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LEAGUE OF NATIONS

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The «International Review of Educational Cinematograph takes to-day the first step along the road of its future.

The programme of its work and activity is synthetically outlined in the Statutes which have governed the creation of the International Educational Cinematographic Institute, viz.: to promote the production, circulation and exchange between various countries, of educational films dealing with education, art, professional and agricultural orientation and teaching, hygienic and social propaganda and with all the other numberless and varied fields of activity and study that are based on, and connected with, every cultural expression as applied to the screen. Or that derive their origin from the moral and social influence which the cinema may exercise, and actually exercises on the masses and more especially on children.

The discovery of movable types in a small printing-shop in the fifteenth century gave a first and powerful impulse to what became the vulgarizing and diffusion of culture in the world. Science and knowledge, enclosed within the silent walls of convents and limited in time and space by the great difficulty of diffusion, become from the privilege of few individuals the patrimony of all.

«Vulgarization» of knowledge and science must not be taken in the elementary sense of the word but denotes that they became open to all, and the immortal works which to-day inspire the life, spiritual and otherwise, of peoples come within the reach of all.

The discovery of the camera oscura marked the second fundamental stage in the progress of human knowledge and constituted the second tool placed at the disposal of man for the conquest and diffusion of culture.
Cinematography came next, after a very interesting series of studies and apparatuses. Which sometimes had even a fantastic or magic appearance. It surpassed by a single stroke the power of appeal of both word and book. The life of men and things, far and near, the life easy to understand or that hidden from us for infinite reasons, the life of microscopic beings contained in a drop of water, everything appears on the luminous screen neatly and plainly with a clearness and suggestive efficacy which no other medium possesses, and surpassing in descriptive and persuasive power the most impassioned words of educators and the most analytic and cleverest writings of scientists.

The cinema is the most comprehensible language in its great simplicity. It appeals directly to the eye and the visual representation, causing a perfect state of emotion and sensibility, fixes on our mind and soul conceptions which are not easily forgotten — sensations complete in analysis and synthesis —, and permits to see and therefore to feel, through the psychical reflections of the vision, what no word or written description, however precise, could possibly render.

Our Review desires in fact to become a free field for this form of activity. At the same time it will be the mirror reflecting the work carried on by the International Educational Cinematographic Institute.

The book, the word, the lantern slide are auxiliary factors of science and knowledge but do not attain the limit which only moving pictures can reach. This accounts for the fact that motion pictures are destined in future to dominate more and increasingly better the life of the peoples and the intellectual movement of the various Nations.

The first and fundamental result of this will be a mutual and precise understanding, a mutual co-operation among all the peoples and the cinema will be regarded as one of the greatest and most powerful factors towards social peace, especially if, by divulging from one continent to another documentary visions of the life, strength and characteristic aspect of the other countries, it may help to dispel the erroneous or false impressions created by the words or writings of men conveying a one-sided or impassioned view or conception.

The fundamental purpose of the International Educational Cinematographic Institute is to help knowledge and science through
the utmost development of the cinema as means and instrument of education.

The work of the Institute is carried on with confidence and keen enthusiasm in the small Medieval Villa Torlonia enclosed in pine and fir trees, in the heart of Rome, or in the silent recesses of Villa Falconieri. Built towards the middle of the 16th century, this historic villa which the Italian State has offered to the International Institute, was erected on the ruins of ancient Tusculum, where Cicero places his dialogue «De Divinatione» with his brother Quintus, where he wrote «De Oratore» and «De Gloria», where he read out to Sallustius the first books «De Republica» and wherefrom the philosophical conversations on the problem of happiness derive their name «Tusculanae».

The surroundings in which the work of the Institute is being carried on serve to give an idea of its lofty ideals.

The activities which the Governing Board and Executive Committee have assigned to the working organs of the Institute are manifold and wide. The first business has been to collect documentary evidence of the world industry of Educational Cinema and of the industries allied to it — an inquiry which necessarily had to be extended to the theatrical cinema in view of the fact that there exists as yet no definite line of demarcation between the purely educational and cultural province on the one hand and the theatrical province of life and action on the other. At a later stage, that is, when this demarcation will be established, this work will be confined to the Educational cinema. At the same time the collection of evidence has been extended everything which has any relation with the cinema in the legislative field. This work, however, is not being proceeded with for the sake of collection or erudition, but as an indispensable preparation or studies and proposals which will give the cinema a wider range of action more in keeping with its own cultural and scientific applications.

Side by side with the documentary branches which take note of the activities of similar international and national institutes, the technical fields of action are being developed day by day.

The historico-scientific knowledge of the cinema, of its innume-
rable applications and its subsidiary and integrative discoveries has led the Institute to undertake the collection of the world's patents relating to cinematography and at the same time to provide for their classification, selection, filing and examination.

This work will in due course render possible the formation of an extensive archive which will be at the disposal of all students who will thus be in a position to apply to the Institute for information regarding the precedents of certain principles or systems. This Review will at the same time start the systematic publication, divided according to subject and speciality, of all patents registered with those States in which the relative examinations are carried out under proper control.

Pending the gradual organization of the various sections and services of the Institute, the work of study and investigation is also being pursued in the field of cinematography as applied to agricultural teaching and propaganda, hygienic and social propaganda, the various grades of teaching, the problems of the new methodology and pedagogy, the orientation, professional training and scientific organization of labour.

At the same time, with a view to enabling the various departments to acquire a perfect knowledge of the activities of other countries, hundreds of newspapers and Reviews are systematically read, all the books which appear on the cinema are collected and read with the greatest care, various files are used for consideration by the officials concerned.

Side by side with this work, an inquiry into the social and moral aspects of the cinema is being pursued. This work which has been started already, is inspired not by negative criteria or by opposition to the cinematographic industry, but by a spirit of fervent and sincere co-operation. To enquire into the direct and indirect influence which the screen exercises upon the spirit and education of peoples, sexes and minors does not imply a preconceived condemnation of the cinema; its object is, on the contrary, to indicate to the industry the paths to be followed, the mistakes to be corrected, in the interest of the producers themselves, who otherwise will see artificial but necessary barriers being set up by law, prohibiting the admission of minors to cinema halls and introducing several forms of censorship. These studies and
investigations cover the fields of psychology, pediatric psychiatry, sociology, pathology and criminology, and tend to ascertain what, if any, may be the necessary consequences of cinema-shows, propose practical remedies and find out the progress made from year to year.

The cinema is described as the most powerful means of propaganda and culture in the Reports that reach the International Institute from far India and torrid Africa, and are full of symptomatic eloquence. These reports as well as legislation concerning the cinema, which becomes more complex every day, will be reviewed and illustrated. The influence exercised by the cinema over peoples amongst whom illiterates are still a high percentage, proves the evident importance of this new instrument of civilization, the need of it that is being felt everywhere as a medium of science and knowledge, and the necessity felt by all nations to take an interest in it with a view to directing it towards the maximum welfare of the peoples.

For these reasons the International Institute has decided to edit and distribute this Review, which is at once a living field of battle and action, of investigation and thought and which will contain a record of all the work of the Institute in all the branches of its activities.

To give the greatest circulation to the Review, the Institute has not hesitated to publish it in five editions, respectively printed in English, Italian, French, German and Spanish.

All those, individuals or moral bodies, who are animated by faith and good will and throughout the world apply themselves to science and culture as universal elements of life, and who are in a position to indicate new systems or new paths enabling the educational film in its vast range of action to take root, are invited to collaborate openly and freely with us. The columns of our Review are from to-day open to any suggestion, advice and information in the interest of the Institute and of the ideal that the Institute serves.
THE ROLE AND THE PURPOSE OF THE INTERNATIONAL EDUCATIONAL CINEMATOGRAPHIC INSTITUTE

(From the French)

A fact that characterises particularly the political, economical and social history of the beginning of the 20th. century, is the tendency more and more marked in the different peoples to direct their various efforts and conceptions toward a collaboration and a cooperation which becomes every day more close between the nations, in view of realising progress in all its forms, and to establish a more perfect cognisance amongst the peoples, a solidarity always more close between them, and to establish the foundations of the kingdom of peace amongst the men of goodwill.

These principles and these ideas, were already in the minds of statesmen from the end of the 19th. century, and the attempt to create at the Hague a sort of Peace-Tribunal was a clear indication of this movement and of the pacific tendencies of the peoples.

It was reserved for the 20th. century to give reality and life to these tendencies and also practical effect by concrete realizations to the principles which corresponded to the needs of the peoples; to establish between them the collaboration and cooperation required to give satisfaction to their material and moral interests.

Amongst these realizations, it is essential to refer in the first place to the high and generous intiative taken in 1905 by H. M. Emanuel III, King of Italy, to assemble in Rome an international agricultural conference, with the view of resolving, in the international sphere, all the technical, economical and social problems concerning agriculture in all countries of the world.

This happy initiative was chiefly intended, in the mind of its August Promotor, to create a solidarity amongst the agricultural classes in all countries, thus establishing one of the peace ties amongst the peoples.

The undertaking was hard and difficult, but the brilliant successes which have been obtained, the favorable reception which
has been given by various Governments, who consented to create in Rome a State Institution under the name of International Institute of Agriculture, are a certain proof that these ideas and principles responded to a need of the peoples.

The number of the adhering States which was originally 40 is now 75, thus clearly demonstrating the almost universal character of this institution.

The first efforts of the League of Nations, specialized and tending to resolve technically one of the problems most difficult in world economy, agriculture, showed clearly the tendency of governments and peoples to study and resolve within a constantly expanding international plane the various problems closely connected with the well being and the prosperity of nations, and to insure as a consequence international solidarity and peace amongst the peoples.

After the tragic upheaval caused by the war in political, economic and social conditions, the peoples experienced in a decisive manner the necessity for Governments to arrive at an understanding in order to realize on a large scale the aspirations and tendencies and resolve by a common entente the difficulties which arose at every moment between the peoples in the field of politics as well as in the field of economic and social questions.

In accordance with the wishes and aspirations of the peoples of the different continents, the creation of the League of Nations represents without any doubt the historical fact of the most considerable importance of the beginning of the 20th century.

During the terrible years 1914 to 1918, hitherto only faintly discernible, mourning, sadness and privations were the lot of the peoples who were directly involved in the great conflict.

Every one may be said to have been concerned, for every nation has felt either.

Consequently the proposals for the creation of a League of Nations appeared to humanity as a symbol announcing the advent of a New Age, in which peace is promised to men of goodwill.

In order to insure and guarantee this peace, the States have realised that it was necessary to sacrifice to the Entente Cordiale
amongst the peoples, some of the privileges that up to now have been jealously defended by them, and to entrust them to a body of an international character but with deeply human and disinterested as well as highly moral ends, which impose themselves to the consideration, the respect and gratitude of the Nations.

The mission thus reserved by the Pact to the League of Nations was of a higher, more important nature, so that it could be applied successively to all subjects and to all problems in the political, economic and social fields, which have their final object to assure peace amongst the peoples, and in this way to promote the happiness of humanity.

The work of the League of Nations was thus full of great difficulties and responsibilities. Although it covered a multitude of complex subjects and problems that have been successively referred to it by various Governments, the activity of the League of Nations forms, in spite of all, a harmonic whole in which the component parts are subjected to the principles and to the rules which derive from its constitution.

If in the human body the organism forms by itself a single whole, a single individual, it is not the less true that nature has herself specialized and adapted certain parts of the body to certain functions essential to the life of the human being, the function rendering necessary the organ.

In the same way in the organisation of the League of Nations the complexity of the work has rendered necessary the creation of new organs which, without destroying the unity and harmony of the whole, ensure in a more perfect manner the working and the increasing progress of the main organism.

It is from this principle and from these necessities that the various international organisms that depend more or less directly on the League of Nations, have been created. It is also to meet one of these necessities and to satisfy these needs that the Italian Government, under the inspiration of its chief, H. E. Benito Mussolini, proposed to the League of Nations, which willingly has accepted the duty, the creation of the most recent International Official Body, The International Educational
Cinematographic Institute, which is under the direction of the council of the League of Nations.

Full justice must be rendered here to the noble and generous initiatives so opportune1y taken by H. M. the King of Italy and his Government for the creation of international organisms tending towards humanitarian ends and towards international co-operation such as we have mentioned above.

The creation of the International Institute of Agriculture in 1905, and then, after the foundation of the League of Nations, the establishment in Rome of the « International Institute for the Unification of Private Law », and quite recently the opening there of the International Educational Cinematographic Institute, these two latter institutions being placed under the direct authority and control of the Council of the League of Nations, show in a significative and eloquent manner the effective and disinterested contribution made by the Italian Nation to the admirable work of the League of Nations.

Thus the International Educational Cinematographic Institute is now placed and classed in the official list of the official International organizations, with a programme, an object and a purpose which deserves to be made known.

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The specialization, which is continually more marked, of the various international organisations, is a phenomenon which is the natural and logical consequence of the complexity of life, of the necessity to study in a special and thorough manner certain problems interesting more especially the pacific development of nations. This is the reason that has induced the League of Nations since its foundation to create certain auxiliary organisations.

Amongst these organisations, the first place may be assigned to the technical organisations, which constitute the most original and practical creation of the League of Nations. The reason for establishing these organisations is known. In the international life there exist a large number of problems of a technical order, which
are susceptible of causing conflicts of a political order. The technical organisations of the League of Nations are intended to deal with technical problems before they degenerate into political conflicts, and proceed then to resolutions by technicians belonging to the different countries. These auxiliary organizations deal in particular with: Organisation of Communications and Transit, Economic and Financial Organisation, Organisation for Hygiene.

Above these technical organisations placed on a higher plane, are the organisations of an autonomous character, and a more independent constitution and these can receive the collaboration of other States which are outside the League of Nations. These autonomous organisations are:

1. The Permanent Court of International Justice, founded in conformity with article 14 of Pact, under the auspices of the League of Nations, and which is juridically, a judicial international and independent organisation, based on an International Convention outside the Pact.

This Court is open to all the States of the World, including those which are not members of the League of Nations.

2. The International Labour Office is a branch of the League of Nations. This organisation was created, not by the Pact but by a special provision in the Treaty of Versailles (Part. XIII, Travail). It is founded on the basis of Social Justice, with the object of suppressing injustice, misery and privations in the conditions of human labour.

With a sense of justice and humanity, as well as with the desire to ensure a durable world peace, the contracting States have resolved to regulate the organisation and the working of this autonomous organisation, with the object of realizing the purposes fixed by the principles stated above.

In consequence of the brilliant results obtained by the International Labour Office, the States can realise that the specialization of work placed under a direction having a certain degree of independence, and the development of the efforts for reaching the results desired, can only facilitate, and help the progress and purposes of the League of Nations.
3. The special Institutes under the League of Nations. A third group of Institutions, called special Institutes, created by the member States, and placed under the jurisdiction of the League complete the groups of the specialised organisations which combine to insure the regular working, the development and the progress of the League of Nations.

The first of these special organizations is:


Juridically distinct from the League of Nations, retaining its special institutional character of internal right, this international official organ maintains nevertheless very close relations with the League of Nations, as it serves as an instrument of preparation and execution for the Commission of Intellectual Co-operation, which is a proper and direct branch of the League of Nations. The Governing Body of the Institute is on the other hand formed by the same members who constitute the Commission of Intellectual Co-operation.

The scientific, literary and scientific objects followed by this organisation, require necessarily a close, cordial and loyal collaboration with other international organisms, which on the technical side it contributes efficiently to the development of scientific progress.

2. The International Institute for the Unification of Private Law, created by the Italian Government, with its seat in Rome, constitutes a second form of special Institute under the authority of the League of Nations, its object being to realise the unification of the principles regulating private law in the member States of the League of Nations.

The composition of its Board, of Governors composed of the most eminent legal personalities belonging to all the States interested is a sure guarantee of the success which will be achieved by this Institute.

3. The International Educational Cinematographic Institute

The most recent, but not the least important, of the special interna-
tional organisations placed under the authority of the League of Nations is the International Educational Cinematographic Institute.

This official organism comes also within the sphere of the special organisations the object of which is to facilitate and assist the general aims of the League of Nations, although directing its particular efforts to a very important object which, as stated in art. 2 of its Statutes, consists in "promoting the production, the diffusion and the exchange amongst various countries of educational films relating to instruction, art, industry, agriculture, commerce, hygiene, social education, etc., by employing all the means that its Governing Body may consider necessary". From this enumeration, it may be gathered how important is the role assigned to the International Educational Cinematographic Institute.

Educational films interest all branches of the activities on which scientific, artistic, industrial, commercial and other forms of progress depend.

The task is difficult, hard and complex, and in our opinion can only be realised by a close, cordial and whole hearted collaboration and understanding between the existing international associations which by their Statutes, could deal with similar activities, as those which the International Educational Cinematographic Institute is required to occupy itself, from a technical point of view so as to realise the purposes which have been assigned to it.

It is not our object to make a special study of the Statutes of the International Educational Cinematographic Institute.

The Statutes were drafted by the Italian Government and were submitted for approval to the Council of the League of Nations, taking into account the observations put forward by the Commission of Intellectual Co-operation attached to the League of Nations, by the Commission for Child Welfare and by the International Labour Office.

The Council of the League of Nations approved the Statutes definitely on August 30th, 1928.

We may be permitted to point out, that art. 6 of the Statutes, provided, from now onwards, that cordial collaboration that we
have foreseen earlier in this article. In fact, the Secretary General of the League of Nations, the Director of the International Labour Office, the Director of the Institute for Intellectual Co-operation and the President of the International Institute of Agriculture may take part in the meetings of the Governing Body or they may appoint their representatives, as consulting members.

It is necessary in addition to point out that, like all other special organisations already in being, the International Educational Cinematographic Institute, is juridically distinct from the League of Nations. It has been created by the Italian State in order to develop an international collaboration in the educational field by means of the educational film. Nevertheless it has been established according to the terms of agreements made between the League of Nations and the Italian Government, so that this new Institute maintains close relations with the League.

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The official opening of the International Educational Cinematographic Institute took place at the Villa Falconieri near Frascati on November 5th, 1928, in the presence of H. M. the King of Italy, members of the Italian Government, members of the Council, members of the Diplomatic Corps and high officials of the State.

Eloquent speeches were delivered during the ceremony, by His Exc. Benito Mussolini, Chief of the Italian Government, by His Exc. Villegas, Chilian Ambassador in the name of the League of Nations, by the Marquis Paulucci de' Calboli Barone, Under Secretary General of the League of Nations, and lastly by His Exc. Rocco, Italian Minister of Justice and President of the International Educational Cinematographic Institute in which were clearly shown the programme, and the ends to be achieved by the new Institute, the creation of which was due to the generosity of the Italian Government. We are unable to repeat and even less to comment the speeches made by these illustrious persons. We may be allowed however to insist here on the educational
role assigned by its statutes to the International Educational Cinematographic Institute.

Its social mission is destined to have considerable importance. If it is true that in our time all the peoples are trying to their utmost to diffuse instruction amongst their peoples, it is not the less true that one sees everywhere a general dearth of education. It is therefore education which must be placed in the first rank, receive the best attention, and become the ideal achievement of the new Institution. This has been perfectly understood and realized by its organisers who have given to it a name which suggests a sort of definition of its object, «Educational Cinematograph». Without doubt, the cinema is called on to exercise a great influence in the general development and instruction of the peoples, and the efforts accomplished up to the present are already considerable.

But it is the educational role of this new instrument for the diffusion of thought that appears to us to represent its particular essence.

The new means for the diffusion of thought and ideas the progress of which appears to be a special feature of the 20th Century, represents at the present day, in the hands of the Governments through the organisations created for the purpose, not only an instrument of control but above all a particularly efficient means of impressing the spirit of the peoples and by the repetition of the imagery, to exert a direct influence on the development of national education: It is therefore essential to examine from the start these new problems, the evolution of which call into play the relations of influences among the peoples, as well as constantly increasing international collaboration. No one ignores the influence of the film on the customs and on the sentiments of the community. All the spectators in a Cinema look for entertainment rather than a lesson.

Nevertheless, all pictures possess an instructive force, good or bad, attractive or repulsive, and by the sentiments of sympathy or antipathy that they arouse, they constitute a factor that represents in reality a powerful means for the education of the masses.
By the cinema language frontiers and even the limits of civilizations are overcome. The customs, the manner of living, the fashions, the ideas with which the public conceives social or private relations, all in fact, is material for the cinema that penetrates through various peoples, and if the films produced and presented to the public have for their object the elevation of the intellectual and moral level of the individual, it follows that the film exerts in this way its educational mission and contributes largely to create a solidarity of sentiment amongst the different peoples.

To-day the film has become a means of propaganda stronger than the newspaper.

The film gives to the citizens a more exact notion of the civilization of other peoples, the peasant is made to acquire a better understanding of city life and vice versa. The result is that customs, traditions, hygiene and social relations may beneficially be influenced by the film.

From this follows the imperious necessity of watching and improving film production, and in consequence also the necessity to insure the technical quality of the film. From the above considerations follows the essential and dominant role of Educational, allotted to the International Educational Cinematographic Institute by its promoters, who might rightly be called «The Gothenberg of to-day».

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The encouragement and the impulse given by the International Educational Cinematographic Institute in spheres so closely concerned with the progress of civilization: instruction, art, industry, agriculture, commerce, hygiene, social education etc., the diffusion of educational films in the various countries of this great international official organism, acting as a sort of technical regulator for the production of films in all countries constitutes also a guide for the direction to be given, from the educational point of view, to this new and powerful factor for the diffusion of thought, i. e. the Cinema of to-day.

To accomplish this high and noble mission, the moral aid and the material and financial assistance of the States will not be
missing. On the part of the different Governments and in particular of those who are members of the League of Nations, there is a moral obligation to participate practically to the development and to the progress of this new organisation.

At a time when the soul and the mind of the crowds in all countries are attracted towards Cinematograph productions which, too often, deviate from the path leading to the general education of the peoples, and which consequently largely discount the moral principles and traditions of civilization, it is well, it is indispensable that the Governments should recognise the high educational and moral power possessed by the new organization to develop sentiments of international solidarity and pacification amongst the peoples by means of a deeper reciprocal knowledge of their customs, traditions, and their way of thought and of living.

This way will lead, slowly but surely, through the exterior diversities of fashion, of tendencies and of customs proper to each country to the formation of a kind of «Common thought» having for its basis and for its purpose the constant development and the free observation of the principles and of the rules which tend towards the betterment of the material and moral wellbeing of the peoples.

Thanks to the means for action which the administrative Council of the new Institute will place at the disposal of a Directorate full of intelligence, faith and enthusiasm, the role of the Institute will grow and develop at a pace which will depend on the interest accorded to it by the Governments, on the material and financial contributions which they will grant to it, as well as on a collaboration which will not fail to be established on a cordial and confident basis with the other international organisations.

* * *

Being in direct dependence of the League of Nations, the International Educational Cinematographic Institute will necessarily fall under its influence and direction, with a view to contributing effectively to the realization of the objects for which it has been conceived and founded by the League of Nations. In its turn, and reciprocally, the new Institute will exercise a direct influence
which will be all the more effective from its technical and specialised character, which will confer on it a competence and action which will be felt in all the fields that have been allotted to its activity.

In addition to its official relations with the League of Nations, the International, Educational Cinematographic Institute in order to carry out efficiently its mission, will be obliged to establish regular, cordial and confidential relations with the international official organisations, which directly or indirectly are interested in the Educational Cinema.

By official organisations we mean the International Labour Office, the International Institute for Intellectual Co-operation, the Hygiene Section of the General Secretariat of the League of Nations, the International Institute of Agriculture of Rome, and the Committee for Child Welfare.

The relations with these official organisations do not exclude, in fact should encourage also relations with private organisations which are also engaged in educational cinematography.

The activity of the new Institute will consequently, in accordance with the provision laid down in its statutes, develop in close connection with the other International Institutions. From this follows the obligation to establish understandings with the other International Institutions to facilitate the development of its programme by co-ordination and co-operation, both national and international.

These agreements will not be difficult to reach if, as there is no doubt, the representative organs and directors of these international Institutions will realise the important mission that has been assigned to the International Educational Cinematographic Institute, which by reciprocal services, will be in a position, by its information, its special data and its technical character to facilitate the special work in which these institutions are engaged.

A practical and concrete example of the possibility and practicability of these understandings may be found in the creation by the International Institute of Agriculture of the International Commission for Co-ordination in Agriculture, the purpose of
which is to submit to the representatives of the various international bodies dealing with agriculture which meet at the periodical conferences held at the Institute in Rome, the questions which could create difficulties by an overlapping of activities, by the dissipation of effort, of expense and of competing activities.

The Committee of Co-ordination for Agriculture has the task of settling all these difficulties, in a spirit of conciliation, of mutual understanding and of cordial collaboration to attain the ends which respectively devolve son each of the International organisations.

Another no less practical example which could be mentioned, relates to the creation of the Advisory Agricultural Committee, instituted on April 5th, 1922 following an Agreement concluded between the International Labour Office and the International Institute of Agriculture in Rome. This Committee which has succeeded in establishing the most cordial and close relations between the two official organisations of Rome and Geneva, make a joint study at periodical meetings, of the agricultural questions which are examined respectively by the two organisations as provided in their respective Statutes, with the view of establishing in common and in cordial agreement the distribution and division of the work.

Agreements of the same nature, made in the same spirit of «entente cordiale» and solidarity appear to us to be of easy attainment for the greater wellbeing and for the lasting progress of international institutions.

The close collaboration which is bound to be established between the International Institute for Intellectual Co-operation and the International Educational Cinematographic Institute which co-exist in cordial and effective association for the progress scientific, literary and artistic of the various peoples, is a safe guarantee of the successful and happy results which will result from a close co-operation on parallel lines, and will lead to the development and to the indefinite progress of the work followed by these two Institutions. Their successful progress will be in proportion to the close and cordial co-operation and collaboration which will be necessarily established between the two.
The International Educational Cinematographic Institute by virtue of the principles and rules on which its creation has been based, has its position well defined, an essential position in the field of the official International organisations whose mission it is whether they are dependent or independent and are or are not placed under the control and authority of the League of Nations, to work for the mutual comprehension of the peoples, to create amongst these an always greater sentiment of International solidarity, and thus establish a general aspiration towards Peace, following the spirit of the League of Nations. The way which leads to the realization of this Ideal is hard and difficult. It depends to a large extent on Science, Faith and the Enthusiasm of the men who are called by the confidence of their respective governments to direct the efforts and the work of this new Roman Institution towards ways and results which will command the confidence and the esteem of the States and individuals qualified to judge of the work accomplished and of the favorable orientation impressed on international co-operation in view of the fixed end to be attained.

Under the high impulse of the eminent President of the Council of Administration and of the Executive Committee, cordially seconded and assisted by the eminent Personalities composing Council of Administration, the Directorate of the International Educational Cinematographic Institute will find in its knowledge, in its high competence, and above all in its faith and enthusiasm, the power and the assistance to develop the new Roman Institution into a machine which will contribute largely, in cordial collaboration with the other international organisations, to establish amongst the peoples an ever closer solidarity by means of the educational film, and thus ensure progressively the Prosperity and the wellbeing of Humanity.

Louis Dop.
Member of the Agricultural Academy of France
Vice-President of the International Agricultural Institute of Rome.
THE FILM AND INSTRUCTION

(From the Italian)

*Omne tuli punctum, qui miscuit utile dulci.*

The film used as a didactic instrument, apt to supplement and at times even substitute the word of the text-book, responds fully to the always more apparent need created by the wider diffusion of culture and knowledge, for a minimum of mental effort, in fact for the enjoyment of the pupils.

Throughout the centuries, it has been the constant aim of the pedagogues, particularly in Italy, to experiment new forms of teaching to relieve the mental fatigue of the pupils.

It is sufficient to recall Pietro da Ravenna, who in 1491 introduced a method of teaching by pictures, so as to explain more clearly to the children, the value of vowels and words. Gio. Battista Porta, who in the XVII century invented new phonetic and visual methods for the pupils of the elementary classes, and at the present day, Maria Montessori, who through her wonderful system has developed the memory of the senses.

Our Institute, will deal extensively on the problem of educational cinema. In fact it represents one of the basic themes on which is founded the life of the Institute. The pages of the Review will contain articles referring to the divers and complex aspects of the didactic and scientific films, to methodology and pedagogy with regard to the film used as an auxiliary for teaching.

In our next number, we will publish an article of exceptional interest by Thos. E. Finegan, great American educator and President of the Eastman Teaching Inc.;—organisation which is attached to, and dependent on Eastman Kodak Co. — Mr. Finegan explains with great precision, the system adopted in the United States, to carry out an experiment on 11,000 pupils.

In the following numbers, we will continue to publish many articles, classified with regard to their contents and in accordance with the organic character of the problem. (Editor's Note).

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The attempts made by the educators, to arrive at more simple didactic methods, introduced in the schools the placards, the large graphic illustrations, the ichnographic maps, and in the last century the magic lantern; but the cinema has done more, it entertains while it teaches and awakens in the children an exceptional and absolutely new interest for the problems of culture and science.

This is easily explained. Let us take for example, natural history taught with the help of the cinematograph. Text-books on that subject are abstract and obscure, but the wonderful visions obtained with the cinema, have awakened the enthusiasm of the children for the secrets of nature. The cinematograph, can offer to the astonished gaze of the child, the spectacle of the process of the complete metamorphosis of the caterpillar into a butterfly, within the space of a few minutes; it can show him the life that exists in the smallest leaves; the slow process of growth in a plant, from the moment it springs from the germ to the opening of its blossoms.

The same can be said for animal life.

Of late, many countries have understood the importance of the didactic film and everywhere initiatives to promote its growth have been encouraged.

I will allude briefly to what has been done in that line by some States.

In 1926, an Association was founded in Belgium, called *Les amis du cinéma éducatif et instructif* which created a film-library for instructive purposes.

In France, the *Musée pédagogique de Paris*, founded under the auspices of the State, an educational film-library, the films of which are distributed gratis to the institutes that claim them. Furthermore the « *Cooperative de l'enseignement par la cinématographie* » of Paris has a specially organised service of motor lorries equipped with apparatuses, which bring to the remotest village schools, the advantages offered by the didactic film.

In Germany, there are apposite associations united in federations for the use of the cinema in the schools.

In England and the United States the use of the didactic
film has greatly developed, and governmental and private offices lend out educational and scholastic films free of charge.

In Sweden, cinematographic projection has become a normal part of the school curriculum. Teachers with special degrees act as cinema operators. A society created for that purpose, distributes cultural films.

It is a well known fact, that the educational and didactic cinematograph has made great strides in Italy and that Rome is the worthy site of the Intertational Educational Cinematographic Institute. Also in this field, the geniality of Italy's Prime Minister is apparent. In 1924, before any of his predecessors had given this subject a thought, he understood the possibilities offered by the cinema as an instrument for the social and intellectual development of the people. He established the *Luce*, which in the course of a few years has progressed flourishingly without weighing on the State Budget.

The Hon. Fedele. Minister of Public Instruction, studied the actual organisation of the big enterprises in the scholastic field, and created the 19 film-libraries (one for each province in Italy) which are run by the R. R. Provosts.

Every provincial film-library has a rich collection of films supplied by the *Luce* which are carefully examined and chosen by a special commission of teachers. The distribution of films to the various schools, is made gratis. The Hon. Fedele has also established the first 30 film-libraries for propaganda of hygiene with films provided by the *Luce*. These film-libraries, have been multiplied and endowed with new films, through the initiative of the Hon. Belluzzo, the present Minister for Public Instruction.

The experiment of the State, has been further developed by private initiative and that of Institutions.

It is no exaggeration to assert, that all over Italy, firms have nobly competed to supply the schools with projecting apparatuses and complete collections of films.

I will quote data concerning elementary schools, taken from recent statistical investigations (not yet completed), ordered by the Minister Belluzzo.

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In Piedmont there are 431 apparatuses belonging to elementary and private schools; 3419 in the province of Venice; 342 in Tuscany; 174 in Emilia; 150 in Lazio; 113 in Sicily; 107 in Lombardy; 78 in the Marche; 55 in the Puglie; 30 in Sargegna; 34 in Calabria; 22 in Basilicata; 19 in Umbria; 17 in Venezia Giulia; 6 in the Venezia Tridentina; 5 in Molise.

Data for Liguria and Campania is still missing.

Much has been done by the various States, notwithstanding the great difficulties that lie in the path, to make use of the cinema as an educational factor, but the goal to be reached is still far ahead. The most essential condition, is the improvement of the didactic film, but to obtain this, a clear perception between the so-called documentary and educational films ought to be established.

The documentary films, compiled with judgment, artistic sense and technical skill, have rendered great services, awakening the interest of the children in cinemagraphic projections, and showing the great importance that moving pictures have in the field of education. However these films are often lacking in the didactic and scientific qualities required.

With regard to this question, the ideas and schemes formulated by the special technical Commission created at the Luce and composed of: the Hon. Prof. Fedele, the Senator Corrado Ricci, Prof. Raffaele, Prof. Galassi Paluzzi, Dr. de Feo, Prof. Trabalda, Prof. Paribeni and the undersigned, must be remembered. Films used for instructive purposes should, according to the opinion of the above mentioned Commission, impart precise knowledge, coordinated in the same logical order as the school curriculum for each class. It is useless to show children, that which they are not capable of fully understanding or remembering, and which is not in keeping with the grade of knowledge they possess. Keeping these facts in mind, it will be found that the only method of creating a new form of instruction is realised by cinematographic pedagogy. Projections should accompany the teacher’s lesson and the facts recorded in the text-books. The interest and enjoyment obtained by moving pictures, awakens the perceptions which engender an easy assimilation of knowledge in the pupil.
The problem of adequate distribution of cinematographic apparatuses amongst the schools, will also have to be studied with particular care.

The mission of the International Institute, in the field of the didactic film reveals itself as necessary and valuable. All the States and schools of the World, animated by the same fervent zeal, ought to collaborate with the Institute.

Now that the efficacy, nay the necessity of teaching with the auxiliary of the cinematograph, is a recognised fact, it is essential to examin and face the problem in all its grand and imposing aspects. In this Review, the various forms and possibilities are discussed, the experiences and the results obtained are compared, the technical systems of projection and preservation of films are studied as well as every other item, which can contribute to this new form of instruction.

It is well that all the influential classes and the political men of all the States should understand the importance of this problem and give it the attention it demands.

Now, that the League of Nations possesses a powerful technical organ which examins these questions, it is necessary that all the Nations which have signed the Covenant should give the attention required to the important study of educational and didactic cinema!

GIULIO SANTINI.
General Director of Elementary Instruction at the Ministry of Public Instruction.
CONCERNING THE CINEMA

(From the French).

There are various kinds of cinemas. The cinema which entertains, and that which instructs; spectacular and cultural films; which are two distinct fields.

The former kind commandes attention at first sight, and its career has been brilliant and rapid beyond all expectations. The world could be spanned at the Equator, if all the films which have been produced were attached end to end. The number of spectators that have enjoyed cinema shows, amounts to millions of millions. The budgets of the greatest nations could be easily surpassed by the sums invested in the cinematographic enterprises.

These enormous developments are beyond all control. They depend on the liberty of trade and industry, and of art itself. Difficult as it may be to submit this giant to international restrictions, persuasion, with the help of public opinion may exercise its influence.

We must make an effort to direct cinematographic production towards beauty, truth and morality.

Towards beauty: The cinema offers new possibilities for esthetic emotion. Too often, in order to please the mass of the public, these possibilities have been neglected. Too often, instead of aiming at the specific effects of the cinema, spectacular success has been found sufficient. However, here and there, where industry alone presided, art makes its appearance; it is a tendency to be encouraged.

It may be foreseen that variations will ensue for the cinema, as it has happened for the theatre (opera, drama, comedy, vaudeville, variety show, etc.), and some day the art cinema will appear.

Towards truth: Especially with regard to historical reconstructions. On account of its international character, the film excludes nationalist passions, all doubtful or contestable affirma-
tions, all inaccuracies of the truth. To guard the mutual comprehension amongst the peoples and the international fraternity ensuing therefrom, it is necessary to control the films.

Towards morality: On account of the deep influence it may exercise, the film must not be of bad counsel. Here, I do not refer solely to sexual emotions; in all civilised countries, there exist laws repressing outrage to morality. But also and principally to the scenes of violence and artifice that may become deplorable examples.

I believe in the future of the cinema. It is a wonderful tool in the hands of the educator and instructor. It may some day greatly modify human conceptions. If one considers that, at the present day, the cinema has enlarged, in time and space, the mental horizon of millions of men and women, that it attains the furthest hamlets where poor and humble folks dwell without other possibility of acquiring any general culture, one can but be thankful to it.

The pleasure experienced at the sight of fine spectacles, will be completed by radiophony, thus enabling all mankind to participate in the enjoyment which the union of these artistic manifestations can procure.

Educational cinema moves in another domain. The question of entertainment, diversion or emotion is not of paramount importance here. Stress is laid on the depth of meaning, not on appearances. Cinematographic shows sustain themselves, educational films depend on, and sustain study.

The weak power of the spoken word in pedagogics, has been admitted long ago. To explain a new notion to a child, it is not sufficient to express the facts in words, but far better to expose them in their real aspect, or to reproduce them by pictures, if a concrete subject is dealt upon. The moving picture, will be the most impressive method. This does not exclude the use of lantern slides. Moving pictures often pass too rapidly on the screen and consequently leave but a fleeting impression on the mind. Confronted by something new to him, the child must have the opportunity of observing and reflecting: He cannot, at first sight grasp and retain every detail. The combination of the two systems, ac-
panied by appropriate explanations, will often prove most efficacious. It is above all, important not to weary the attention, which, in the child is always of short duration.

Therefore, it is essential to dispose of good teachers as well as good films for school purposes. The methods adopted for the use of the films, is as important a factor as the projection itself. Projection, as a pedagogic science is still to be developed.

The film can be a powerful auxiliary to the teacher in the humblest school, and to the professor of the most famous university. He can give to his words, a demonstrative value which, unattended by the film, they would not possess. This shows the vastness of the domain to be explored. But it attains still greater proportions, if one considers the possibility for the film, to examine and expose the technicalities of all productions in art, industry and agriculture, and the help it can be to the scientists in their laboratories by showing them, with the means of the slower movement of the reel, phenomena and processes which the eye could not discern and the mind never fathom. It is a splendid opportunity for the investigation of the secrets of nature.

Jules Destrée.
Former Minister of Fine Arts
Member of the Belgium Parliament.
STATE CONTROL OF FILMS IN GERMANY

(From the German)

The Constitution of the German Reich provides in art. 118: «There is no censure, but restrictive measures may be established by law on cinematographic performances». According to the authorisation given by the article above cited, the Reich law on Cinematographic performances was passed on May 20th, 1920. After the abolition of theatre censorship which took place in 1918, this represents the only legislation censorship which is in force in Germany at the present day. Cinematograph Censorship is of a preventive character, viz. it operates before the film reaches the public. All films, without any distinction, which are publicly shown in Germany are subject to it, as well as films placed on the market and intended for public representation, films sold or hired, whether it is proposed to produce any such film in Germany only, or in Germany and abroad, or abroad only. The law, however, extends only to public representation. Private

The masterly statement made by the Counsellor, Dr. Seeger, with regard to the organisation and the methods of censorship in Germany, is based on the fundamental problems of the cinematographic industry and the educational questions related thereto. Be it with regard to the special revisal of cultural and educational films, or with regard to the moral and social problems connected with the cinematograph.

Dr. Seeger exposes synthetically the fundamental regulations of the great organisation of control in Germany. From the statements made, by him one understands that the Reich has already adopted a kind of internal code, which has come into being through general practice. Will it be possible in the near future to obtain a classification of the fundamental rules upon which universal censorship can be based? This achievement would be of great utility to all those interested in the industry and to everyone who has the moral problems of the cinematograph at heart.

To-day, cinematographic censorship is carried on with absolutely different methods in each State. In the United States, for instance, there are hundreds of cases where judgment varies from State to State.

To follow up the inquiry, there will appear in the next numbers of our Review some articles dealing with the organisation of censorship

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cinemas are not subject to censorship, and this possibly covers the case of films shown in schools, in Universities and in the projection rooms of cinematographic firms. Productions at clubs and at any kind of closed association, are regarded as public representations. Any evasion of the law by private representation is in this way obviated. Foreign and German films are alike subject to censorship.

Censorship is effected by two Offices of Control, situated the one in Berlin and the other in Munich, these being the two principal cities for film production in Germany. Authorisation issued by either of these Offices is valid for the whole territory of the Reich, so that any film that has received authorisation from an Office of Control may circulate freely and may be shown anywhere. Application must be made for approval. Such application cannot be made by the proprietor of the cinema hall but in the case of films of German origin by the producer, and in that of the films of foreign origin by the renter.

Police censorship has been abolished in Germany.

According to the Cinematograph Law, censorship is of popular character (Volkscensure). Accordingly it is effected by

in other countries. Simultaneously, there will appear a topic of particular interest to the International Institute, i.e., the censure of educational and cultural films. This problem has not been differentiated from that of the theatrical films, except in Germany and a very few other countries, but the difference of valuation, judgment and technical understanding vary enormously. To this end, we will publish in our next number an article by Prof. Lampe, Director of the central Institute for Education and Instruction.

The whole of the censorial system for the cinema, requires a radical revision, equal to the needs of the important part played by the cinema in the life of the people. Good censorial laws disciplining entirely fundamental casuistry, is the best safe-guard for a country desirous to solve the difficulties of the cinematographic problem. A perfect organisation for the control of didactic films can greatly increase the popularity of the educational screen.

Our Review will deal extensively on this problem, also with regard to the activities of the International Institute and of the commission of Experts which will be created by it.
Committees composed of private citizens, presided over by State officials. Each of these Committees is composed of five persons, viz.: by the presiding officer and by four private citizen members who receive due notice of all meetings. For this purpose, the great Associations representative of the Cinematographic industry, art and literature, National economy, popular education and the moral protection of the young, indicate to the Minister of the Interior suitable delegates, and the Minister who is free to select, nominates the members for a period of three years.

Each Committee is therefore composed besides the President who must be an official, of a representative of the Cinematographic industry, a representative of art and of literature and two members representing the groups of National economy, of popular education and of child welfare. The members are independent, and are not bound by the instructions of their respective associations in giving their judgment. Also the members of the Cinematographic industry do not represent the interests of their group, and are, like the other members, simple exponents of popular censorship. The committee views the projection of the film, hears the applicant or his representative, and authorises the public performance of the film within the German State, or else prohibits it. The prohibition may extend to the whole film, or it may refer to single scenes or writings, which are cut from the copy presented and kept in the Control Office.

The authorisation may be given in general, that is to say, both for adults and young persons, or limited to adults (persons above 18 years of age). Admission to the Cinemas for German children of less than 6 years of age is absolutely forbidden.

If a film is prohibited, completely or partially, the applicant firm may lodge a complaint within two weeks of the decision. On this protest the Higher Control Office in Berlin decides. This is composed in the same way as the offices of control. No member of the control office may be at the same time a member of the Higher Control Office, or viceversa. The procedure here is identical to that of the control office. The decisions of the Higher Control Office are final, so that it represents the highest authority for censorship in Germany. If the Higher Office approves the
previous decisions and rejects the appeal, the film previously condemned remains definitely prohibited. If, in contrast with the judgment given on the first examination, it is decided that the film may be passed, the previous decision is cancelled and the production of the film is authorised.

This authorisation is granted to the applicant in the shape of a document or censor's card which serves as a pass with respect of police officials specially appointed to control film productions.

The Higher Office operates not only in cases of prohibition issued by the first examination office, but also in cases of authorisation as well as prohibition. The President of the Control Office or two dissenting members, may lodge a complaint and obtain a new decision from the Higher Office. In addition, the government of each of the provinces composing the Reich, can apply for a successive prohibition against a film previously authorised.

The reasons for which a film may be excluded from public representation in Germany are exactly specified in the cinematograph law. According to the German law, all films are absolutely prohibited that may endanger the public order and the safety of the state, offend religious feeling, have a brutal and demoralising influence, compromise the prestige and the relations of Germany with foreign States. The Control Offices have to decide on the application to individual cases of these principles which have been expounded by the Higher Control Office as the highest authority on the subject of censorship, during its activity extending over nearly eight years, rules have been laid down for their application which the control offices must equally consider.

The endangering of public order and the public safety is the effect of those films the representation of which gives rise to a lasting and direct disturbance of public order and safety. In this group is included films that endanger the stability of the State, excit different classes of the population to violence against one another, cause danger to the health of the spectator, or bring into disrepute certain professional classes who perform certain public duties (judges, teachers, physicians, lawyers).

Production of propaganda films is not prohibited. As a safeguard, the law prescribes that authorisation is not to be refused.
on the ground of a political, social, religious or ethical tendency or any general view of life, as such. The words «as such» indicate that a special judgment is only justified by the fundamental conception of a film, in so far as that conception would be the sole ground of the prohibition and none other of the usual grounds can be established. The Higher Control Office however, considers as equivalent to an endangering of public safety the case in which the special view or tendency is developed along with incorrect motives, exaggerations and misrepresentations which go beyond what is admissible.

As dangerous to health is considered the representation of surgical operations, and the treating of the body with surgical instruments, such as probes, catheters and the like, because the representation of such operations in public, implies an excessive tension on the nervous system of the spectator. The physical or sanitary state of the individual is not considered, but exclusively that of the normal spectator. From the point of view of risks to the health, the cinematographic representation of hypnotism is also prohibited, inasmuch as the representation is an infringement of police regulations in Germany which forbids any public spiritistic activity.

In issuing a censorship's decision for the protection of certain professional categories, a distinction is made as to whether the reference is to an individual or to some occurrence affecting the whole profession.

The administration of justice and the police, enjoy a particular protection, under German cinematograph censorship. In the description of judicial procedure there is a certain permissible exaggeration and distortion of facts and of the situation, but the film representation should not go beyond this to the point of giving the lay spectator the impression that the tribunals give irresponsible, superficial or even partial judgments, in a word that caprice takes the place of justice.

Any bringing into disrepute of the police is also a ground for prohibition as likely to endanger public safety. It is sufficient reason for prohibition that the police should be shown to act in a preposterous and inefficient way in prosecuting the cri-
minal, that it should neglect its duties or that it should be dominated by the criminal. At this point however there is a distinction to be made as to whether the police represented is German or a foreign police. The Higher Control Office is of the opinion that a distorted representation of the activity of foreign police, does not compromise the German public safety.

It is forbidden to popularise methods of detecting criminals, such as the finger prints: also the special system used by criminals, for example their work with gloves, the placing of the weapon near the murdered person so as to simulate suicide, and other systems of the kind. It is the object of the censorship here to avoid any warning to the criminal element to exercise caution in leaving traces of the crime, thus rendering the action of the police even more difficult.

_Offensive to Religion_, are considered, according to the pronouncement of the Higher Office, those films which are either actually blasphemous or in some other way tend to degrade the rites or usages of any of the Christian Churches, or of any other religious community having corporative rights within the German State. To this category applies, for example, the obvious misrepresentation of rites, religious usages and ornaments. On the other hand a truthful and reverent reproduction of an object of religious faith and adoration must not be prohibited only on account of the fact of its inclusion in a film. All films that throw discredit on the organisation and on the members of a religious order are prohibited.

It is thus, on the whole, considered as injurious to religious sentiment to represent the admission of a fallen woman into a convent. The wearing of priestly robes is also protected, although the Higher Office refuses to regard this as a case of abuse of official dress, remarking that from the point of view of offence to religious sentiment, the dress of a priest cannot be compared to that of any other uniform. The appearance of a priest in a masked ball is viewed differently by the Higher Office according to whether the priest's robes are used as a masquerade without the due composure, but not sufficient to cause prohibition, or that under the sacerdotal attire, a criminal is hidden and the one who is thus
represented does not appear as a mask, but participating in the festivity in a priestly attitude, with the cross on his breast.

Also the representation of the Pope in a film enjoys the protection of German censorship. Thus the Higher Office has prohibited the production, otherwise unobjectionable, of the Pope, as an advertisement of a film equally unobjectionable which represented the marvels of the Vatican, for the reason that a Catholic will not tolerate the effigy of the living Pope to be utilised as an advertisement or for it to be placed on an advertisement stand near the picture of a dancer or the notice of a review.

As disgusting and brutalising, are considered the films whose projection can revive dormant primitive instincts in such a measure that moral resistance disappears and a desire to do similar actions is set up. This does not necessarily occur when a brutal objective action is represented; the film must rather show relevant subjective influences to be condemned. The representation of a bull fight, cannot be prohibited because the events represented are objectively brutal and for the German spectator are considered as torture for men and beasts. They do not operate in a subjectively brutal way, but excite on the contrary horror and have a deterrent effect. The place and time of the action represented, are factors to be considered, in judging of the brutality, as well as the ever present subjective influence produced by the brutal action that can be strengthened by the details of the representation of brutal objective actions, or it can be eliminated by means of equivalent values, ethically or otherwise.

Sensations are not considered repulsive when reproducing sporting or artistic actions that are intended only to cause the excitement or tickling of nerves. In the grotesque American film an influence, even subjectively irritating, may be excluded on account of the absolute unlikelihood and preposterousness of the action, for reasons of abnormal conditions of place and things which are beyond imitation. If however the grotesque performance refers to the reproduction of likely circumstances which can be imitated, and by which the grotesque action is brought back into the field of possibility and imitation, then such action will dull the better
feelings and excite the brutal instincts and becomes liable to act also subjectively on the brutal sense. This applies for example, to scenes of savage fights and of struggles.

A film is *demoralising* if the representation injures the moral feelings and thoughts of the spectator, viz., if it is offensive to the moral sense or grossly injurious to habits and to decency. The representation of the nude acts in a demoralising manner only when it is shown in lewd form, exciting the senses, such as the reproduction of the «Bauchtanz» or naked dances. The effect is also demoralising, according to jurisprudence of the numerous films of criminals and detectives in which the representation of the crime is shown as its own and only object, or in which the action of the criminal is glorified, and the police shown as stupid and clumsy. On the other hand, the Higher Office has permitted any locality to be used as surroundings for the dramatic plot of a film, even when the representation is drawn from the life of prostitutes and criminals, provided always that there is no infringement of any of the prohibitions above mentioned. Thus for instance, the life of the prostitute must not be represented as pleasurable and as a life which can be at any time abandoned, unless at the same time it is shown as reprehensible and it is made quite clear that the return of the prostitute to the normal social life is full of difficulties and disappointments.

Special protection, falling under the class of prohibition of demoralising films, is accorded to the subject of marriage.

The Higher Office recognises that marriage and adultery, cannot be excluded as subjects of the dramatic plot of a film, consequently there are no objections to the farcical representation of the rapid alteration of matrimony, adultery, dissensions, separations and reconciliations. It is required however, that for these representations of matrimony and for the development of conjugal problems, the conflicts should be represented in a serious form and have a psychological basis. In particular, matrimonial deceptions must be based on grave motives of a spiritual order and must not be based exclusively on levity and frivolity, which might be interpreted as a low valuation of matrimony.
German prestige is injuriously affected by those films which either in their contents or tendencies offend against the national honour or by reason of mendacious representation of German events are apt to diminish the prestige of the fatherland. It invariably tends to compromise the relations with foreign states when another Nation is described as knowing aggressive or unworthy, so that the spectator may be induced to consider it as such, thus inducing him to show to its citizens less respect than what he would have done without the influence of the film. This however, must refer only to prejudice in a political sense and not for other consideration. The false representation of the cultural and religious characteristics of a country can result in compromising foreign relations only in cases when it is of such an offensive character that it may endanger political relations with the respective country. However, it is not the object of the law, nor the duty of the Control Offices that have to apply it, to have regard for the excessive sensibility of foreign nations.

The films that are to be represented before young people from 6 to 18 years of age, are examined by the censor, in addition to the conditions stated above, to ensure that their moral, spiritual and physical development may not be prejudiced, nor their youthful fantasy overstimulated. The same more severe regulations apply also to advertising with writing or pictures, which are likewise subject to censorship, but these only when shown in public places, in the cinema halls, in shops, etc. Advertisements in newspapers are not included in cinema censorship.

In this field, fall under the prohibition of censorship chiefly the pictures showing criminal acts of violence against persons that may give rise to acts dangerous to life, and the piquant views of feminine charms who are intended to arouse lascivious feelings in the spectator.

The above is a summary of the main principles on which rests the Cinema Censorship in Germany. Every year, about two million metres are handed in to be submitted to examination by the Control Office, who has also to inspect about as many photographs and advertising posters intended to be shown in public.
places, and lastly, within the period of time, they have to provide also about half a million censor's cards bearing the authorisation stamp of the office, a work which can only be accomplished by the continuous use of stamping machines worked by electric motors.

Apart from cinema censorship, the circulation of films in Germany is not subject to any limitations. There are however, still certain kinds of control which are exercised by State organs, but not from the police point of view from that of schools as well as fiscal reasons. This control refers to films adapted for teaching (Lehrfilms) which takes place independently from the general censorship, and consists exclusively in subjecting the film to examination in order to ascertain whether it can be utilized for teaching in the schools. The fitness for this purpose is decided by competent authorities on each particular subject.

These authorities are the cinematograph offices in Berlin and Munich. The Berlin cinematograph office is independent from the central Institute for education and teaching, while the Bavarian cinematograph office has a special character. Neither of these offices are authorities of the Reich. A large number of experts in all branches of science are co-opted to serve in these offices and to assist the President in the examinations.

It is provided, by means of Ministerial Ordinances of the various provinces, that in representations made in schools or in institutions which are connected with schools, only such films may be shown as have passed examination in one of the said offices, and are found suitable for teaching purposes.

The Cinematograph office decides on the fitness of a film for school teaching, for evening entertainment for school pupils and their parents, and expresses at the same time its opinion as to which Institutes, types of schools, branches of teaching, age of pupils and kind of performances the films are more especially suited for. The certificate thus issued has an official value.

In addition to the declaration of fitness of the films for teaching purposes the cinematograph office is called also to give its judgment as to their educational and artistic value. This is done with the view of individualising those films which by the quality of
their contents are entitled to enjoy a preference with regard to taxation. As it is known, in Germany a tax is levied on the gross-profit made by the entertainment cinemas, which tax is reduced when the programme of the projection includes films in respect of which educational or artistic value has been declared by the cinematograph offices. In using instructional films, in some cases, it may even be possible to obtain complete exemption from taxation. This principle has reference to the great interest taken by the State in promoting good films because on account of this fiscal privilege, the proprietor of the cinema hall of theatre is induced to include in his programme, some films of this category.

The institute of inspection of the educational films, known as *Kulturfilmprüfung* has been in existence for many years already, and it has demonstrated that a good number of films were entitled to receive the qualification of educational or artistic films. Also this control is made quite independently of Cinema Censorship in its proper sense.

During the years 1919 to 1927, the cinematograph office in Berlin alone has examined 2,226 films having a total length of 1,315,325 metres, and of these, 1,583 films, 820,000 metres in length have been found suitable as films for teaching, as valuable from an educational and artistic point of view, and consequently subject to a preferential fiscal treatment.

From the controls above described, which relate to the contents of the films and to the mode of using them, it is necessary to differentiate the other precautionary measures which relate to the suitability of the rooms or places for cinematographic projections. These include the police regulations on the conditions of safety which are applicable to the construction and arrangement of cinema theatres, meeting halls, schools, etc., a subject which cannot be considered in this article as it falls outside the range of the State Control of films.

Dr. Ernest Seeger
Oberregierungsrat in the Ministry of Interior of the Reich
Director of the Higher Office for Cinema Control.
CHILDHOOD AND THE CINEMA

(From the French)

« Motion Pictures ». This is the term chosen by the English to qualify the cinematograph. Living pictures. One can also translate it into : pictures that stir the emotions. In fact, the repercussion of the impressions produced by animated pictures on the mind and heart of the spectator, is direct and deep. If this spectator is a child, therefore a highly sensitive and emotional creature, the influence exercised by the screen on its mentality, surpasses anything which can be experienced by an adult. The youthful being, who, in the dark is following the phases of a filmed story, is incapable of discerning between fiction and reality ; he gives himself up entirely to the enjoyment of the show. As Mr. Jean Renouard says : « The shadows, which to us are merely shadows continue long after their vision on the screen, to impress the child. They haunt his dreams, mysterious intangible beings persecute

(N.d D.). On the 12th. of April 1929, presided by the Italian Delegate, H.E. the Ambassador Marquis Raniero Paulucci de' Calboli, the International Committee for Child Welfare, discussed in Geneva the problems of the formation of the character, mentality and intelligence of children, through the influence exercised by the cinematograph. In former Sessions, the Committee had examined the discussion of this problem and the legislative situation of the greater Nations was studied with great care and special attention. Very important reports were presented and discussed.

The Director of the International Educational Cinematographic Institute, was invited to be present at the Meeting of April 12th. He exposed at length the programme of the Institute in accordance with the aims considered by the Committee. Described the various aspects of the question, illustrated the fundamental problems which are discussed to-day in the numerous countries by various institutions and committees, which have been created for that purpose, proposed a practical plan of action by means of an international inquiry, which should make an accurate study and take into consideration the opposed interests, the observations made by the industry, the data collected by eminent scientists, sociologists and jurists of many countries.
and frighten him like ghosts. They take the shape of living persons, with whom he can get into touch. For, has he not been allowed to see them, with the consent of his parents? He gives himself up to their influence, thinks about them, reflects and tries to understand and often guesses at the meaning of certain scenes, which at first appeared confused to him.

It is thus, that in the mysterious sub-conscience of the child's soul, notions and decisions take shape, of which we cannot guess the consequences. Thus, that films can become dangerous to his moral and physical health. This danger is far greater to him than the perusal of literature and the contemplation of pictures not adapted to his childish mind. This peril has been denounced by all those who have studied child psychology. In spite of the measures taken by most legislations, which organise certain forms of control, inspection and censure; educators and judges are unanimous in declaring that the cinema is one of the most active factors in juvenile delinquency. Certain groups, impressed by these statements, have gone so far as to demand that the access to public cinemas should be absolutely prohibited to children.

A complex action, with a practical and positive form has to be developed. To quote a great American educator, it is not to throw stones at the cinematographic industry, but to study with full knowledge the influence which it can exercise and exercises on the formation of civil, political, national and religious consciousness and the mentality and formation of character, especially in the child. Concrete results must be achieved, and such that can contribute to direct the film industry towards a production always more in keeping with the social morality, and to improve the legislative institutions which have been created by the States to form barriers of protection against low morals. Undoubtedly, it is a very wide field of action and its problems are arduous, although of extreme utility and importance. The Institute, has requested the Committee for Child Welfare to direct every technical research concerning this problem, towards the organ specially created by the League of Nations, so as to avoid the springing up of innumerable other Institutions, often not wholly uninterested and quite uncontrolled, which could hinder the unbiased examination of the practical schemes.

The detailed report of the Director of the Institute, was unanimously approved by the Committee. The Vice President of the Polish Senate,
For my part, I do not think that the remedy lies here. The success of the cinema is a fact against which it is vain to react. It is impossible to go against the stream, but its irregular course can be so directed as to obtain better results for the general good. But how?

From an educational and pedagogical point of view, it is more and more evident that the cinema is a great factor for instruction. The cinematograph is an object lesson which enables the poorest child of the humblest primary school to see the wonders of the furthest regions of the World. For the teachers, it is an excellent procedure for demonstration, and a means of awakening in the child the habit of observation. Be it for natural history, geography or history, they always find documentary information and even educational subjects which can give the scholar better than any verbal recital, an object lesson which, to quote Montaigne: « happens like a meeting and passes without being felt ».

How much time has been devoted to the teaching of hygiene, botany, and mechanics! To initiate the pupil in the phenomena of the circulation of the blood, the microscopic system, the processes of the germination of plants, the analysis of movement, Mr. Posner, the Minister of State, Count Carton de Wiart, the French Ambassador, Mr. Regnault, the Spanish Delegate Mr. Amador, the Delegate of the Red Cross League, Mr. Humbert, Mademoiselle Hein, the British Delegate Mr. Harris, the Delegate of the International Labour Office, Captain Johnston and other delegates expressed their approval to the schemes proposed by the Director in the name of the Institute.

The Minister of State, Count Carton de Wiart proposed a resolution which was unanimously approved, inviting the International Educational Cinematographic Institute, to examine with particular care, the question of recreational films specially adapted to minors.

In fulfilment of the promise made to the Committee for Child Welfare, and in accordance with the decisions of the Committee of the Institute, the executive organs have already begun to investigate the problem.

Concerning the problems of childhood and the cinematograph, as mentioned in the preceding note — our Review intends to establish a vast debate and discussion.
nothing will amount to the value of photos taken by the objectif, which reproduce the movements of life, greatly slackened on the screen if accompanied by good verbal commentaries.

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The cinema must not only be an infinitely precious auxiliary for the instruction and education of youth. It is essential not to neglect any further, what I would call, its recreative value. It is not enough, that pedagogues use the cinema, with ever improving and more ingenious methods, for strictly scholastic purposes; what I consider no less important, is to supply the children and the young with films which divert and entertain as well as with those which instruct. Films, which are not, as is often the case now a days, mere trashy novels more insignificant than those offered to the adult audience, or so called comic scenes, painfully lacking in wit!

It is well that the action of those interested in the problems of childhood, should be protective with regard to the cinema. But it should above all be constructive. To discard the bad films is not sufficient. Good ones must be provided, and should they not

In our next number, will appear an article due to a great scholar and apostle: professor Maurice Rouvroy, Director of the Central Establishment for the special observation of children, and laboratories of psycho-pedagogy in N'oll. Professor Rouvroy — who is an expert in these matters, has studied the problem with great attention for many years and has realised noteworthy experiments which he describes in the above mentioned article.

If any reader of our Review wishes to collaborate and expose his opinions, specific studies or experiences, he is cordially invited to do so. Essays should have a technical purport, without controversial character, but be equal to the noble debate which such a study and inquiry demands.

In fact, discussion is of exceptional importance and can help to enlighten the executive organs and the special commission of experts which will collaborate with the Institute, as well as the International Committee for Child Welfare, the first which faced with competent knowledge and authority the problems it now pursues in accordance with the Institute.
be available in sufficient numbers, every effort should be made to promote their production by inducing the families and the cinematographic industry to encourage their popularity, by giving them the preference.

What about literature for the young? Many writers and designers have revealed themselves capable of understanding the childish intellect. They have imagined, animated and embellished the stories which have charmed the young readers of 10 to 15 years of age. The works of the Countess de Ségur, are still, after well neigh three quarters of a century, the books which appeal to the young. Why? Because, notwithstanding the oldfashioned attire of her young heroines in crinolines, this good grand-mother has devised that which is eternal in the child's soul. Why does the cinematographic art, which has the capacity of reproducing not only life, but its dream, remain poorer than the traditional Guignol, in its supply for the young audience?

I know that very laudable efforts are being made to create «film libraries» corresponding to the needs and tastes of children. In almost every country, measures have been taken to counteract a danger and scarcity which is universal. No doubt, this will be one of the most useful tasks of the International Educational Cinematographic Institute, created under the auspices of the League of Nations; it will encourage, assist and co-ordinate all endeavours of this kind. Although the films reveal to a certain extent their national origin, through the choice of their subjects and scenario, the physiognomy, and play of their actors, it does not hinder this new art to be understood everywhere. No other means of expressing thought is more appropriate than this one, for a systematic co-operation and a regular exchange from country to country. Thus what some have created, will become the possession of all.

Good scenarios and good films are requested for the children.

H. Carton de Wiart
State Minister
Former President of the Council of Ministers of Belgium.
Hon. President of the International Committee for Child Welfare.
The cinematographic art, having met with an immediate success exempt from criticism inclined to regard it as a perfect art, has grown into gigantic proportions too soon. Interests, fabulous profits, greed, unheard-of morbosity have falsified its development so suddenly that this great invention has had no time to recognize itself on its own merits.

Talking-films are to-day the object of all expectations. They are welcome, and when they come, we shall greet the stereoscopic and coloured images also.

I cannot here deal with the educative or scientific cinema whose field of action in the study of life in all its external and organic phenomena, is immense; my purpose is to speak of that art of telling stories by means of moving pictures, of the so-called screen representations, which, in the fervid life of the present day, have apparently taken the place of all the arts, especially of the theatrical art.

The so-called « star-worship » of to-day is about to be conquered and greater importance is being attached to other gifts requisite in the actors — the great theatrical gifts, for which physical beauty represents an asset of secondary importance.

What is then going to happen?

First of all, the perfect revival of the classic tragedy. The present vain and hybrid attempts, out of the proper setting, among the ruins, are a grotesque travesty rather than a failure.

I remember having once attended at Meiningen a revival of a classic tragedy on a scale which cannot be attained unless there

(Editor's Note:) On the artistic problems of the screen and on the future of the Cinema, we will publish in the next number, articles of great interest by Mr. F. T. Marinetti, and Mr. Norbert Jaques.
is, as in that case, a despot who is disposed to sacrifice his whole fortune for the sake of theatrical art. A structural copy of the Scena had been built, adorned, after the celebrated theatre of Aspendoo, with niches and classical statues; on the podium of the theatre the actors, dressed in white and gold and wearing masks, looked like living criselephantine statues and recited in a dead language, in Greek. Although I was unable to understand the text, I knew perfectly well the plot of Oedipus King and appreciated the complete harmony of an artistic production that belonged to an age gone by for ever.

It is possible that the talking film may again perform the miracle, completing it in all its decorative elements, and that it may aptly stage before the cathedrals in the surviving piazzas the sacred representations of the Middle Ages, the humanistic performances of the Rome of the 16th century, the first Italian tragedies, the first melodramas, the compositions of Gluck and Mozart in their original version, the representations of Bayreuth. And it may, if no longer with the voice of Malibran and Patti, or the acting and modulations of Talma and Duse, succeed in recording the present historical conditions of the stage.

The talking-film will be a sudden and unforeseen addition to the real theatrical art, the art of the stage, and is about to go back into the framework of that dramatic art which it threatened to supplant.

In spite of so many revolutions the arts are destined to remain what they are; within their limits, as Lessing affirmed. And, as in the case of the plastic arts which, after the rage of realism, impressionism, futurism and many other -isms, remain what they were, the theatrical art, through the evolution of the «silent Art», is being brought back to its proper limits.

What are then, one may ask, the destinies of the «silent Art»? The reply is easy: it will become the great «silent Art», the incomparable «silent Art».

We have seen really good films on the screen. In spite of many aberrations, we have admired excellent chiaroscuri, sublime visions of fantastic things which have taken the place of that
romantic art which, allowed to influence literature and painting, falsified both these arts.

Thanks to the cinema, we are witnessing the revival of the centuries — old mimic art — a primordial and universal perfect art which followed in the trail of civilization from the semi-barbarous expressions to the exquisite forms of Hellas, Latinity and the Rinascimento. We are thus able to enjoy again the spectacle of the eternal manifestations of civilization, condensed by culture and picturesque sensitiveness to which all the schools of art in Europe have contributed; we are witnessing the revival and staging of spiritual life as it appears to the eye.

Triviality would, however, be fatal; more than this, it must be stopped altogether. I would not be opposed to a strict State censorship with the object of preventing all works of doubtful taste; this danger, in fact exists and indeed is far greater than that represented by the exhibitions of plastic art which are necessarily open to all attempts. Arts of a public nature, such as the cinema, must be absolutely perfect and irreprehensibly moral; and the conviction must spread among the people that what they see on payment is above their capacity and that there is a limit to their right of criticism.

Some time ago I occupied myself with film-production and know by experience that a flawless film is not impossible. The natural enemy are the speculators and industrial managers, men with a second-rate intelligence, who, concerned merely with immediate profit-bearing possibilities, place themselves between the public and the creative mind of the artist on the strength of the following sentence, which is complete in its banality — « This is what the public wants! ».

Then as now, the object of my profound hatred are those glass-covered hot-houses which are improperly called « studios ». I have good reason to believe that the profuseness of papier-maché and artificial light and the foul atmosphere at once and completely put in a false light the character of the individual actors, even of those in a secondary rôle.

I was then able to see for myself to what extent are the people
accessible to a representation when they are asked to take part in it. I had conceived the plot of an old classic fable adapted to our epoch, and I selected the protagonists from amateurs, friends of mine, and picked out the «supernumeraries» from among the inhabitants of the place where I was, whom I knew one by one, as if I were their mayor. It was the people of Anticoli Corrado, the people of «models».

This experiment has never been shown in public, and it is not such as can affront the general public. The means at our disposal were limited although our operator was unquestionably able and uncommonly intelligent: he is now engaged in the same capacity by one of the leading film-producing companies in England.

The opinion of those intelligent people was examined, the production was that never before had reality and fiction been amalgamated so completely in one single vision. The buildings were suitably chosen amid those monuments and the «supernumeraries» to whom I had explained the plot, grasped it thoroughly and acted convincingly in their own homes and in the streets of their own village and afterwards in the buildings, imbued as they were with the event and the eloquence of the places where I had asked them to act. The sun shining upon us all completed the show.

I came then to the conclusion that it is necessary to create a literature for the screen, because the adaptation of dramas and celebrated novels to the cinema is an absurdity and an aberration. It compels the scenario-writers to make an exaggerated use of sub-titles, which is at once tiresome and inadequate, and obliges the artists to have recourse to those unbearable and monstrous colossal grimaces.

A proof of the possibility of creating a plot and of developing it through a series of images was afforded by Gabriele d'Annunzio; Cabiria is undeniably a harmonious succession of enticing scenes. It proves that no art can evoke the extraordinary and cause the transfiguration of the actors in the fabulous reality — which is precisely the characteristic virtue of the cinema. In the hands of
a far-sighted artist the cinema becomes, the pallet of a creative and superlatively romantic painter.

In its present conditions the cinema is already an adult art; it is technically perfect and needs no superfetations to be more convincing. Just as no one feels the absence of colour in the engravings of Rembrandt and Piranesi, which are in themselves so rich in colour; just as no barbarian would dare to paint the sketches of « Christ and the poor » or the « Basilica of Maxentius », it is useless to insist on colour or stereoscopic relief in the representations of objects and men in motion.

The art of the story-telling cinema is, in its present stage, perfect, as I have already said. If the talking-film restores to the stage all that the screen has taken from it, its power of expression as a whole will stand to gain. When the cinema will have restored to the stage what belongs to the stage, it will start its definite and, for this very reason, essential progress, ready to face criticism worthy of its aesthetic standard.

Giulio Aristide Sartorio
Member of the Italian Academy.
GOOD AND EVIL EFFECTS OF THE CINEMATOGRAPH

(From the Portuguese)

The cinematograph is quite an impressive phenomenon which has aroused the stupor, admiration and enthusiasm of the crowd in barely thirty years of existence. Theatres of prose and music have passed into the second category; and all other means of visual enjoyment have been far surpassed by the fascinating cinematograph projection. Today, about thirty to forty millions of people daily frequent the Cinematographic Halls. In a country like the United States 90 to 100% of its inhabitants go weekly to the Cinema. Colossal edifices are built, majestic in architectonics and splendidly decorated inside, which cost millions and millions of dollars. These buildings are rapidly transformed into great halls destined for the theatrical and musical culture of the people. Orchestras of hundreds of persons play symphonies, extracts from operas known and beloved by the audience, and the most modern compositions are also played and criticised by the crowds. The organ plays while tens of white robed singers, hidden behind columns or scarcely visible raise their voices in song.

This is the cinema of to-day in many centres of the United States; even in London and Berlin, it is taking root, soon it will have reached Madrid and Rome, Buenos Aires and Rio Janeiro.

Parallel to the magnificent phenomenon of expansion and conquest of the people, especially in the last years, is the war waged by the highest intellectual and scientific class against the Cinematograph. Not all, but a great many among the philosophers, psychologists and criminologists have set their face against it and credit it with all the evils of civilisation of today and all the consequences of the present perversion. Is the cinematograph alone responsible for all the evils? Is it then true that the indubitable perversion of customs is due to the white screen which shows us real and ephemeral life and which makes us often forget all sorrows and sufferings that surround the daily battle for life?
Let us not exaggerate. I, for example, defend the cinematograph.

And, in defending the screen I do not intend to deny the social consequences, sometimes evil, that it has been able to exercise and exercises! But I remember that the wonderful invention of Edison, of Lumière, and of Marey, has only lived for thirty years. Does not this time represent a brief and transient moment in front of the perfecting and establishing of so great a means of amusement? Well, one cannot hesitate in giving an opinion; the cinematograph of ten years ago compared to the cinematograph of today, is with regard to social morals and education of customs, as the Pao d’Assucar which dominates Rio is to the Himalaya!

During the first years of the cinematograph it was an instrument in the hands of uncultured persons, industrials without any faith or any human and organising spirit; they were the eternal, the fatal speculators of the new revenue of civilisation! This has always been the case. Even the first producers of automobiles were men who were driven very quickly from the market by the great and real automobilistic industry! To speculation succeeded the scientific organisation of the industrial production. In the cinematograph this happened in a more complex manner. The cinematograph, owing to its very character, attracted actors and actresses who knew as much about morals as 90% of men know Sanscrit, and through the pressing need to amuse the people at any cost and of amusing the special audiences that flocked to it (let us remember that for about twenty years writers, men of letters, political and prominent men were ashamed to be seen in a Cinematographic Hall, considering the film a shame and deprivation compared to the theatre). This is why the Cinematograph turned out detective, adventurous or worse films, exalting and illustrating the mortal sins of human beings and so on. And it is the logic, fatal consequences of such cinematographic projections that it should have a great and incalculable effect on the formation of spirits and tastes, of habits, not always good and very often evil, of the spectators, and it is only logic that this kind of production (like the dramatic and Granguignolesque scenes in a theatre vio-
lently aroused enthusiasm in the criminal quarters of London and New York up to the time when they were prohibited because they caused moral harm and showed the perfection of criminality) should have had a great influence on criminology in general and on infantile criminology in particular.

Not only, but I think that when one protests against all the cinematograph, one does not think, instead, that one of the best and most rapid means to combat the harmful influences would be to suspend the projection of all the films produced up to 1925 or 1926. Today these films, in every country of the World, especially in our countries of South America, in the Far East, in the provinces of European countries are being continually shown, exploited (might be said in technic slang) by the Firms renting Films. And they are exploited with copies, ruined, lined, ugly inside and out. These hundreds of subjects belonging to the production of all countries (it must be borne in mind that they were produced from 1914 to 1925) are shown to simple folk, unable often to read and write, peasants and artisans, to persons who do not know and will only know the worst sides of our so-called civilisation by these means.

These films had been censured; the renters are therefore in the right! But can a visé of the Censor given ten or fifteen years ago, when the cinematograph had not the same moral, social and political importance that it has today (or, better still, when such importance had not been valued exactly) be considered efficacious in time and duration also when the mentality or the industrial necessity of once upon a time has passed?

I do not hesitate to affirm that if all the great cinematograph critics, the scientists who aim their arrows at them often justly, the psychologist who in school and hospital trace the tragic consequences of the screen; the judges and magistrates who in numerous cases of infantile crime find in cinematographic projections incitement and instigation to crime; the sociologists, who in the films and their projections, see very serious and dangerous consequences in the cultivation of tastes, customs, habits on the mental and psychic formation of the population, were to make a full enquiry to catalogue the films that bring about such results,
if they wished to discover the first cause they would find that it is a question of that great industrial rubbish that still turns and turns, the prey of small speculation, from the village to the provincial town, and shows the people who ingenuously absorb all the good and evil which is communicated to them.

The first practical result of a vast action made by the International Institute and by the International Commission for Child Welfare should be, according to me, that of demanding each State to make a revision of all the films up to 1925 and also 1926 which had passed the Censure. I am sure that the inference of such an act would be exceptional. Nor would the syndical Cinematograph organisations that, today, are striving with every means and with evident excellent results to reach an ever increasing improvement in the intent of art and culture, be contrary to such a work. And the merit of the International Institute would be gigantic. The first great battle for the social purification of the Cinematograph would be won, and perhaps the consequences obtained would be the elimination of 70% of the evil.

It is necessary to recognize that the improvement of the production is not owing only to the desire of the industrials but also to the perfecting of the Censure institutions in different countries. Ten years ago in a number of nations the revision of the Cinematograph did not exist, today only in a few States it has not been introduced, but will be very soon. The Cinematograph industrials have felt the increasing pressure and have bowed before it, and such a movement aided by a sense of responsibility which has come to them through the practical knowledge of the evils that the Cinematograph, abandoned to itself, spreads among the masses.

I said before, I defend the Cinematograph! And, now I shall explain. I have admitted the social consequences of it, while assigning the greatest importance to the past, today I ask: Why not illustrate the merits of the Cinematograph? Why does one not remember the great good that it has done, and may bring to the education of the people and to the development of culture? Can we forget the popularity realized by means of the Cinematograph of the great historical works that brought to the knowledge of
those who were ignorant of the far-off epochs, customs unknown, episodes unheard of, the life and customs of the long past Roman Empire and of the Middle Ages? Can we forget the great work of geographical diffusion realized by means of the Cinematograph? The knowledge of the nature and of its secrets and of the enchanting poetry which surrounds all that which is unknown, and that the Cinematograph has revealed with admirable art? Can we forget what we owe to the Cinematograph in the fields of architecture, of scenery and the progress it has brought to optics, electricity and mechanism?

Great films that have caused to live before our eyes all the moral and spiritual beauty of people lost on oceanic isles, people that our civilisation, or the so-called civilisation subdued, destroying them; films that have caused us to live again with delightful poetic sentiment the struggles of humanity for the possession of riches and gold; films that have shown us the great social picture of life which tends to level men and destroy the genius; films that have shown us the distant regions of exploration interprises, the life of the jungles, and the immensity of the forests; all these productions are essentially educative and their beneficial results are of such importance as to annul and counterbalance at least all the evils that are imputed to the Cinematograph.

I am certain that the debate the International Institute proposes to establish with regard to the Cinematograph and the consequences it has on life and in the universal spirit, will be a discussion of the highest importance. And it is well that it be guided and directed by an Institute of a technical character, without interested apriorisms! To find all the good and to detect all the evil of this great invention of our century! So that the good will become greater day by day and may permeate all social classes; search for all the evil, the reasons for it and the consequences it brings to civil, political, intellectual and social life, to make of the Cinematograph that ideal instrument of culture, of social peace and of moral elevation which should be desired by all! A formidable undertaking to which all must collaborate with serenity of spirit.

Aloysio de Vincente.
THE CHILD AND THE FILM

(From the German)

If the educational film is essentially meant for the instruction of the young, it does not follow that its beneficial effect as an educator of the people should be neglected. The question arises however, as to the age at which a child should be exposed to the influence of the film.

In Germany this question is answered by a law which prohibits a child under six years of age to be present at a cinematographic show. The kind of film exposed does not come into consideration. The law, therefore is applicable to those who wish to educate, as well as those who entertain with films. We will not discuss here, to what extent the law is justified with regard to entertain ment films. The attention must be drawn to the fact, that the enactment of this law was influenced by the consideration that the normal representations take place in the late evening hours, and that parents could be tempted to take their children. As at special representations given for young children (and we are only discussing these), the hour is specially chosen to suit them, these objections do not arise. The question only concerns the subject, and the essential performance to be produced in juvenile presence.

Regarding the film plot: It is obvious, that everything which is classified under the name of «theatrical film» must be discarded. Also the films labelled by the Censor: «suitable for the young», are not to be considered, as these are only films which, in their essential parts do not present harmful characteristics, but were originally created for adults. In Germany, people of 18 years of age, are still classified under the category of «Youthful».

Even the educational and cultural film cannot always be presented to the child, as the subjects often surpass the capacity of understanding of the very youthful folks. Only a special mate-
rrial without particular character or title can be used for this purpose.

But before entering upon the fundamental theoretic question, I should like to report the test which was made in Berlin on January 19th, 1929 by the Association of German educational and cultural film producers. A film performance was given in the presence of an audience composed of about twenty children from 4 to 6 years of age. The representatives of the daily and cinematographic press were asked to attend. Professor L a m p e , Director of the Central Institute for Education and Instruction, had undertaken the task of acting as interpreter between the children and the film.

The representation resulted in the complete assertion, that films can be shown with advantage even to the very young. Several animals were shown on the screen: marching and galloping horses, cows, pigs, sheep, hens, chickens just creeping out of the egg, geese, marmots, camels and zebras. Also children engaged in all sorts of occupations and games. And finally, motor-cars, ships and trains in locomotion. All these views were taken from the most varied scientific and educational films, none of the scenes were especially composed for a youthful auditorium.

The results were astonishingly positive. All the children followed the scenes with the greatest enjoyment. Without being prompted, they exchanged their impressions and spoke to each other although they were not acquainted and placed in strange surroundings, amongst grown ups. They answered very intelligently to all the questions addressed to them by Professor L a m p e . Their many observations were unerring and spontaneous, which showed that the scenes, often abbreviated and changing, were fully understood by the children.

No weariness was noticed among the audience. Many details and peculiarities of the show were observed and remembered.

Some children were examined after a few days, and it was remarkable to notice how much they had retained of the impressions received. The children had really acquired knowledge and experience.

Comparative observations made in the Zoo, show that the
child is more easily tired at the sight of domestic animals and shows less interest than he does when confronted by the same subjects in film form. That a simple reproduction in the form of a picture, has still less effect is obvious. Professor Lampe emphasized this question in his lecture. An unprejudiced observer of children is aware of the fact that a child’s attention is attracted by life more than by theories.

Besides the fundamental recognition of the value of cinematographic shows for children, no real theory on the subject is advanced. Some observations of a practical order should however be made, regarding the content and length of films. It is obvious that an ordinary cinema programme cannot be carried through. As to the length of the film, it should not exceed 1000-1200 metres. During the representation described above, 600 metres of film were shown. It is also necessary to interrupt the performance, and during that interval a teacher could be made to give useful explanations to the children. Not more than 25 pictures should be projected in one second. A special objective must be kept in mind for the choice of the pictures, so that length, style, and order of subject are in accordance with the assimilating capacity of the child.

With regard to the choice of the subjects, it is advisable to take into account the surroundings in which the child has been brought up, and to alternate the views of things known and unknown to him. The town child will show a preference to machinery and means of locomotion of every description, but his interest will be aroused at the sight of animals because they are a novelty to him. For country children the opposite will be observed.

There remains the question, whether it is advisable that very young children should be « taught » anything at all. If one takes into consideration that a child « learns » more than the bulk of adults, it would be advisable to help the child in his work and to direct and simplify his studies. As an auxiliary to instruction, the film is undoubtedly superior to any other means. It appeals directly to the child and is in itself a means of acquiring knowledge. The film can achieve what is usually so difficult to obtain, and is of great importance for the child, namely, it can widen his general
outlook and explain many things to him. It can enlighten the obscure notions that often cling to a childish mind for years, thus eliminating the dangers that accompany ignorance.

How can the film achieve this?

A more genial means of instruction cannot be imagined, and if the saying « children and fools, say the truth », is correct, the happy enthusiasm with which young children follow the projections, is the best justification for the adoption of this method of teaching.

Dr. Hans Curlis.

Director of the Institute for Cultural Research in Berlin
How did we get permission to run off a reel?

It is indeed not easy for a man carrying a cinema apparatus to enter Afghanistan, and the «forbidden country» tenaciously kept its frontiers closed to American and British operators in spite of their several efforts to get on its soil.

At the start, we had no better luck: In April 1928, the Afghan Government refused to deliver the necessary visa for our expedition until... the return of the Padishag, Amanulla-Khan, to Afghanistan. We did not however abandon our plan and when Amanulla came over to the U. R. S. S., we reeled off his journey from Moscow to Constantinople.

At Leningrad, we threw on the screen at the Winter Palace one day, before the Padishag, his visit to the Moslem Mosque, which had been cinematographed two hours before.

Puzzled, Amanulla exclaimed, «How could you have done it so quickly?» And then came the question we were waiting for, «How can I thank you?»

By granting us permission to go to Afghanistan!

After a minute's thought, Amanulla Khan agreed and I trust he will not regret it.

The journey out.

On the map, Afghanistan is not very imposing, especially when compared to the U. R. S. S., but when it is a matter of actually travelling across it, from the Soviet frontier to its Indian boundary, the wearying journey, made on horseback, with a caravan, entails by the most direct route, three weeks full time. It was our method of advance, from the River Amou-Daria to Kabul (via Mazar
and Cherif, Gaibak, Bamyan). On our way back we took another route, going through Ghazuy, Kandagar, Ferrakh, Gueratte, Kouchkou, which entailed still greater loss of time, in spite of the fact that we journeyed by motorcar, driving the car along inaccessible roads. Further, we went on a number of expeditions starting from Kabul in various directions (more especially to Djelalabad) so that over three months were covered in Afghanistan merely by moving from one place to another.

**Conditions of Work.**

On virgin soil, work naturally proceeds with extreme difficulty, and we began facing our difficulties as soon as we had crossed the frontier.

The population of Afghanistan is made up of numerous tribes speaking a multiple number of languages. It was an arduous task,
at first, to arrive at any understanding of the strange medley of
type, costume and dialect.

A film depicting life and custom is always more difficult to
reel off than one properly staged, and in Afghanistan, we faced an
obstacle typical of that country only, - extreme religious fanaticism,
and an extraordinarily reserved population. We were not looked
upon merely as 'foreigners', but as 'Khafirs', (infidels) and a
Moslem believer can not allow Khafirs into his house, cannot sit
to meals with them, and must hide from them his ways and cus-
toms.

Scenes of nomadic life were particularly difficult to take. For a
number of days we followed nomads on the high road and
across the mountains, but only twice did we succeed in entering
their camp, and then only for a few hours.

Nor was work in the cities any easier. Who could have
thought that in Afghanistan where the sun shines daily, pouring
its blinding rays of light ceaselessly from morning to night
our worst enemy would be,-shade?

Yet it was so. At Mazar-et-Cherif, at Take-Kourgane,
at Gaibak and even at Kabul, we did little else but struggle against
the shade. The sun not only shines, it is bakingly hot, and every
living thing aims only at avoiding its rays.

The centre of activity in all oriental cities is the market place
and market places are almost always covered. Often, very often
we met with opportunity of watching astounding scenes, but ever
impossible to cinematograph.

All one sees of women in the cities can be described as moving
mannequins, covered from top to toe. At the first sound of the
apparatus (naturally automatic), such grey shadows move off,
tryng to hide behind some corner, or inside a gate.

The first school for girls has been opened at Kabul, but all
the school girls that attend its classes, ranging from eight to twenty
years old, are covered by the 'tchadra'. Often one meets them
on the street, black, nun-like figures, carrying their satchel — but
it would be futile to try and take a full view picture of them.

Among nomads, the women do not cover their faces, but it

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is impossible to take a picture of them: on catching sight from a
distance of the 'kaphirs' carrying their monstrous, shining machine
the women hastened to seize their children and dashed off to the
same tent, seeking shelter. In another tent, the men received
us with all due ceremony, and entertain us with sour milk and con-
versation.

Everywhere in Afghanistan we come upon striking contrasts:
cities of the middle ages — yet at the centre, at Kabul, modern
life; an extraordinary rapid penetration of European material
civilization in an Asiatic country decidedly retrograde.

My Credo:

The film «At the heart of Asia» (Afghanistan) is entirely
documentary, as are also the fruits of my previous work, «At
the back of the Polar Circle» and «The Roof of the World», (Expe-
dition to the Pamir).

In my opinion, even in its present imperfect condition, the
documentary film is of much greater value than any series of «arti-
stically» staged tableaux. Films based on real facts can alone
convey a true idea of the world around us and make a contribution
towards the enlargement of the intellectual horizon of mankind.

The development of the documentary film had in its process
to overcome not only conservative tendencies of producing firms
and those of rental contractors, but imperfections in the technique
of today as well. In perfecting this kind of film (ultra sensitive film-
fabric strong light exposure, perfected automatic apparatus, etc. as
in perfecting the «sonorous» cinema production, there grows
the possibility of elaborating new methods in taking scenes for
documentary films. Routman has partly indicated this in his
«Symphony of a large city». The new expression of Mankind,
the language of the cinematograph will not have its birth in the
theatrical cinema, which follows but one goal, - the entertainment
of the public.

While working for the cinema, I have not entirely given up
literature. My book, «The Industry of the Cinematograph in
Germany» resulted from my trip to Germany (1926). After completing the film, «The Roof of the World», I published my book, «On the Roof of the World with a Cinema Machine», and I am working now on new sketches of «Modern Afghanistan». My literary work compensates me somewhat, for the lack of satisfaction the production of my films gives me. My 'Cinema language' is as yet too imperfectly developed to enable me to give, through its channel all that should be given. The 'meagerness' of my cinema language is due partly to the conditions of work in isolated countries, during my expeditions.

The various authorities concerned created an infinite number of difficulties. The local governor of Djelalabad, Akhmed-Ali-Khan (who made such a poor figure recently as head of the army) went as far as prohibiting the taking of views. We had to seek a special permit from the central Government before we could start work in that typical and most interesting of all Afghanistan regions. At Kabul, one of the ministers refused to allow us to take a photograph of the «filkhané» (elephant stable) giving the following reason: «The elephants are too thin; they are far too tired out for a long march».

It is only at Pagmane, where Amanulla-Khan resides, that we felt entirely free. We could, there, reel off even the women, those lovely ladies «fashionably attired» in Parisian frocks, but still wearing a veil over their face, below the eyes.

Amanulla-Khan loved most to be taken in the company of the Europeanized deputies 'djirguy' of the Afghanistan Parliament — who hastily donned their frock-coats. Possessing his own automatic cinema machine he took pictures and constantly prieded us with questions regarding the technique of view-taking.

**Leading principle in Film production.**

Our cinematographic expedition aimed at the production of a cinema sketch of the country. I believe we have achieved our aim and that when our film is thrown on the screen, the veil of mystery hitherto covering Afghanistan, will have dropped.
From the very start, I actively opposed experimenting along strictly formal lines. To carry out experiments which cannot be verified, i.e., thrown on the screen, is impossible.

Every effort was centred in another direction. Contrary to Vertoff whose starting point for most of his works was the material on hand, I endeavoured to «take» that material, laying greater stress on the fundamental lines of the picture even during the taking of the views. These lines had already been traced, based on a study of Afghanistan through literary works, — from ancient civilization to the Middle Ages, on the mountains, in villages and towns, — and starting anew from European civilization. We succeeded in maintaining them in spite of all difficulties, and in my opinion, that constitutes the principal merit of our enterprise.

Ruins of towns founded thousand of years ago, with wild nomad tribes grazing their flocks in them. A village next to a feudal castle where the 'kichlaks' of the serfs till the soil from morning to night, using most primitive methods.....

I feel certain that work will be possible under better conditions in the future, so that it will be easier to pass over the material on hand, even unknown to the spectator, in a more perfected form. I shall then feel satisfied to entirely give up literature as regards films!

Wladimir Jerjew.
THE DOCUMENTARY FILM
IN SEARCH OF THE METEORITE IN THE TAÏGA

(From the Russian)

Telegram: Send immediately operator Taichete (1) Koulik. Summoned to the director's office, I was informed that I had been appointed cinema-operator to the L. K. Koulik expedition, organised by the Academy of Sciences, to the Taïga, in search of the meteorite. On the following day, the train carried me in the direction of Taïchete, where I hoped to join the expedition.

When I reached Taïchete, the expedition had left. Taking advantage of the winter road, the travellers had started 5 days earlier, bound for the farm of Vanavare.

Every minute was precious to me, I travelled day and night by post-chaise, changing sledge at each relay. The winter road had disappeared; to cross the chain of mountains, I was obliged to go by the summer road. The horses sank up to their necks in the snow. I had to give up one of the sledges, and riding the horse thus left free, I traced the path for those who came after me. Crossing a river in the mountains, I was dragged in by my sinking horse. The water rose up to my waist. The horse broke the ice and thus made a track to the other shore.

The twilight... The postillion far back in the rear, ... The snow... The Taïga dumb and solitary.

At last, after waiting an hour and a half, the postillion overtook me, and I was able to change my clothes, there where I was, in the midst of the snow.

After enduring many similar hardships, I reached the river Angara. The ice was thawing within some yards from the shores and its breaking up was eminent.

(1) Taïchet - The last station of the railway on the road of the expedition, 5,000 kilometres from Moscow.
There was no time to lose. The horses and the sledges were made to cross the river in the centre, where the ice was still strong, while with great precautions, we started out in the direction of Kéjma. Half way, near the cataract of Alpinsk, a horse succumbed. The shafts of the sledge were cut at once, but it was too late. The horse sank deep under the ice.

After five days of toilsome walking, harrassed with fatigue, I reached Kéjma. But... the expedition was no longer there! At the local base of Gostrog, I was given horses with which to continue my route to Vanavare farm. Along our way in the Taiga, I was several times obliged to built rafts, with the help of my 3 postillions, so as to be able to cross the rivers. At last, with great difficulties, I reached Vanavare farm, where I found the whole of the expedition of the Academy of Sciences. L. K. Koulik had given up all hope of my arrival.

We started out towards the spot where the meteorite had fallen proceeding by canoe, always keeping up the same speed. Every minute was precious, as the river in this locality, has many floating sand banks. Notwithstanding my entreaties, the expedition refused to halt so as to enable me to take cinematographic views.
At a mile from the spot where the meteorite had fallen, the Taïga disappeared. In its stead, we found many burnt trees, all of them uprooted and fallen in line with the tops in the same direction. They seemed to have been swept away by a formidable gust of wind. In that locality, there is a swamp, with many furrows similar to those made by the explosion of heavy artillery shells. This region is absolutely bare, and there is no vegetation or animal life whatsoever.

The weather and the scenery were favourable to my work. No life — nothing but the burnt out Taïga. I shot all the views that could be of interest and at the same time fixed on the negatives all the activities and vicissitudes of the expedition.

But a new obstacle, I had not foreseen, made its appearance: «the paoutes» (1). We were obliged to protect our heads and shoulders with nets, like those used against bees. Thus I worked for more than a month. Towards the end of this time, I felt the first symptoms of scurvy. As I had taken all the views required, I went towards Angara, taking with me the sick workmen. There I composed an ethnographic film called: «The Land of Angara».

(1) The «paoutes» - the oestres - the gnats, the thrips and other insects.
After having worked over two months in that country, I drifted down the Angara in a canoe, as far as Enissei (750 kilometres), returning by boat as far as Krasnoyarsk. Finally, I travelled back to Moscow by train.

With the views I had taken, a five part film was composed. It was called: "In search of the Meteorite in the Taiga". The film is an artistic narrative of the exploits of the scholar L. K. Koulik, leader of the expedition organised by the Academy of Sciences of U. R. S. S., in search of the meteorite.

N. A. STROUKOV (cameraman.)
FIRE AND FILM

The disastrous tragic fire that has caused the destruction of the Cleveland hospital and has caused a sense of deep commotion in the public of the whole world, has been, in part at least, caused by cinematograph films stored in the radiograph room. A precise confirmation of this is not yet to hand, in any case several chemists have each explained in a different manner how the poisonous gases that have widespread death amongst patients, doctors and nurses, have been produced. There is no doubt that other factors have contributed to produce this great disaster.

As the problem of fires produced by films is of first class importance, especially for education, which reverts to the utilization of non-inflammable films, or to use special systems for the storing of the films and for the use of projection apparatuses suitably protected, we think it useful to give herewith a large résumé of an article written by Mr. Thomas Mc. Ilvaine who possesses a high competence on this subject. The immense quantities of films produced annually is sufficient to demonstrate the importance of the peril.

Only in the U. States of America the annual production of films amounts to more than 400 millions of metres (about 270,000 miles). The films are today stored by the hundreds in distributing offices, schools, institutes, etc., and in some of these places there are thousands and tens of thousands metres of films.

Some years ago a Pittsburg fire caused the death of ten persons and twenty more were severely injured. The fire commencing in a room of a film-hire office rapidly decomposed the films stored in the room, and the gases produced, reaching a very high temperature exploded, causing the fall of the main walls holding the first three stories of the building although these walls had a thickness of over 8 inches.

Expert technical people were called to examine the debris, and reported that nearly all the regulations relating to the storing of the films had been neglected. The vaults were provided with double doors, but these had been left open, and there were no fire extinguishers at hand. The ventilators that could have carried away into the open the gas produced did not exist; also large quantities of films had been placed outside the strong rooms; in a room some employees had fitted a kitchen into which, evidently by mistake, pieces of films were found. The heating pipes in the building had been left uncovered, and many of the films had been left outside their metal boxes. The doors leading to the landing of the staircase were left continually open so that the current of air produced permitted of a rapid circulation of the gases in all parts of the building.
At Bayonne a few years ago, a terrible fire started in a chemical works were the silver salts were recovered from old films by dipping them into a hot solution of caustic soda. The accumulated gases caught fire and the whole building was blown up killing dozens of people. One of the most impressive features in this case was the extraordinary production of radiant heat, which at the distance of over seventy yards was still sufficient to melt telegraph wires, and to produce fires!

In the year 1925 in a laboratory at New-Jersey, placed into a so-called «fire-proof» building, and fitted with fire doors automatic extinguishers, with walls lined with asbestos, etc., a great fire took place. The inquest showed that the disaster had been caused by someone leaving open some of the doors.

Mr. Mc Ilvane suggests a number of arrangements which we think it useful to report here: 1° The vaults of the storage rooms must be well built. 2° Provide several fire extinguishers and aspirators in every storage room. 3° The doors must be made to close automatically and must remain always closed. 4° The electric wire circuits must be enclosed in lead pipes, and the light lamps must be made of globes containing steam or rarefied gases, and the switches must not give out any sparks when opening or shutting them. 5° Smoking must be strictly prohibited. 6° Film rolls must always be kept in metal boxes. 7° The boxes containing the films must be kept at a good distance from the heating pipes or heat radiators, these latter should be enclosed in metal cages. 8° The glue for attaching the films, which is very inflammable must be kept always well closed and preferably in small quantities. 9° When preparing the films, the various small pieces or fragments must be thrown into special boxes which close automatically. 10° Any other materials such as prints, paper, photos, etc., must be kept away at a good distance.

To these very necessary recommendations of Mr. Mc Ilvane, we may add that it is not difficult nor impracticable to follow even the most complex forms of fire prevention and order, especially for schools, Institutes, clubs and the like where a stock of films is generally kept. It is also advisable that the films should be stored in rooms situated at convenient distances from the school rooms, assembly rooms, etc., and in any case, in places which have no direct communication with the stairs, so as to avoid in case of mishap, that the smoke and fumes produced may not block the exit thus avoiding the possibility of grave disasters.

All that has been said above will have no value when the non-inflammable film, which is bound to come, will be introduced everywhere to replace the present film, and more especially in the field of educational cinematography which does not require to project great lengths of films on the screen.
The recent great development of film production with its representation of subjects of exceptional documentary and historical or artistic value, makes the preservation of negatives of the highest importance. The solution of the problem of storage, when dealing with negatives that should be preserved for tens, of for hundreds of years, when such films represent the life of today, its folklore, the ethnical boundaries of countries in process of establishment, explorations, discoveries, the imposing flights, the great conquests achieved by human daring, is of the highest interest. (Today everyone carries at least a kodak).

Experimenting on old photographic plate negatives, or on printed copies of positives prepared by means of an emulsion of collodion and gelatine, has proved that pictures can very well be preserved, provided certain fundamental precautions are taken.

Cinematographic processes are relatively too recent a practise to enable us to draw comparisons between the preservation of plates and that of films. Unfortunately also, many films of historical interest, taken in the latter years of the last, or the first years of the present century, were left in such pitiable condition that little of them has been preserved.

Cinematographic film negatives based on a nitro-cellulose compound were introduced for the first time in 1889, and the emulsion was neither at that time nor for a considerable period after, as sensitive as the emulsion used today. Up to the year 1895 the same emulsion was used in the preparation of positives. It was only at the latter date that the commercial production of film positives was started, and, two or three years later, a definite distinction was made between negatives and positives.

Photographic negative films however, had been used in increasing proportions during the period mentioned and their preparation which is on a basis exactly similar to that of cinematographic negatives, was subjected to identical processes and received the same treatment, we are able to form an opinion on the comparative qualities and possibilities in the preservation of films, making allowance for differences in manufacture.

Tests carried out by the Kodak Co. tend to show that provided the washing and impression of negatives is properly carried out, their preservation can be ensured for a long time. The constituent parts of a negative cinema film are a basis of nitro-cellulose, and a layer of gelatine containing silver bromide. The basis of nitro-cellulose mainly consists of cotton
nitrate which substance, though apparently fixed, undergoes a slow transformation, while the gelatine containing the emulsion is absolutely fixed, provided the impression, washing and drying are properly carried out.

Transformation or deterioration in the nitro-cellulose basis will be of no importance, if a constantly low temperature is maintained, but will become increasingly marked through the influence of high temperature as the latter favours the formation of peroxide of nitrogen which acting on the physical properties of the basic compound may penetrate the emulsion and gradually destroy the picture.

An impression insufficiently fixed, imperfect washing of the film allowing traces of hyposulphite to remain, greatly increase deterioration, producing a typical yellowish decoloration of the layer of gelatine. This is what makes the fixing of the impression and the washing so extremely important, and it is essential with a view to greater care that, after the ordinary washing after fixing the impression, the negative be once again fixed in new hyposulphite solution, then lavishly washed, — if the negatives are of great value, it is advisable that the water used be distilled water!

Again, when negatives are being prepared for a long period of preservation, it is advisable to reel them on cylinders made of wood, packing in chemically pure paper; they should then be placed into corrugated boxes, preferably of fibre or of vulcanite, which in turn should be enclosed into metal boxes. Contrary to what is almost always done in actual practise, it is advisable that during its time of storage, a negative should not come into direct contact with metal.

As has already been said, owing to the influence of temperature on the nitro-cellulose basis, it is advisable that negative boxes should be stored in cool, dry and properly ventilated premises. The ideal conditions for the purpose can be imagined as those of a good house refrigerator. Such precautions tend to effectively avoid physical alterations of the basic compound, of the layer of gelatine, as well as any shortening or crinkling of the film, so disastrous to any subsequent impression or projection, because of possible misplacement of perforations.

In conclusion we would say that care should be taken not to let films lie untouched for any considerable number of years. At least one impression should be made every year in order to allow of the dissolution of any gases that might form; in case this is impossible, it is advisable to unreel the cylinders once a year, which will also enable all traces of deterioration to be controlled.
THE FAMILY CINEMATOGRAPH

A fact which has been apparent of late and cannot be overlooked, is the collaboration for the improvement and development of moral and educational ideals, with regard to film production, in the United States. The producers have manifested the wish to be informed, before and during the performance, of criticism and advice expressed by the representatives of the most important educational organisations, so as to facilitate in the United States, the circulation of the list of films recommended for family use.

Mr. Will Hays, President of the Motion Picture Producers and Distributors Inc., has proposed in New York a programme of work to the representatives of the 46 organisations which number at least 52,000,000 members. Mr. Hays, recalled attention to the existence of a special Committee composed of 16 members, whose duty it is, to be in direct and continuous contact with the manufacturers, scenario directors, etc., at Hollywood. The members of the Committee make the opportune suggestions and indications according to the characters they represent. The producing companies, have begun to send in the manuscripts of the plays to be filmed, to obtain an estimate and an amicable control. If industrial misunderstandings arise, the Committee appeals to technicians which have been named by mutual consent.

All the free comments which appear in the press are systematically collected by the Public Relation Department of the Motions Picture P. & D. I. Mr. Hays declares emphatically that this does not represent a second censure or a means by which the Governmental cinematographic supervision is substituted, but a useful integration of the repressive system of public powers with a system of intimidation, which results from the main currents of public opinion. The second goal at which this collaboration aims, is to spread as widely as possible, cinematographic projections in the family circle. For this purpose, the necessity has arisen, to compile special monthly lists of films which have been passed as moral, educational and subject to be shown in the home.

A large national organisation is being created in North America, to promote this scheme. The film produced will have to be specially viewed by the authorised representatives of the most important organisations. The films are subsequently controlled by the Academy of Motion Picture Arts and Sciences. The Committees of the national Federations of Women's Clubs, educators, etc., will make special reports, according
to which the lists of films adapted for family use, will be based. Amongst the groups present at the Meeting, were the Boy Scouts of America, the Federal Council of the Churches of Christ in America, the Federation of Women's Clubs, the International Federation of Catholic pupils, the daughters of the American revolution, the Union of English speaking peoples, etc.

FIRST DEMONSTRATION OF SOUND MOTION PICTURES IN LIFELIKE PERSPECTIVE ON WORLD'S LARGEST PICTURE SCREEN ANNOUNCED BY RCA PHOTOPHONE

A new system of motion pictures, synchronized with sound by RCA Photophone, and projected on the world's largest motion picture screen in lifelike perspective, was demonstrated for the first time to a private audience of leading engineers, motion picture executives and newspaper men at the Gramercy Studios of RCA Photophone, Inc.

The new system, described as natural vision photography and projection, is the work of George K. Spoor and John J. Berggren of Chicago and represents over ten years research and laboratory development, in the effort to overcome the present-day limitations of the silver screen. The new system projects pictures of characters and scenes with lifelike size, detail and perspective on a vast panoramic screen, hitherto unattainable in the motion picture art.

Synchronized with sound by RCA Photophone, the new development, it was forecast by engineers and motion picture experts, opens a new field of opportunity in motion picture production.

To show the startling contrast in size and perspective between the standard motion picture of today and the natural vision picture of tomorrow, a standard 35 mm. film was first thrown on the screen, in the size as normally viewed in motion picture theatres. It seemed like a postage stamp on the vast area of the new screen employed for the projection of the Spoor-Berggren film.

Immediately following this, the identical scene recorded and reproduced by RCA Photophone on the Spoor-Berggren film, was flashed upon the great screen, 30 feet high and 52 feet long, sweeping across the immense studio proscenium from post to post, although pictures under the same system can be projected to a length of 70 feet. The line of a musical comedy chorus, dancing and singing in rhythm across a stage that extended the
entire width of the studio, was caught in its entirety by the camera and projected with threedimensional effect upon the screen. With the vast screen reaching from the floor to the vaulted roof it seemed as if the whole musical comedy chorus were walking in among the audience. The long line of chorus girls, singing and dancing across the stage, filled the screen from end to end, creating a perfect illusion of living dancers.

The application of the new system of natural vision pictures to great outdoor scenes and spectacles was next demonstrated, when a scenic film of Niagara Falls was thrown upon the immense screen. The audience found itself seated before one of Nature's wonders, with the majestic spectacle of water rushing from a great height down to their very feet, creating such an atmosphere of reality that one could almost feel the spray of this great cataract as it poured across the screen. So perfect is the focus attained by the camera in the new system that details in the picture as far as five miles away from the camera lens, stood out as harply as the figures in the immediate foreground. The Niagara Suspension Bridge was shown clearly outlined in the distance against the Falls, although the bridge was 2 1/2 miles away from the camera when the scene was taken. A lightkoues tower in the background was photographed at a distance of five miles.

By means of the Spoor-Berggren system the flat, shadowy, black and white images of present-day motion picture photography are eliminated for pictures that retain all the natural imagery, shading and proportion of the objects photographed. Recorded on the usual panchromatic motion picture film, differing only in that the film is approximately twice as wide as the ordinary film, the projected picture can be made to cover a screen filling the entire stage opening of the largest theatre. The new system, it was declared, marks an important forward step in ultimately bringing lifelike, full-stage, musical comedies and dramatic productions to the talking motion picture screen.

The natural vision system of motion picture projection does not produce merely magnified objects, formerly shown on enlarged screens. The new screen serves to contain the widely increased limits of picture which the special width film of this system embraces, and to heighten the natural vision effect. Actually, human figures on this screen closely approximate natural proportions.

Great panoramic battle scenes in natural perspective, covering immense areas of action, outdoor spectacles, broad stretches of natural scenic beauty, tremendous crowds photographed as a unit on the new film, are among the applications opened up for the natural vision camera. The travel picture, penetrating into foreign cities, jungles and deserts, will bring the full life and action of its scenes to the mammoth screen. The newsreel, will capture a range of action vastly wider and more diver-
sified than is now possible. All dramatic action, in fact, will be powerfully heightened, by that same illusion of reality.

In the Spoor-Berggren system, according to the inventors, the picture starts with the screen and extends into the background. The picture retains the real, natural perspective of all objects photographed, because a camera focus approximating that of the human eye is contained in the special lens system. The new camera captures two images and resolves them into a single picture on a special width film, bringing to the negative the full relative shadow values of the photographed object.

Optically, the projected picture permits the spectator's eye to see with natural vision what the special lens system (in effect an eye itself) sees in photographing the scene. The new lens system gives a widely increased angle of vision over the scene being "shot", thereby permitting close-up views of groups instead of individuals. Thus, the facial expressions of a number of persons may be noted simultaneously where, heretofore, in standard motion picture work the camera has been forced by its restricted angle of vision to concentrate on individuals.

The importance of this element to the filming of stage plays and musical comedy is very great, allowing full-stage action to be photographed in one picture with complete detail of the players' actions and expressions. No longer need motion picture audiences feel "blinders" being applied to their vision as the picture fades into an individual close-up. Now all characters stand out in their full pictorial values as the eye sees them in a stage play, permitting observation of every bit of action on the stage at the moment.

In explaining the relation of the lens system to the eye it was stated that the double perspective or image action of the eye was eliminated, retaining only the double angle shadow effect which in normal vision gives objects their three-dimensional characteristics. The human eye normally represses double perspective, except in cases where intoxication or a similar condition paralyzes automatic control of the optical system, causing the eye to see two images. In this respect, again, the new camera duplicates the human eye, except that it continually corrects for the double image, photographing only the double angle shadow.

By means of this double angle shadow, motion pictures that are flat and two-dimensional, will simulate, real, three-dimensional objects with all the warmth of light and shadows which gives depth and space in normal vision. The contours, flat areas, vistas, and panoramas in the range of the Spoor-Berggren camera "eyes" will be recorded on film as they are; delicately shaded in curvature, or reaching back in straight lines of true perspective; in other words, modeled, to use a sculptor's phrase, in their true physical and optical proportions as the eye sees them with normal vision.
The Spoor-Berggren camera resembles the ordinary motion picture camera in external appearance, except that the magazine cases that carry the film are larger to accommodate the wide film. As many as 1,000 feet of film can be carried in these magazines, the maximum footage which is employed in current standard-size film practice. Thus, with the addition of sound, lengthy sequences of singing, talking and sound, action may be filmed without a break for reloading the cameras. In the position where the single lens of the standard camera is normally located, are two lenses, side by side, resembling two «eyes». The images they see are combined and transferred to the film through a duplex lens system. A special mechanical system in the camera prevents the wide film, used for these pictures, from bulging and flapping as it travels through the mechanism. Operation of the Spoor camera is not radically different from that of the standard camera.

In «shooting» pictures with the Spoor camera, the usual lighting of a motion picture set is employed. The lens system of the camera functions under precisely the same conditions that prevail in standard camera operation today, but will produce a much clearer and better defined picture at the same time.

This latter is one of the outstanding features of the new camera. It will focus sharply on foreground and background simultaneously, giving none of the blurred effects noted in ordinary motion picture close-ups. In the scenic film of Niagara, objects two miles away retained a sharpness of detail rivaling the Falls in the foreground in which particles of water could be clearly discerned.

The Spoor-Berggren projection machine closely resembles the standard motion picture projector in current use, except that its mechanical systems are arranged to carry the double width film. This requires special gearing and a compressed air control on which the wide film rides to prevent buckling or twisting. The lens system is standard optically, but larger to project the oversize picture. A special shutter arrangement is employed which differs radically from standard types.

At yesterday's demonstration, the picture was thrown on the screen from a distance of 144 feet. The length of the «throw» makes no difference, and may be increased or decreased to fit all theatres. The only requirement in projection, aside from the projector, is a large screen, usually covering the proscenium opening of the theatre.
THE LIFE OF THE INSTITUTE

Besides the original articles which fully describe the various aspects of the educational cinematograph and the aims which must be attained by the Institute, the Review will assign some pages every month, to the chronicle of the work accomplished, by giving information of the inquiries made, the results obtained, the comparisons that can be drawn up and the schemes approved by the Council and the Committee.

By this means, each field of action will be discussed in its twofold aspect: doctrinal and explanatory. Agriculture, hygiene, social prevention, films for didactic use and for professional and vocational training, the technical and legislative problems of the cinema; all these subjects will be duly considered.

In the next number, the Review will initiate the publication of articles written by well known authors and specialised technicians such as: (Léon Bernard, Chodzko, A. Lutrario, D. Ottolenghi, C. Thomalla, etc.), for hygiene and social prevention. (Seyewetz, Namias, etc.), for cinematographic technic. (Viborel, Urwick, etc.), for professional and vocational training. (Plugge Van der Moesen, Röber, etc.), for legislative questions. (Gabriela Mistral, Baralt Coissac, Gottheiner, Eckardt, Roux Parassac, etc.), for the didactic and scientific film. (don Pedro Sangro, Michels, etc.) for the social problems of the cinema with regard to childhood; and all other fields of action of the Institute.

All these personalities have accepted our invitation to collaborate in these and all other fields of action of the Institute and have consented to provide the Review with their valuable articles, thus assuring to the publications of the Institute, the moral and spiritual value which it hopes to attain and develop to an always increasing measure.
The Cinematographic industry is passing through a phase of restlessness and uncertainty. The talking film has appeared like a hurricane on the cinematographic horizon creating a general confusion in this important branch of human activity.

What will happen when the storm has blown over? How many enterprises will have succumbed and how many will have survived? Like all violent phenomenon it will be of short duration and, after the crisis, the right path will appear.

Why does the International Educational Cinematographic Institute take an interest in the great problem of synchronised and talking films? Such a question could only be asked by those who do not take into account the immense possibilities of education, science and art which the modern cinematograph offers on the screen.

First of all because it is a question of art. The sound is part of the action, this is the opinion of those who favour synchronisation, and we agree with them. It is not a simple musical accompaniment but a valuable complement to vision. The mute art asserted itself on account of its atmosphere of silence and concentration which is usually associated with cinematographic projection. However, we consider that talking films can gain greater favour only through perfect synchronisation.

Orchestral accompaniment during the last decade has played a very important part in cinematographic performances. In every country attempts have been made to adapt the accompaniment to the subject projected and to modern orchestral instruments, but still it is often far from the original interpretation, chiefly because the method of rendering the music is at the mercy of any conductor of local orchestras. The talking film does not tend to abolish and suppress the orchestra but to give the film that multitude of sounds, songs and intimate expressions of local colour, which no orchestra can produce.

The cinematograph is gradually becoming an art. The talking film cannot impede the advance of the screen on this path, for in such a case it would be doomed to certain death. The power of art does not only impress, exalt, or move to emotion, but it suggests ideas and vision, determines feelings and state of mind, interpretations and sensations which rise beyond the pure and simple reality offered to the senses.
If the talking film succeeds in being the integration and perfect artistic complement of cinematography, it will confirm the latter as an art. On the contrary if it is limited to a mere substitution without that interest which can be aroused by the material existence of an orchestra in a projection theatre, either sounds or words would diminish the artistic power of the cinematograph.

If the success of the talking film in the theatrical filmistic production could be doubted, we believe that no doubt can possibly exist of the exceptional importance that sounds and words might have in educational, scientific, ethical, folklore and documentary visions, where the scarce interest could be quickened by sounds or words and where the lessons and comments of illustrious masters could, in every part of the world even in the smallest centres, illustrate cultural and didactic films. Besides the very vast application of the talking film which is being adapted to the small scholastic apparatuses and especially to those of small size films, shows what new paths and possibilities are opening for the educational film.

Serious problems of a social and legal nature have arisen in connection with the talking film, and the International Review of Educational Cinematography cannot but be interested, and it proposes to handle them with the full collaboration of International Institutes devoted to the study and solution of such problems. The Review and the Institutes could supply said organisations with a valuable amount of news, information and elements which are really part of our programme and which we can easily collect.

There are social problems connected with the substitution, unfortunately unavoidable in the small centres, of the orchestra with the talking film. In the great cities we believe that the orchestra, even where it has already been suppressed, must return, as we have seen in the enormous halls of New York, where side by side with the talking film, are orchestras of nearly 100 players, whose performance is to be regarded as an important function in the musical education of the people. But in the small centres the substitution will be fatal! Many musicians will lose their employment; small companies of clowns and music hall artists will be replaced by the sound pictures where many attractive numbers are being spoken and sung. The International Labour Office with its well-known competence and good-will is taking an active interest in the solution of this problem.

There is also, in addition, the legal aspect of the question especially with regard to the new valuation of author's rights. Quite opposite conceptions could be reached by considering the possessor the author or by considering the author the actor! But, today, confronted by a composite performance how is it possible to determine the author's rights? And in the same talking film would it not be possible to find differences according to whether the disc system and a photographic system of words and music
are used in the film system which does not permit the separation of words or music from the projection? Will not all this create the problem of a different protection than that which the law extends to literary, musical and photographic works? And, in the specific case, which of the two legislative provisions might be applied? And will the artistic and musical rights already granted for theatrical and phonographic reproductions be also extended to sound, musical or talking films? And vice versa how will the obligations assumed by great singers be regulated? Will the whole of the pictures be considered as a performance or remain only pictures? What will become of the relations between Authors' Societies and cinematographs and producers?

These are only some of the fundamental aspects of the problems which interest our Institute fully, directly or as a suitable technical instrument to present a basis of study for the International Institutes.

Therefore we must follow up this phenomenon with interest since we believe that Cinematography is one of the greatest means that human genius has placed at the service of knowledge for the education of peoples.

If we consider the silent cinematograph such a powerful means for education what will it be when sound, word and colour have made it complete and perfect? We think that some technical information on this subject might be appreciated.

For many years scientists and inventors have been at work on the interesting problem of synchronisation of sound with the image; it can be said that this problem was faced immediately after the invention of the cinematograph and it would be very difficult to give its exact history. Perhaps the talking film, rather than an invention, could be defined as a series of improvements of scientific principles.

Today, the systems that are aiming at the practical realisation of the reproduction of sound and its synchronisation with pictures, are numerous and varied. For the present we shall limit ourselves to dealing with those only, that have had an industrial application. There are two principal methods of making these films industrially: the first is the disc system, that is, the sound is registered on gramophone records and mechanically synchronised with the pictures; in the second, sound is photographically registered on the film.

In the first system the disc is mechanically coupled with the projecting machine and is driven by the same motor, on the disc, on which there is a starting point corresponding to a similar point marked on the film; both must be started simultaneously, and must maintain a perfect synchronisation every moment, since a very slight difference (even the eighth of a second) is sufficient to produce disastrous results. This system has the advantage of rendering possible an easier registration of sound in
synchronisation with the silent films previously taken, of permitting the
projection of the films independently from the sound, because both the
film and the photogram are in no way altered in their normal dimensions
and, especially, it has the advantage of not requiring that scrupulous care
in handling which renders difficult to work the system in which sound
is photographically impressed.

Against these advantages there are, however, numerous drawbacks: the
registration of sound does not reach the perfection that is obtainable
by the photo-electric system, this is due to the reduced scale of vibrations:
registrable. The sound waves that strike against the diaphragm of a mi-
crophone cause the vibrations of a steel point which incise undulations
on the disc, corresponding to the volume and intensity of the sound
itself. One of the chief drawbacks of this system is that the energy ne-
cessary to incise the disc must be reduced from that generated by the
sound and as these energies are very weak, every loss is a detriment to
the result. Therefore the supertones, necessary in harmony, are never
perfectly registered on the disc. Another defect in the mechanical inci-
sion is that both the low and high notes cannot be registered in proportion
to their intensity, because in the case of notes too low, the side oscillations
are too wide and there is the risk that the steel point may break into the
preceding path. In the case, instead, of notes too high, the point vibrates
too rapidly and jumps on the surface of the disc, thus distorting the re-
production of the sound.

The discs are easily deteriorated, fragile and voluminous. Today,
celluloid discs are being made greatly reducing the weight and volume,
but will these resist equally well to the work they are meant for? We
believe that in the near future this system will be completely abandoned,
and will be replaced by other more practical means, such as appears to
be the case with the electro-magnetic registration on a steel wire, which
Doctor Stille is bringing from the experimental stage to that of working
practicability.

The photo-electric method permits a sound reproduction to be ob-
tained with greater facility and allows the registration of a much wider
range of tones, both, high and low. This method is divided into two sy-
ystems, one with variable density and the other with variable surface. The
system of variable density consists of lines of varying density horizontally
disposed across the space reserved for the impression of the sound, the
density of the lines is the result of the strength and quality of the sound.
If the sound is light the lines will be more transparent; more marked if
the sound is stronger and of larger volume. In the system with the va-
riable surface, the sound is registered by means of oscillations which form
a black demarcation on their passage with an irregular edge on a transpa-
rent background, greatly resembling the uneven teeth of a saw: the irre-
gularity of the indentation is in proportion to the density of the sounds. To the advantage of a faithful reproduction of sound, the photo-electric system adds the advantage of a perfect and constant synchronisation, since, even in case the film should break, a disynchronisation would not occur, but the sound would only stop for a moment and would restart together with the film, because both are impressed onto the same support. Against these advantages, there is however, the difficulty of handling and using these films. A difference in the development, an imperfection in the emulsion, some specks of dust, a scratch on the sound picture, are sufficient to produce alterations in the sound, the consequence being a higher cost in the production, and a shorter life of the film.

In the photo-electric system both by density of light and by variable surface the reproduction of sound takes place in the same manner. A ray of light, passing through the sound picture, falls on a photo-electric cell which produces variations of current.

In the system of variable density, the light that falls on the photo-electric cells is regulated by the density of the sound pictures; in the system of variable surface, the quantity of light that passes through it is given by the difference of the transparent surface. The variations of current passing through an amplifier composed of thermodic valves reach the microphone of a loud speaker which in its turn gives out the sound.

Also in the photo-electric system, the reproduction of sound still shows some imperfections. The photo-electric cell, containing selenium or potassium, shows a certain amount ofertia which causes alterations although less serious than those of the disc system such as to make the talking film still far from absolutely perfect.

In the field of sound amplifiers, the various systems in use, today, are not yet capable of registering all the vibrations, and these often become superposed thus producing distortions of the sound causing unpleasant effects, especially in the reproduction of the voice.

The systems of amplification more commonly used are divided into two categories: the trumpet and the cone. The trumpet systems are less sensitive and require large dimensions if an exact reproduction of the sound is needed; the diffusing cone system is more sensitive to the vibrations and renders the production of sound with much greater precision.

These are the systems used today by industry for the production of sound and talking films. Together with the imperfections of the means there are the difficulties of handling, which present a hard test for the ability of the technicians and for the purse of the industrial enterprisers.

Technical difficulties of scenes, and complex acoustic problems may be added to the already great optical difficulties. If practical experience has rendered the technique of the silent film relatively easy, the
technique of the talking film is still little known, and therefore requires continual tests, accurate study and keen observation of the various phenomena, in order to overcome the difficulties that have continually to be faced. Problems of acoustics, of place, and of materials, problems of laboratory, of development and of printing, are still awaiting solution and stabilizing in exact laws. In addition to the artistic and inventive sense, in addition to the complete mastery of the laws of optics and photographic chemistry, the technique of the talking films requires a knowledge and a profound study of the complex laws of acoustics. The mistakes made in the early stages of the silent cinematograph and which make us smile today, are being repeated in the case of the talking film, but men of talent, endowed with great ability and means are working unceasingly and we shall soon be able to smile also at the first steps of the talking film.

We have tried to give a general idea of the present state of the talking film, without entering too deeply into technical arguments of a detailed character. We have touched on the salient points of this interesting problem, which is still in its childhood, and which is full of fascination for all those who take an interest in cinematography. Every day famous scientists, technical men with high reputation, inventors and industrialists are strenuously endeavouring to bring this new instrument to perfection. We think that the progress of the talking film will be rapid and sure, and that it will not be long ere men and machines reach perfection. Then as we have said at the beginning of these pages, human genius will have placed another powerful tool at the service of the people and for the greater progress of civilisation.
The development of industry and trade, has in the past decade created many problems, amongst others, that of the scientific organisation of labour. Many thinkers and scientists consider their solution, as a means of improving work and a remedy for the difficulties that agitate the world since the war.

The importance of this problem is so great, that the International Educational Cinematographic Institute is devoting special attention to it. However, the opportunities afforded by the cinema for the methodical development of professional training and tuition, and the scientific organisation of labour are such, that the difficulties are greatly simplified.

The cinematographic projections used for educational purposes are a means of propaganda, they improve the methods of production, discern childish tendencies, spread the knowledge of machineries with their various systems and the means by which labour accidents are prevented, becoming thereby a real benefit to modern society.

For this purpose, our Institute, in accordance with the International Labour Office, is organising a vast inquiry and documentation. But to arrive at positive conclusions, it is necessary to be systematically informed, of the experiments that have been attempted, of the films which have been edited and the results obtained therewith. It is also important to be acquainted with the opinions of those who dedicate their attention to this problem.

Therefore, our Institute is making vast and accurate inquiries upon these various subjects. During the Session of May 12th, 1929 of the Administrative Council of the International Institute for the Scientific Organisation of Labour, at Geneva (with which our Institute has already collaborated) presided by the Hon. Prof. F. Mauro, deliberations were made which will greatly facilitate our task. The resolution decided upon was, that the duty of collecting and documenting all material concerning films related to labour questions, should be devolved to our Institute; and that all documents collected up to this day by the Scientific Organisation of Labour, should be passed on to the Institute, thereby simplifying our researches.
THE LEGISLATIVE ASPECTS OF THE CINEMA

THE TARIFF QUESTION

The juridical system governing the various aspects of the cinematographic film in general and of the educational and cultural film in particular, is one of the main questions affecting the life and future of the cinema to the consideration of which the Institute intends to direct its attention.

A study of this problem must, however, be preceded by an examination of the legislation concerning the cinematographic film by means of synthetical and precise comparisons between the systems existing in the various countries throughout the world.

Before proceeding further, it is necessary to make a preliminary remark. The film is to-day an element and instrument of life and progress. It is perhaps the most powerful element of knowledge and science, the most efficacious medium of persuasion of our century; there are no limits to its advance other than those which lie along the path of the technical and scientific progress of humanity.

It may cause the greatest harm just as it may be productive of the greatest good. It may be a stimulus to perversion and a pure source of entertainment and culture. In all cases, it is always a document, even if misapplied, of psychological and social research, of a revival and representation of life.

Its power of appeal extends beyond the barriers of language and will of peoples. It is a universal weapon which may strike to death, but which may also promote wellbeing and happiness in the world and may engender a radiant conception of Peace, however far may this ideal appear from present conditions and the hearts of men.

The film realizes its human form of life, activity and knowledge not only when it retains its character of a medium of culture, education and documentation, but also when it distinctly invades the dramatic and theatrical territory.

There are certain films depicting scenes of real and intense life, whose telling educational value cannot be denied. By telling their passionate stories they acquire, on the contrary a pre-eminent educational value.

Editor's Note: The Institute has in the short time of its existence, opened an archive, containing the cinematographic legislations of almost all the countries, with regard to customs, censure, minors, etc. The question will be treated and extensively developed in this Review.
A distinction based exclusively upon the formal and external characteristics of the film is, for juridical purposes, purely and essentially arbitrary. At present, however, we can do nothing more but accept this distinction just as we find it in existing legislation. Our task in future will be to unite our efforts with a view to a revision of the cinematographic «values» and also of those factors which form the nucleus of the film and may be classified among the ideal «values» of life.

This question is not yet within sight. And the systems of tariffs or censorship obtaining in the various countries are still founded upon conceptions which theory and conscience have overcome but which are in practice recognised by law.

We must therefore confine our present inquiry to legislation now in force: on this basis alone it will be possible to formulate the theories of the near future.

Nearly all the countries of the world have, for reasons of protection, subjected the cinematographic film in general to tariff treatment. The absence of any discrimination between theatrical and cultural films compels us once again to go into the whole problem in order that we may be able to dissociate its educational aspect in which we are interested to examine it thoroughly and formulate the opportune proposals.

The tariff system and the amount of duties charged on films vary a great deal from Nation to Nation.

In the course of the Geneva Conferences for the abolition of import and export restrictions, the idea prevailed that films cannot be regarded as ordinary goods and that national production cannot, in the long run, be protected by prohibitive and excessive fiscal barriers.

The term «trade», the foundation of mercantile relationships, even if in economics it is appropriately used to denote an article (and therefore also the cinematographic film) that may have an exchange value and therefore be matter of speculation and offer mutual utilitarian advantages to the contracting parties, is in itself incompatible with the antimercantile character attaching to every artistic or cultural conception.

If the work of an artist (and therefore also the educational film) is to be regarded as an article, its economic value will be in direct proportion with a utility of a purely spiritual nature. This utility is almost entirely the product of the creative element of the work. The material element has a limited importance which can be valued almost on a standard basis. What in economics is known as the cost of production, and what may lead, by means of the fluctuations of the market and the play of supply and demand, to a more or less objective fixing of the exchange value of the article, consists entirely, in the case of a work of art, in a purely subjective estimation of its utility not on mercantile considerations but from a spiritual and intellectual standpoint.
The day will perhaps come when the work of art, in all its manifold and infinite manifestations, though treated as an object of economic relations, will be regarded as lying outside the business sphere. It will then be possible to reconsider the matter and discuss the creation of special legislative safeguards on the same lines of that special protection which, through doctrinal and judicial elaboration, has been accorded to the products of the human genius by means of the copyright and of that system of prevention and repression of plagiarism which by itself serves to establish the value of the work of art as being capable of a peculiar and imitable form of protection which cannot be claimed in the case of all kinds of articles. (It would be useful to consider the work of art from the standpoint of its future sphere of influence in life and to find out the differences and limits existing between an article, taken in its strict sense as means for the satisfaction of material needs, on the one hand, and an article of art created for universal entertainment, on the other).

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Since its origin as a strip made of gelatin and celluloid, the cinematographic film has been subjected in the various countries to tariff treatment which varies in the case of:

a) blank film;
b) exposed negative film;
c) printed negative film;
d) positive film;
e) film of less than standard width;
f) theatrical or cultural and educational films;
g) films intended for purposes of advertisement.

We think it advisable to examine these items one by one, on the basis of positive legislative data obtained from almost all the countries of the world and, in the case of those States which have not supplied them officially: on the basis of information which the Institute has been able to collect.

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1. Blank Film. — There are considerable differences in the import tariff system adopted by the various countries. Duties are charged on the basis either of weight or of length (footage) two fixed elements of valuation — or ad valorem — an arbitrary and variable standard. There is no doubt that, in its present primordial stage of life, the film possesses all the characteristics of an ordinary article.

With regard to imposition of duty on the basis of weight, it should be borne in mind that the standard film weighs 7 grammes per metre and that therefore there are almost 143 metres of film in a kilogramme. As
weight is adopted as basis for tariff purposes by most countries it has been considered useful to give all data in terms of weight with a view to a better understanding of the differences in the tariffs of the various nations.

The following States impose customs duties on blank film having regard to its weight:

**Austria.**
Tariff n. 307 of the Austrian Customs Law: 1,20 gold kronen equal to: 1,73 sch. per kilo, *equal to 1,255 gold francs*, in addition to an exchange duty of 2% ad valorem.

**Brazil.**
§ 835 b. of the customs tariff: 10,000 Reis per kilo, *equal to 16,284 gold francs*.

**Bulgaria.**
Public Tariff Law. Official Gazette n. 2 of April IIth. April, 1922, as modified by the Official Gazette nos. 289, 525, 158, 43, 225 and 32 of 1923: 6 gold francs per kilo in addition to a municipal duty of 20% on customs duties.

**Czechoslovakia.**
N. 36 c of the Customs Tariff and Government Decree of January 12th. 1923: 3,60 Czechoslovakián crowns per kilo, *equal to 0,54 gold francs*.

**Chile - Unofficial information.**
0,45 gold dollars per gross kilo, *equal to 2,33 gold francs*.

**Columbia - Unofficial information.**
0,10 pesos per gross kilo, *equal to 0,5019 gold francs* which owing to are increased to 0,5907 gold francs which is increased to 35% if the films are sent by parcel post.

**Costarica - Unofficial information.**
0,40 cents of colon per kilo, *equal to 0,519 gold francs*.

**Cuba - Unofficial information.**
2 gold pesos per kilo, maximum tariff, *equal to 10,364 gold francs*. One gold Pesos per kilo, preferential tariff, *equal to 5,182 gold francs*. Imports from the United States are granted a 20% tariff reduction.

**Ecuador.**
Exempt from duties. They are liable to an entrance-duty of one fourth of a centago per gross kilo. Section 16, artiche 1127 letter B. Y. C. of customs duties without customs duties.

**Esthonia.**
Customs Regulations. Decrees of the Ministry for the Interior «Riigi Teataja» n. 77-78 of 1925: 0,728 gold francs per net kilo.
Preferential tariff with a 40% reduction is granted to imports from Belgium, Luxembourg, Spain, Italy, Austria, Greece, Latvia, Poland, France, Sweden, Germany, the United Kingdom of Great Britain and Northern Ireland, Switzerland, Denmark, Czecho-Slovakia, Hungary, the United States and Japan.

Finland.

Law of 28th January 1927: § 462 ed. 1929 marks 25 per kilo, equal to 3,25 gold francs. Preferential tariff is extended to the following countries: Holland, Belgium, Luxembourg, Estonia, Spain, the United Kingdom of Great Britain and Northern Ireland, Italy, Austria, Greece, Latvia, Poland, France, Sweden, Germany, Switzerland, Denmark Czecho-Slovakia, Hungary, the United States and Japan.

§ 640 of the Customs Tariff Law: 4 marks per kilo, net of tare, equal to 4,95 gold francs.

Japan.

Sections 7, 8 and 10 of the Customs Tariff and section n. 636 of the Import Tariff: one yen per Kin (1), equal to 6,29 gold francs per kilo.

Germany.

Section 186 of the Customs Tariff and Decree of 22nd December 1923: 1 gold drachma per net kilo, equal to 0,91 gold francs. All countries enjoying most-favoured-nation treatment are granted a preferential tariff. The following States are excluded: Poland, Spain, Portugal, Soviet Russia, Japan, Abyssinia and the United States.

Guatemala - Unofficial information.

1,50 Dollars per kilo, equal to 7,77 gold francs besides the 8% ad valorem, under the paragraph: Consular rights, of which only 2% actually goes to the Consulates which legalise the account. The total Customs duty including the 8% in of 15,25 gold francs for the negative and 11,04 gold francs, for the positive.

Honduras.

0,15 Dollars per kilo, equal to 0,77 gold francs.

Iraq.

Section 12 of import Tariff and section 19 of Customs Law, n. 27 of 1928: 3 Rupees per kilo, equal to 9,44 gold francs.

Irish Free State.

Section 12 of Finance Act of 1925 and Section 18 of Finance Act of 1928: exempt from customs duties.

(1) One kin — 1,323 lb.
Italy.

Item n. 948 of Customs Tariff in operation since 1st November 1926:
10.20 gold francs per gross kilo, including the tariff of majoration
on the fundamental customs duty.

Unexposed films are subject to half the ordinary duty.

**Jugoslavia - Unofficial information.**

3,25 gold dinaro per kilo, equal to 3.23 gold francs, «maximum» tariff;
2,50 gold dinaro equal to 2,48 gold francs, preferential tariff.

Latvia.

§ 169 Section 3 Customs Tariff: 2,25 Lats per gross kilo, equal to 2,24
gold francs; all countries who have concluded to commercial treaties
with Latvia are granted a preferential tariff of 1.50 Lats equal to 1.49
gold francs.

Lithuania.

§ 215.5 Customs Tariff: 1 Litas per Kilo, equal to 5,70 gold francs.

Mexico - Unofficial information:

One piastre per kilo, equal to 2,591 gold francs.

Norway.

Item n. 97 of customs Tariff: 2 krone per kilo with a temporary increase
of 50%, equal to 4.14 gold francs.

Palestine.

75 mils per kilo, equal to 1.89 gold francs.

Poland - Unofficial information.

6,20 złoty per kilo, equal to 3,58 gold francs. For all those countries with
whom commercial treaties are in force, the tariff is reduced to 4
złoty per kilo, equal to 2,31 gold francs.

Portugal Unofficial information.

0.33 gold escudos per kilo, equal to 1.74 gold francs. For all those coun-
tries with whom commercial relation are in force, the preferential
tariff is reduced by half.

Rumania.

Art. 1788 of the Customs Tariff. 30 Paper Lei per kilo, equal to 0.92 gold
francs.

Russia (1) U. R. S. S.

1.50 gold rubles per net kilo, equal to 1.80 gold francs.

(1) Regulations issued by the Council of the People's Commissaries and of the Central
Executive Committee of the R. S. F. S. R., dated April 12th 1923, relating to foreign trade,
the quota, licences and certificates for importation and exportation; instructions issued by the
Council and the Presidium of the U. R. S. S, see also Decrees of 1923, n. 31, pag. 345, n. 40,
pag. 424 and n. 32, pag. 539. The monopoly and control is entrusted to the Sookino by the
Decree of the People's Commissaries, dated 13th June, 1924, n. 57 in the Collection of De-
crees for 1924, pag. 559.
Salvador - Unofficial information.

0.40 Dollars per kilo, equal to 2,073 gold francs.

Spain.

Section 691 of Customs Tariff of February 12th., 1922 : 2 Pesetas per net kilo, equal to 1.70 gold francs; preferential or second tariff, amounting to 1 peseta per kilo, equal to 0.85 gold francs, is granted to countries with whom commercial treaties are in force, that is, to all countries with the exception of Albania, Danzig, Esthonia, Latvia, Lithuania, Poland and Soviet Russia.

Sweden (1).

Item n. 300 of the Customs Tariff : 80 öre per gross kilo, equal to 1,10 gold francs.

Switzerland.

Item n. 694 a of the Federal Customs Tariff of October 10, 1922 ; Federal Law of October 1st, 1925 ; Regulation of June 10, 1926 ; 0.40 Swiss francs per kilo, equal to 0.365 gold francs. Exemption from duty is granted in cases when the weight does not exceed 100 grammes or when customs duties would have been less than twenty cent.

Tunis.

Customs Tariff of May 30, 1914 : 10,20 francs per kilo, equal to 2.02 gold francs.

Turkey.

Item n. 766 of Customs Tariff and statistical n. 1186-1187 : 37,50 Piastres per kilo to be multiplied by 5, equal to 4.72 gold francs. This tariff is extended to all the signatories of the Lausanne Treaties, as from August 1929; for the other countries, the coefficient of multiplication varies from 5 to 8. In addition to this, there is a 6% ad valorem duty covering forwarding, insurance, unloading and douane expenses, besides a municipal charge of 0.40 piastres per kilo.

Hungary - Unofficial information.

Venezuela - Unofficial information

1.96 Bolivars per kilo, equal to 1.95 gold francs.

The following duties are chargeable in respect of length of film.

Belgium (2).

Customs Law, May 8, 1924 : 0.30 francs per metre in the case of films for negatives 0.15 :

(1) No deduction is made of the weight of boxes, paper or other kind of packing. If the article which comes under this item is presented unpacked, it is subject to a surcharge of 30 öre per kilo.

(2) Unsensitized films come under the normal ad valorem tariff, which, in the case of preferential tariff of 30%, is reduced to 10%.

7-ingl. 97
Frans per metre in the case of films for positives 15,38, equal to 30,75 gold francs per kilo. « Maximum » tariffs are, respectively, of 0.60 and 0.40 Belgian francs per metre. There is in addition a for both tariffs, on the 1.5 ratio. All nations are granted preferential tariff which is, as a result, reduced in all to 0.30 and 0.15 francs, respectively.

Great Britain.

Import duties. Sections 3 and 9, and Part III of Finance Act, 1925; Section 4 of Finance Act, 1927; and Sections 7 and 8 of Finance Act, 1928: One penny per linear foot, equal to 16.29 gold francs per kilo, standard tariff. Preferential tariff is fixed at of a 5/9 penny. These tariffs are applicable to films of standard width of 12.5 th of an inch.

Belgian Customs Tariff.

Luxembourg.

New Zealand.

Customs Law of 1921 as amended in 1927: One penny per linear foot, equal to 49.20 gold francs per kilo, besides of everything and also of supplementary tariff. 1 % ad valorem. There is also a supplementary duty of one penny per English foot. Films coming from the British Empire are granted a s. o. called British preferential tariff equal to 1% ad valorem.

Siam.

Customs Law B. E. 2469. Decree for Customs Tariffs D. E. 2469: 30 Satangs for every 100 feet, equal to 14.08 gold francs per kilo, for films of standard width.

Union of South Africa - Unofficial information.

Two shillings and six pence per 100 English feet, equal to 46.60 gold francs per kilo, or about 20^9/6 ad valorem.

United States of America:

§ 1453 Tariff Law 1922: cents. 40 dollars per 100 feet equal to 9.73 gold francs per kilo for, standard width. Films of variores width are taxed according to size.

The third group of fiscal tariffs is fixed in respect of the variable value which may be given to blank films according to the cost of manufacture.

It should be noted in this respect that the cost of blank film varies considerably in the case of films.

In view of the fact that with regard to almost all the countries mentioned below no difference is made between the two kinds of film, it is only possible to give the official data received from official or other sources and reduce them presumptively to a basis of 0.6514 and 0.285 gold francs per metre for negative and positive films respectively.
Argentine - Unofficial information.
25 % ad valorem, equal to 24.87 gold francs per kilo. The value is estab-
lished on a fixed basis of 5 Argentine dollars per kilo.

Egypt.

Customs Tariff and Item n. 37 of Import Tariff for films: 8°/ ad valorem, besides the supplementary duties of 0.5% on goods for delivery in Alex-
andria, 0.45% for delivery in Suez, 0.8% for delivery in Port Said, equal to 25.74 gold francs per kilo. The value is established on a fixed basis derived from the weight. A kilo of blank film is given the estimated value of one L. Eg.

France.

Decree of October 28, 1921; Law of March 29, 1910 and Decree of Septem-
ber 6, 1922; 30% ad valorem duty, equal to 20.49 gold francs per kilo in the case of negative films, and to 8.96 gold francs in case of positive films, inclusive of everything. Comprising a duty of importation of 2°/ ad valorem. The value is established in agreement between the Administration and interested professional groups on invoices legalized by the Diplomatic or Consular Authorities.

Morocco.

12.50% ad valorem together with a duty of 1.50 francs per net « de portes » per quintal equal to 11.23 gold francs per kilo in the case of negative films and to 4.91 per kilo in the case of positive films. The tariff is reduced to 5% for films imported through the Algiers-Morocco frontier.

French Customs Tariff.

Nicaragua (Unofficial information)

15% ad valorem duty, equal to 13.97 gold francs per kilo for negative and to 6.12 gold francs per kilo for positive films.

Holland.

Customs Law of 1924: 8% ad valorem; equal to 7.45 and 2.86 gold francs per kilo for negative and positive films respectively.

Panama - Unofficial information.

15% ad valorem, equal to 13.97 and 6.12 gold francs per kilo for negative and positive films respectively.

Dominican Republic - Unofficial information.

15% ad valorem; equal to 13.97 and 6.12 gold francs per kilo for negative and positive films respectively.

Syria And Lebanon.

Customs Tariff: 50% ad valorem, equal to 46.57 and 20.38 gold francs per kilo for negative and positive films respectively, for all the States not belonging to the League of Nations.

7*-ingl. 99 —
25% ad valorem, equal to 23.29 and 10.19 gold francs per kilo for negative and positive films respectively, for all the members of the League of Nations.

15% ad valorem for Turkey, equal to 13.97 and 6.12 gold francs per kilo for negative and positive films respectively.
Imports from Palestine are exempt from all customs duty.

(To be continued).

THE INSTITUTE IN THE FIELD OF AGRICULTURE

Among the tasks essentially assigned to the Institute, Article 2 of its Statutes places that pertaining to the agricultural field.

It is but natural that the founders of the Institute should have included agriculture in the special mission entrusted to the Institute. Not one among the enterprises and activities of mankind better deserves the attention of public authorities, of governments, and more especially that of international organizations. States have long given weight to the importance of an international investigation of agricultural problems with a view to study a solution of the problems of agricultural industry, — an industry so vital to every nation. A living and edifying example of this is the creation in 1905 at Rome, of the International Institute of Agriculture. It is therefore evident that agricultural cinematography could not fail to be assigned a place — one among the foremost — in the programme of an international institution such as the International Educational Cinematographic Institute of the League of Nations.

The special properties, acting both by suggestion and demonstration, of life pictures projected on the screen, prompted everywhere the development of Agricultural cinematography, in the hope of more ably reaching the rural populations and making a contribution to their education.

Cinematography is therefore destined to develope into an effective means of agricultural propaganda as regards methods of cultivation, of cattle-rearing, of agricultural machinery, of electrification of small rural industries, even of association and cooperation. Moreover it is of a nature to offer to the people of the country both an attractive entertainment and one of educative and instructive force. Its influence moreover may also tend to stop the exodus towards towns, encouraging families to settle rather in their own native villages.
With a view to the attainment of its far reaching social aims, the International Educational Cinematographic Institute endeavoured to establish on a systematic and sound basis, the programme that had to be followed in order to fulfil its purpose and to follow the lines that its Administrative Council and its Executive Committee had traced for it.

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From the time it came into action, — i. e., end of December of last year — the Agricultural Section of the Institute decided that it was difficult, if not impossible, to lay down beforehand a concrete plan of what educational cinematography could achieve in the agricultural field, from an international point of view. There were already in existence a number of official national, and even private organizations, and more especially international bodies actively busy on the subject. This however, did not discourage our efforts, nor impede the action the Institute intended to display in order to fully grasp the extent and direction it had to give its activities in the agricultural field. It seemed rational and logical at that point, to first establish a kind of inventory of possibilities.

"To know and make known" had to be our motto.

With this end in view, the following steps were taken:

1. To get into touch with the various Ministers of Agriculture of all countries — by means of an official circular letter — in order to acquaint them with our existence and with our purpose asking them to inform us with what sections of their Administration we might find it useful to open relations.

2. As soon as advised of these sections, to forward to them, as the answer of the Ministries came to hand, a "Questionnaire" by which we would be apprised of all Official and Private bodies dealing with agricultural cinematography.

3. As soon as replies to this "Questionnaire" reached us, advising us of the such Official and Private bodies existant in all countries, we despatch another "Questionnaire" to such bodies, in order to be informed of their individual activities in the field of agricultural cinematography.

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The first part of the programme laid down was realized in the first ten days of the month of January. In that short while, the Agricultural Section of the Institute sent an official letter, getting into touch with the Ministers of Agriculture of 63 countries, 54 of which are members of the League of Nations.
Passing on to the second item on our programme, entailed receipt of the various governments' replies, hence time and patience were required. Similarly, the third item on our programme depended on the replies received to the first questionnaire sent out.

However, since the start of February, replies reaching us are such that the development of the future activities of the Agricultural Section of the Institute is of most favourable promise; we can foresee at not too distant date a new phase in its progress, and a definite settlement of its organization, brought about by the growing cooperation of the various Governments and the Institute. The former have indeed fully appreciated the work entrusted to the Institute along the agricultural field, and the undoubtedly great benefits that will accrue to the development and progress of the rural populations of their countries.

It will be easy to form an exact idea of the importance of the results already achieved and of the lively interest shown by certain Governments in the organization and development of the Agricultural Section of the Institute, first by judging of the number of the States that have already responded to our demand for collaboration and with which we have definitely entered into regular relations, and secondly, by the very importance of some of those States, from a political as well as from an economic and agricultural standpoint.

We are happy to name, among them, French West Africa, South Africa, Germany, Belgium, Brazil, Canada, Egypt, Esthonia, the United States of America, France, Guatemala, Haiti, the Free Irish State, the Grand Duchy of Luxemburg, Madagascar, Morocco, Paraguay, the Netherlands, Sweden, Switzerland and Venezuela.

A detailed account of the active relations entered upon with some of these States will further allow the reader to form an impartial opinion of the importance that they have given to the development of agricultural cinematography, and of the interest aroused in their countries by the establishment of the International Educational Cinematographic Institute; also of the great encouragement they have given to the activities of our Agricultural Section.

Union of South Africa: The Secretary of the Agricultural Department of the Union of South Africa at Pretoria replied assuring us of the enthusiastic collaboration of his services. The South African Department of Agricultural indeed, resolved to make use of our films as a means of advertisement of its own services in rural districts, and has recently launched its first representation, «The Peasant's Friend», a film prepared in conformity with the instructions of the Department of Agriculture of South Africa, destined to acquaint the peasants with the services of the Department generally, and to encourage them to take greater advantage of the facilities the Department places at their disposal. «The Peasant's Friend»
is the first of a series of South Africa films. Judging from the success films of foreign importation have hitherto obtained, a still greater success is expected for those of national origin.

The Union of South Africa is therefore distinctly entering, in its public functions, into the field of agricultural cinematography, and its collaboration with the Institute promises to be particularly advantageous.

Germany: A great agricultural State like Germany, that is ever on the look out for technical improvements and better methods for the increase of its revenues, could not fail to grasp the importance of the mission assigned to our Section and its purpose, and we have received from the Reich Minister of Foodstuffs and Agriculture an assurance of his entire collaboration. He particularly called out attention to the «Zentralinstitut für Erziehung und Unterricht» and to the «Deutscher Bildspielbund», both at Berlin, indicating that both bodies were well qualified for cooperation with us because of similarity of aims. Cooperation between Germany and our Section is but at its start and will doubtless develop rapidly, especially after the recent agreements of general order arrived at between our Institute and the prominent German bodies working in the interests of educational cinematography and its industries.

Belgium: The Minister of Agriculture in Belgium has warmly praised our initiative in the work, and, failing a Government body in charge agricultural cinematography, has pointed out as more particularly active along those lines in Belgium the «Friends Educational and Instructive Cinema», at Bruxelles, not a money seeking institution. The International Educational Cinema Review will not fail to call attention in one of its subsequent issues on the brave and fruitful work done by that body.

Brazil: The Brazilian Government has given us the name of the Instituto De Expansao Commercial de la Secretaria de Estado dos Negocios da Agricultura Industria e Commercio at Rio de Janeiro, as the best Brazilian Service for collaboration with the Agricultural Section of the Institute in the field of agricultural cinematography, thus showing that our activity met with approval in that immense agricultural State of South America.

United States of America: Extensive and most valuable has been the collaboration of the Secretary of the Federal Department of Agriculture of the United States Government. The Agricultural Section of the Institute gains assurance of vitality and efficiency through the full cooperation of America, which can but rejoice the hearts of all who pin their hopes on agricultural cinematography as a means of world-wide amelioration of rural districts.

Dr. C. W. Warburton, Director of Extension Work to the United States Department of Agriculture at Washington, has been appointed to ensure collaboration with our Agricultural Section. We have already
obtained first rate information regarding the United States through Dr. Warburton, which will greatly help to the further development of our Section. It is enough to state for the time being, that the Department of Agriculture has at its disposal for cinema activities an annual budget of $ 63,000, that it has already put into circulation nearly 300 agricultural films, and that more than 65 State institutions are directly concerned with agricultural cinematography. The number of private organizations whose activities centre round the same problem is legion.

The Review will not fail to keep its readers informed of the vast proportions that agricultural cinematography assumes in the great American Republic and of all subsequent developments in the existing co-operation between the Section and the United States.

France: Among the great states with whom we are already in touch, that of France seems to offer equally immediate and important cooperation. His Excellency Mr. Jean Hennessy, Minister of Agriculture, personally replied to our letter, writing most warmly and promising the entire collaboration of his services; he has appointed M. Paul Drouard, Chief of the Agricultural Cinematographic Service at the Ministry of Agriculture at Paris, to ensure such cooperation. Mr. Drouard who has been a firm believer of Agricultural Cinema for nearly twenty years is at the head of an official Service which can justly claim to be a model of its kind. Readers of our Review will be able to avail themselves of all information regarding the development and organization of agricultural Cinematography in France, in an article to appear in that publication.

The generous documentation already supplied by the Ministry of Agriculture is of the greatest value to the Agricultural Section of the Institute. Indeed, the co-operation entered upon by the Agricultural Section and the Ministry of Agriculture at Paris, is on the point of taking more concrete form, as a result of the goodwill and interest that our young Section has aroused in H. E. Minister J. Hennessy, and in M. M. Lesage, Director of Agriculture, as well as in the Permanent Committee for Agricultural Cinematography so ably presided over by M. Alfred Masse former Minister; this will probably result in more autonomous action towards the achievement of its purpose.

Netherlands: We also met with warm response and fruitful information from the Dutch public authorities. Dr. A. J. Swaving, General Director of Agriculture at The Hague, has furnished us with very detailed documentation which will be embodied in an article to be published in one of the next issues of the Review.

Sweden: The Royal Administration of Agriculture has also supplied us with interesting information regarding agricultural cinematography in Sweden — also to be embodies in an article of the Review.
These, in short, are the most important steps in the activities of the Agricultural Section of the Institute during its first months in connexion with States whose cooperation promises to be most active and fruitful.

Elsewhere, the Section is attempting to carry through a technical agreement (which is about to be concluded) with the International Institute of Agriculture at Rome.

After having sought information in this manner at the heart of governmental and official bodies, of agricultural cinematographic industries ever spurred on by our motto «To know and make known», we are about to carry our cause into the rural centres. Many hundreds of agricultural associations the world over will receive a questionnaire aiming at probing their views and wishes regarding the question of agricultural cinematography. Thus the Section will be in a position to «make itself known» directly to the strictly agricultural circles, and to declare its action as regards agricultural cinematography. Such incessant increase of our documentation tends to lead to the second phase of the activities of the Section, when we shall be in a position to appreciate our own documentary knowledge and, strengthened by acquired experience, we shall be able to draw up, even to impose a general constructive programme which will ensure universal victory to agricultural cinematography.

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One essential factor that will enable us to overcome all difficulties, and attain the final goal, must be to ever seek inspiration above all, from the very noble mission assigned to the Institute, which more particularly entails international mutual assistance and a greater mutual appreciation among the peoples, — under the guiding spirit of the League of Nations.

To reach this goal, no better means can be used than the cinematograph, no field is more propitious to it than that of agriculture!
CINEMATOGRAPH USED FOR HYGIENIC PROPAGANDA AND SOCIAL PREVENTION

The great development of the cinematograph in the brief period of a few decades from the time when the unsteady flickering of the pictures induced doctors to advise their clients not to go to see them, up to today when the cinematograph has become an ally of medical and surgical science, leads to some reflections on the greater or lesser knowledge that it possesses of medical-surgical subjects in each of the clinics and laboratories, etc. The material of which we are speaking only rarely corresponds to the requirements of the case having been conceived either in an excessively popular form or with speculative-commercial finality. On the other hand the need of a good filmistic production of the kind is confirmed more and more as the exceptional suggestive and persuasive possibilities of the cinematograph are being ascertained.

One of the fundamental questions that our Institute has faced — in the field of cinematographic hygienic propaganda and social prevention — has been the study of the practical systems of the knowledge of what exists of good in it and the divulgation of the material itself. In accordance with the Section of Hygiene of the League of Nations — to which the Institute has considered its duty to submit the initial programme of activities — the Institute has addressed each Government in order to find out what use is made of the film in their respective countries in the above-mentioned fields.

We believe it would be useful in this initial period to refer objectively to the organisation in each State.

The questionnaire was the following:

1. Do any official sections charged with cinematograph propaganda in the field of hygiene and social prevention exist at the different Ministeries or, is it centralized in one sole Governmental office?

2. Do laws, decrees or regulations that discipline this propaganda, exist?

3. Do the offices make propaganda in direct form or do they use organisations, associations and official institutions or semi-official offices or private? (For example: works for the protection of maternity, infancy, works of social prevention of workmen, «After Work», social prevention, prevention of accident, aid in professional illnesses, professional re-education following upon misfortune, etc.).

a) In what manner is the propaganda developed and how are the projections executed and in what manner are illustrative lectures held?
b) Is an adequate hygienic propaganda and social generic prevention provided for in the programme of the primary and secondary schools?

c) Do industrial and commercial enterprises exist that make use of the non-cursive film (lantern slides) as hygienic propaganda of social prevention of health among their workmen?

4. Does a special Censure exist for this kind of film and is the Censure developed with technical or scientific criterion? In the affirmative case kindly indicate how the Censure Commission is formed.

5. Who sees to the distribution and renting of these films? (kindly indicate each House, Firm or Institution).

6. Is there a complete detailed catalogue of filmistic material referring to the present Questionnaire?

The Institute provides for the attentive examination of the replies which come from accurate study of the publications that are sent, and models of abridged pictures, on the state of each country. We think, as has been said, that it would be useful to reproduce systematically the said pictures in the Review.

Austria. — A collection of diapositives and films exists at the Federal Ministry for the social administration of the Office of Public Health. This office informs the authorities depending on it and doctors through circulars on the consistency of the collection of matter of social and hygienic propaganda by means of the film. Communications are made from time to time by means of the daily political press. The penal doctors, provincial doctors, sanitary officials, etc., may avail themselves of this material projecting it in halls existing in the industrial enterprises, works, or assistance of social prevention, schools and institutes of culture and education, first aid societies etc. The projections must be accompanied by illustrative lectures (1).

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(1) The hiring of material and texts of illustrative lectures will be made on request of the hiring department of the Office of Public Health to the Federal Ministry for social administration: Vienna 1, Hanuschgasse 3, and according to the following conditions:

1° the material will be hired out only to doctors who wish to give lectures on hygienic propaganda;

2° he who hires the material is responsible for any damages which might eventually occur from the time of its consignment until he delivers it back;

3° the renters domiciled at Vienna must provide at their own expense for the fetching and bringing back of the material. The renters that live out of Vienna are bound to pay the effective expenses of the return shipment of the material, the shipment must be made according to shipment for bulky goods;

4° generally the hiring will be made for a period not exceeding four weeks; in case they wish to keep the material for a longer period of time a prorogation must be demanded with a suitable period of notice;

5° as to the price of the hiring, necessary for the keeping up of this material and for new purchases, the central office charges 1 schilling for series of diapositives to 53.2 schillings for series superior to 50.10 groschen for every lecture. Prices are counted for each week calcu-
The projection machines necessary are at the disposition of the above-mentioned Institutes as the Central Cinematograph located in the Ministerial does not dispose of any.

The programmes of the High Schools and Grammer Schools provide for the teaching of hygiene, and for its general principles: the structure and the functioning of the human body, etc. In the normal school instead, hygiene is one of the official studies to be taught; in the establishments of the « Oesterreischische Montangesellschaft » the doctors hold systematic lectures on lifesaving in case of accidents in the mines, on first aid, on industrial hygiene and so forth. The Ministerial Office of Public Health has not undertaken, for the moment, a direct production of films of the kind. The material has been purchased from national and foreign Companies, as, for instance, the Hygiene Museum at Dresden.

The hygiene propaganda is exercised either by the Government administration or by the Provincial authorities and by the Insurance Institutes for sickness, by the private and special Institutes, and by Societies for the health of the people.

At Vienne, through the Municipal Aid Office a vast hygienic propaganda for married people, is made. The aim of the Office is that of calling the attention of those who wish to contract marriage to the dangers that may be derived from the contagion of venereal diseases and tuberculosis, and the consequences that it may have on the future generation. The Commune of Vienna has also instituted a premium of 40 schillings for those women who during the first four months of pregnancy, consent to undergo a blood examination (reaction Wassermann) and in case of positive results put themselves under an antiluetic cure. The examination and the cure are free of charge. Propaganda of this kind is called « Aid for Mothers ». The Cinematograph is largely used for publishing purposes to make known legislative conditions, to show all the possibilities and utility of the work it accomplishes, and show it to be in the interest of all the people to take advantage of the above systems. So the Cinematograph is used to instruct the pregnant women and to bring to their knowledge the consulting Institutes where they can be visited free of charge, and instructed on hygiene of the body and nourishment. And moreover the women at confinement receive as a free loan

lasting the time from the shipment of the goods to the day of their return. Every week begun counts as a whole week. Payments are made by special postal orders.

Given the very great importance of popular hygiene instruction undertaken by doctors it is recommended to make large usage of still and animated projections.

The governors of the provinces are begged to call the attention of its doctors under their jurisdiction and also invite all doctors in general to take advantage of such means. The invitation is especially given to doctors specializing in social prevention, accidents and so forth, or those who devote their activities to schools, consultations for pregnancy, maternity rooms, anti-tuberculosis dispensaries for venereal diseases, etc,
the cradle and the linen necessary for the birth. The propaganda continues, it is being developed in an efficacious form. It brings to their knowledge that in Austria exists a network of places of lactation (at present five hundred), it brings to their knowledge that they can receive free a complete package of baby equipment and all that is necessary to dress the newly-born hygienically.

Also the Insurance Institutes against disease make a great deal of propaganda, and women even though not of the Institute itself, have the right to obtain during the first twelve weeks of nursing a premium in money if the mother herself does the nursing. The premium may be extended to a maximum of 26 weeks if the mother nurses the child beyond the usual period.

The propaganda of prevention that is made among the tuberculosis to make them understand their duty in contributing to avoid the spreading the contagion among the relatives or those near them, is very vast. The same propaganda is followed for venereal diseases.

All the Institutes use the cinematograph largely as a means of suggestion, of education and of propaganda.

_Czecho-Slovakia._— The hygienic propaganda and the social prevention by means of the cinematograph is carried on by the Ministry of Hygiene and of physical education; it is therefore centralized at the Department of social Hygiene which in its turn, is divided into sections of education and sections of hygiene propaganda.

In conformity with the circular of the Ministry of the Interior of 17-I-1922 the permits of projection are conditioned and are annulled if within a determined period of time the pictures have not been projected. This disposition also regards films of culture and education. Competent authorities may demand a prorogation of the permit. The Ministry of Hygiene has entrusted the technical part of the programme of the spreading and the hiring to the section of culture of the Masaryk Institute for the education of the people and has consigned to the same the greater part of the films of the kind produced directly or purchased.

The hiring of the films is made with payment of a small tax which covers the general expenses, transportation and ammortisation of the cost of the films. The films, if adapted to young people are also used in the schools. Also the social-hygiene organisations dispose of films reserved for the use of internal propaganda. The Czecho-Slovakian Red Cross possesses four circulating cinematographs furnished with films and diapositives. Each circulating cinematograph when touring the provinces has with it a doctor who illustrates the contents of the projections.

The official Censure exists for all the films. The prescriptions referring to the licence or censure are determined by Decree of the Ministry of the Interior No. 191 (Imperial Code).
NOTES TAKEN FROM REVIEWS AND PAPERS

To facilitate the study, documentation and knowledge of what is being said, done and prepared, the Institute is systematically examining over 200 publications. The number of weekly and periodical reviews received by the Institute is constantly increasing. All the news which can be liable of revision, comparison or study is examined by the various departments and bureaux, and is immediately distributed to the respective functionaries. A large collection of notes concerning everything which has been published regarding special subjects or arguments, have been filed and can be consulted at any moment.

The Institute, will open a monthly column in « The International Review of Educational Cinematograph » which gives the chronicles of the most important news collected ; in it will also appear information, not strictly connected with the constitutional characteristics of the Institute, but which can, on account of its artistic, intellectual and social import, be of interest to the readers of the Review.

In the next number, the column will also contain information and notices directly collected by the Institute, through its corresponding and editorial agencies. A rapid survey of these pages will enable the reader to gather monthly information of what is being done, thought and published on the problem of educational cinema.

For this special department, as well as for the other fields of action of the Review, we repeat to all our readers our cordial invitation to collaborate with us, by spreading our Review and thus contributing to the victorious ascertainment of the cinema as a means of education, of high, moral, intellectual and social value.

FILMS AND CULTURE

With the collaboration of the director of the Zoological Gardens in Berlin, a film has been drawn up dealing on the life of the bison in the secular forests of Poland, the mountain eagle of the Bavarian Alps, the black stork of Germany, etc. As some of these zoological species are disappearing, this film will have a great documentary and scientific value. (Der Bund - D. 6/33).

The Badischekulurfilmspielen, in accordance with the popular University and the Union for the education of the young is organising in the city theatre at Freiburg, in Br. important projections of educational films, specially adapted for the people. These representations will be gratis and will be held on Saturday afternoons of next winter. (Badische Presse - Karlsruhe. D. 3/2).

To vulgarise the Cinematograph as a means of teaching history, science and geography, the Film Bureau of America is equipping a large number of halls, exclusively for the projection of scholastic films for children and educational films for adults. Many of the representations will be gratis. The Association is not interested in the profits. (New York Herald - New York. D. 3/24).

Several hundred educators and teachers were present at an important show of educational films, organised by the Stoll Picture Theatre and the Visual Educational Ltd. in London. To awaken the interest of teachers in cinematographic pedagogy, regular monthly representations will be held. (Daily Telegraph - D. 3/33).

An article by Lotar Holland called: « Films and the new Generations » treats on the opportunities offered by the cinematograph. It states that art and industry of the present day are in opposition with the actual form of film industry. New artistic conceptions will have to be applied to productions in the future, also for educational purposes. (Vorwärts - Berlin. D. 2/21).
A Film on « Egyptian Pastoral Life » is announced depicting the daily life of the labourers, in the ancient land of the pharaohs, which leaves aside the well worn decorum of sphinxes, mosques and the like. The film illustrates in a particularly interesting way, the difficulties against which the modern Egyptian, like his ancestor of the times of Ramzes II, is fighting to overcome the aridity of the soil. (Comedia - D. 6/27).

The Tagore Film Company directed by the cousin of the poet, has acquired land in the neighbourhood of Calcutta to establish art studios. Associated with the Wadan Society, it will produce cultural and religious films. Cinematography has made very great progress in India. Over 1000 natives are employed in the studios. Bombay possesses 4 producing companies, one has been created at Benares. (Film-Kurier - Berlin. D. 20/9).

The future of Indian cinematographic production is founded on films that have a psychological, historicical or mythological plot. The Indian National Industry of Bombay for the production of cultural and artistic films, is under the auspices of the Indian Cinematographic Committee and is subsidised by the Government. (The Times - D. 26/14).

The Parliament of Rumania is passing a Bill proposed by Mr. Michaëesco, concerning the obligatory introduction of cinematographic performances in the rural schools.

Benito Perojo, in an article entitled: « El Cinematografo en Rusia », announces that: The Ministry of Instruction prepares all the programmes of the Russian cinematographs, with the cooperation of authors, artists and University Professors. The Government produces two kinds of films; cultural and theatrical. The fixt deal on chemistry, botany, zoology, hygiene, social prevention, etc. The theatrical films deal on communistic politics with sentimental episodes.

All Russian citizens are asked to collaborate in the cinematographic industry for the duration of 3 months; the authors propose the plots, the artists superintend the scenarios and the advertisements, photographs, sculptures, etc. each lends his assistance in his particular capacity. Cinema actors receive a fixed salary no higher than the wages of an expert workman. (A. B. C. - Madrid. D. 25/6).

The Yale University in Boston is producing a series of films illustrating the political, moral and cultural ideals of America. The films will have a strictly historical character. (The Christian Science Monitor - Boston. D. 3/35).

The Minister of Instruction of Czechoslovakia has ordered a general revision of the cultural films produced throughout the Republic, to control and organise in a rational form, the distribution of adequate films in the schools and the Institutions for popular culture. (Prager Presse - Prague. D. 25/20).

A research expedition, organised by the « German Society of Cultural Expeditions » has set out for the virgin forest of Brasil. The cinematograph will be a great auxiliary during the expedition for documentary and scientific purposes. (Film Kurier - Berlin. D. 3/36).

An article by H. E. Wilson, examines all the means apt to spread the use of the cinema in schools, to awaken the interest of the pupils, to create strictly didactis films, particularly for science and the history of social sciences. (The Historical Outlook - Philadelphia. D. 37/7).

An article written by Ehrler, deals on the safty of the cinematographic halls in the schools and of the regulations that ought to be adopted in that respect. (Le Travail - Genèvre. D. 37/6).

An interesting article explains the organisation of the first film school « Filmseminar » which will have the character and the grade of a higher Lyceum. (Königsberger Allgemeine Zeitung - Königsberg. D. 37/1).
Some films have been made representing the life of human tissues. Such films are of great interest for the study of cancer. (Daily Telegraph - London. D. 14/15).

André Laphin, in an interesting article speaks of the study of the penetrability of matter with the cinematilusene and of the new invention of Magnan e Sainte-Laguë. (Intransigeant - Paris. D. 36/25).

Thomas Edison declares in an interesting article that cinematography has increased the rapidity of human thought. (8 Uhr Blatt - Nuremberg. D. 34/26).

In the University for Ingineers in Holland, there is a project of organising a section for the cinematograph and phototechnic. (Kinematograph - Berlin. D. 8/27).

A documentary film was presented in Paris which dealt on the life of the termites (ants) created by M. H. Dufane. (Comédia - Paris. D. 6/48).

The British and Dominion Films Corporation announces the creation of a series of talking and synchronised films which will reproduce the most prominent facts of the history of the Dominions. (Daily Telegraph - London. D. 6/44).

Daniel C. Knowlton of the Yale University, publishes an interesting article on the improvement of the means of teaching history with the help of the cinema, and the possibility of subdividing the study in groups and sub-groups. (The Historical Outlook - Philadelphia. D. 3/50).

The Council of Ministers in Czecho-Slovakia has given to the Millenium film company, a subsidy of a million crowns to produce the national Czecho-Slovak film « St. Vencelas ». (Licht Bild Bühne - Berlin. D. 6/43).


The Lord Mayor of London has shown great interest in the problem of the educational films and assisted at many moving picture shows and prognosticated a widespread circulation. (Daily Telegraph - London. D. 3/51).

In the University of Hamburg there have been representations of synchronised cultural films. (Kinematograph - Berlin. D. 3/53).

The first results of the great experiment made by Thos. E. Finegan, President of the Estman Teaching Inc. on the educational value of films, made in 200 schools and experimented on 11,000 children, have been published. (The Film Daily - New York. D. 3/54).

The Institute for Cultural Research directed by Dr. Güris, has produced a film with views of the Danube and beautiful landscapes, emographic views, country and costumes. (Vossische Zeitung - Berlin. D. 6/30).

George Pikler has written an interesting article on the esthetic problems of film industry and art. (Nürnberger Zeitung - Nürnberg. D. 2/20).

Peter Micklethwaite has written a long letter to the editor of the Daily Telegraph dealing on the progress of the cinema with regard to art and science. (Daily Telegraph - London. D. 2/26).

A series of scientific and cultural films have been projected, ordered by the Empire Marketing Boards of New Castle-on-Tyne, before an audience of 48,000 children. (Times - London. D. 3/45).

IN THE TECHNICAL WORLD OF THE CINEMA

A new system « Bonne Presse » for augmenting the luminousness of lamps used for cinema apparatuses, has been notified. The system is that of a compensating lenz of a special focus which is introduced at a certain distance between the condensator of the lamp and the projector. The lenz concentrates the luminous rays so that luminosity of 20% is thus obtained. (Le Fascinateur - Paris. D. 36/24).
In America a new screen for synchronised film projections has been experimented; it is called Cinevox. This screen is very porous and allows the free passage of the sound waves. This screen enables the loud speakers to be placed at the normal place from where the sound comes, as compared to the photographic reproduction and immediately behind the screen. (Cinematograph Times - London. D. 10/68).

Jacques Faure, has remarked upon and studied the grave inconveniences observed when projections are made with old films having spoiled parts. Such projections make the public nervous and every interruption prejudices the success of the film and often jeopardises its artistic value. (Comédia - Paris. D. 36/66).

Attention is drawn to the microcinematographic technical systems of great importance. Lately it has been possible to take films on the Cineoleucetii. (Bulletin of the Société Française de Photographie et de cinématographie - Paris. D. 13/15).

Experiments have been made in the United States with a film of three dimensions, with which it is possible to obtain the effect of perspective, depth, width and altitude. (Comédia - Paris. D. 21/133).

Eugene Alauste, explains a new system for talking films in which the reproduction of sound will be provoked by the means of an apparatus which will transform the electric variations in sound waves without mechanical contrivances. (Movie Makers - New York. D. 21/124).

A new system for the registration and reproduction of sound has been experimented. It appears that the method is a simple one and can be applied to small apparatuses and amateur machines. It is an invention of George K. Spoor. (Exhibitors Herald World - Chicago. D. 12/108).


Herbert E. Ives, of the Bell Laboratories, gave a lecture at the Columbia University on the new system for taking and projecting films which produce a perfect plastic effect. (American Exhibitors - New York. D. 21/138).

**SOCIAL ASPECTS OF THE CINEMA**

R. Jaquillard, Chief of service at the penitentiary in the Canton de Vaud (Switzerland) publishes an article which deals on the criminological influence exercised by the cinematographic spectacles on the minors. Taking into consideration the great psychological influence exercised on the spectator through his visual faculty, the writer says that at least in Switzerland, censure is being applied to all scenes which could seriously influence the development of the instincts of criminality in the child. An enquiry was made to that effect, which resulted in the following statistics: 30% of the young criminals had never visited the cinema halls, 6% had forgotten everything they have seen, 48% had frequented cultural spectacles, and only 16% had seen detective scenes and criminal plots. (Le Cinéma Suisse - Montreux. D. 15/4).

A large American Firm has made a contract with prof. W. M. Marston, psychologist and professor at the Columbia University, naming him Director of a new section for the study of the psychological influence of the cinema and the means by which they can be attenuated and made beneficial. (Word - New York. D. 20/51).

An article notifies the pernicious influence that the cinema can exercise on the mind and the education of the minors, if allowed to assist without any control at the normal cinematographic shows. The foundation of special cinema halls for children is proposed. Minors should not be allowed to frequent the ordinary cinema shows. There should
be Governmental intervention and a strict control on all publications and photographs exposed to the public. (Politica Sociale - Rome. D. 15/28).

An article in the Indian Daily Mail of Bombay, entitled «The Influence of the Cinema» says that the cinema is one of the most important characteristics of modern life. While, some years ago, the leisure hours of the evenings were spent in the homes of the citizens, to-day they are spent at the cinema. Therefore it is most necessary to have a regular control of the censure, which will by this means enable the cinema to become an instrument of instruction and of cultural and scientific vulgarisation, rather than a means of perversion. (Indian Daily Mail - Bombay. D. 18/35).

In a letter from S. Tristan Webb to the editor of the Daily Telegraph certain films projected in India are much criticised because they give a wrong idea of the Western life and customs. The writer claims that the vision of these films is highly pernicious to the natives, which receive a false impression of the morals and manners of the Western populations. (Daily Telegraph - London. 18/37).

The Russian Commission for the control of national and foreign films has, in the last months, prohibited the projection of several hundred films stating simply: «because they do not present anything of interest for the public and because they are demoralising». Amongst the prohibited films there are also those of national production. (Film Kurier - Berlin. D. 18/6).

In the meetings of the «Semaine du Cinéma Farnèse» the following vote has been unanimously accepted, which, although voted for France, could be generalised for all the Nations:

Considering that a great number of spectators in the cinema halls are apt to judge the foreign countries according to the films which presumably reproduce the habits and the mentality of these countries; France protests against the deformations of her physiognomy and is too often the victim of false interpretations of her habits. Her people are represented as pleasure loving folks, Paris as a frivolous city, the colonial soldier as covetous and rapacious being. Such scenes are often inserted in French films projected in foreign countries. At the meeting the vote was carried that the authorized representatives of the cinematographic industry should protest energetically against this and publicity against misrepresentation of this kind which come to their knowledge. (Comedia - Paris. D. 22/45).

Bossyvon publishes an article in which he declares that it is absurd to consider the cinematograph as a school for crime. (Comédia - Paris. D. 33/25).


After an inquiry made by the department of psychology at the University of Columbia, on the influence of films on children, Dr. G. L. Holmes states that the delinquency of children cannot be attributed to that cause. (New York World - New York. D. 15/23).

It has been proposed to use the talking films in the compilation of criminal records. (Exhibitor Herald World - Chicago. D. 10/91).

The necessity of classifying the films according to their character and the preferences of the public has been felt for the coordination of the performances in the cinema halls. The advertisements should state whether the films have a tragic or comic character. (Comédia - Paris. D. 2/22).

Seymour Stern in an open letter to Mr. Beaton criticises the cinematographic production of to-day and exposes the essential qualities which an artistic and moral film should possess. (The Film Spectator - Los Angeles. D. 2/24).

The Canadian Government has pas-
sed the Law of the National Council which prohibits the access to the cinema to children under 16 years of age. The National Council for Education has ordered that all the educational films destined for the schools should be controlled by the Council.

RELIGIOUS FILMS

Two films dealing on the Sionistic movement have been projected. One was entitled «Spring in Palestine», the other, «The exaltation of the Jordan». (Neue Zürcher Zeitung - Zürich. D. 2/15).

The Catholic Cinema of Berlin has opened a projecting hall in the Ni dredwall street with 360 seats, where only films treating on catholic educational propaganda films will be shown. (Film Kurier - Berlin. D. 11/7).

The municipal Kuomintang of Canton has ordered the proprietor of the Poary theatre nel Bund to cancel from the film «Ben Hur» the sections which are «Inaccessible and superstitious». The Ministry for Instruction was asked to cancel the following scenes: the birth of Christ and the vision of the comet, the Resurrection, the healing of the leprous by Jesus, the eclips, the earthquake and the other natural phenomena which took place at the moment of the crucifixion of Jesus Christ. The office declared that it was obliged to effectuate these cuts because otherwise the film could have produced an immense effect on the social education and religion of the Chinese. It is interesting to note that many catholic authorities were against the production of the film, whereas others, as for example in France, found nothing which could be considered as irreverent.

PROFESSIONAL TRAINING AND THE CINEMA

The cinema offers great possibilities for advertisement and can be used to show the methods of fabrication and the movement of machinery. To illustrate this argument, a long article by Henry W. Hough is published. (Scientific American - New York. D. 5/16).

The «Fachfilm» of Berlin has edited several films dealing on the technique of the various trades. (Der Werksleiter - D. 51/26).

The «Verband Sozialer Baubetrieb» or Federation of the Constructors of Berlin has edited some films on the methods of construction and house building with steel.

The «Dresdener Bank» has edited a film illustrating the advantages of the use of the calculating machines in the large banks, showing also the modern technic of work.

The Governmental School of France has adopted the film to advertise the advantages of professional training.

The Committee for steel of France has edited an important film dealing on steel and the progressive manipulation of steel in Lorena.

The Film «The March of Machines» has met with great success. No actors appear; only the machines and their movements are seen. (Daily Telegraph - London. D. 5/13).
Ten years ago, the «Institut für Kulturforschung» was founded in Berlin by Dr. Curtis, who at the present day is still its director. The purpose in founding this institution was to create an organisation, capable of favouring and inquiring upon the possibilities of development of the scientific film, especially with regard to the most important educational and cultural questions.

From the first, it was attempted to create similar Institutions in all the countries.

During those ten years, the Institute, has endeavoured to assure both the progress and the educational value of the film. It has also examined with the utmost care, the films for scientific researches and has produced a great number of films such as: «Hands that create» dedicated to the teaching of sculpture and painting, and other film of a cultural-geographical character. The Institute, believes implicitly that the films is the best method for teaching.

It perseveres in its design to make know by means of the film, to all the children of the various countries, for the purpose of a universal intellectual cooperation, the other important countries of the globe.

Dr. Curtis' Institute receives no subventions either public or private and is only sustained by its own work. Besides the scientific researches, a cinematographic encyclopedia is being compiled which the Institute in the occasion of its 10th anniversary, is dedicating to the International Institute in Rome.

We are happy to be able to mention this high and noble collaboration. The Institute of Berlin maintains the most cordial intercourse with our International Institute and the new work which Dr. Curtis is preparing with so much competence, is another manifestation of what can be done with the auxiliary of the film, for the progress of culture and the education of the peoples.

We hope that in another ten years' time, we will be able to give information of the ever increasing activity and development of this Institute, so worthily directed by Dr. Curtis.

Dr. LUCIANO De FEO — Editor and Responsible Manager.

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THE CINEMA AS AN INSTRUMENT OF EDUCATION

(from the French).

The success which the cinema has achieved in all the countries of the world, the almost universal fascination it exercises upon the young generations, whose preferences are gradually being shifted from the traditional forms of the stage to the luminous visions, the miraculous reproduction of these visions throughout the whole world — in itself an indication of a profound spiritual revolution — give the exact measure of the value of the cinema and of the concern it has aroused in the minds of educators. It is the moral task of the League of Nations to deal with problems of an international character aiming at the welfare of humanity. It could not remain indifferent to a phenomenon of such scope and significance. Under its auspices an International Institute has been very opportunely set up in Rome, with the definite task of studying not only all technical questions relating to the cinema

(Ed. N.) In the 3rd Number of the Review we shall publish an article of exceptional interest from the pen of Professor Alberto Lutrario, of the International Health Committee of the League of Nations.

Prof. Lutrario deals in the masterly way that distinguishes him with the Biological aspects of Educational Cinematography.

The great possibilities of the screen, either for good or evil, in engraving feelings, ideas and passions deeply on the minds and souls of spectators are generally recognized, but up to the present few have paid any attention to the bio-physiological reasons which determine the special influence of the cinema.

Lutrario deals à fond with this subject and we have no doubt that his paper will give rise to interesting discussions.

Léon Bernard, the eminent French scientist, who has done so much for medicine and hygiene propaganda, suggests in his article what the cinema can and ought to be in order to arouse the spectator’s attention and interest in hygiene propaganda. We are able to assure the illustrious scientist that the Institute is devoting its earnest efforts in the very direction to which he points.

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but also the influence exercised by this new art on the feelings of men and the possibilities it opens in the vast domain of education.

The cinema can avail itself of two forms of representation. In common with the stage, it can give life to mere fantastic creations; but it can also, more effectively than can ever be attempted on the stage, present the exact reproduction of the phenomena of real life. Moreover, the recent technical improvements which have made possible the synchronisation of sound and action, have enabled the cinema to offer a perfect and complete vision of life. The motion-picture may thus perhaps supplant the theatre altogether, including the opera, or at least rob it of a hegemony dating from the dawn of the formation of human thought. We are confronted with a phenomenon which will be remembered for ever in the history of humanity, at least in that part relating to its forms of entertainment.

The influence exercised by the stage on the mind, and especially on the minds of youths, has always been a matter of concern for moralists. From the Fathers of the Church to the philosophers of the Encyclopaedia, from the old teachers of the Pagan era to the dramatic critics of our own times, all have been confronted with the same preoccupying question: what value must be ascribed to this influence? to what extent does this influence impose duties upon the stage?

It is far from our intention to re-open such a dangerous discussion, in which no decision seems possible. In its application to the cinema, its limits are, however, clearly defined.

It is not possible, in fact, to extend to the cinema the degree of independence that must be given to literature. So far, at least, the art of the screen does not come within the province of literature and its interests claim that it should be kept quite apart from it. It would be much better, in fact, to leave the theatre within the sphere of pure literature as it can only contrive to express fictitious situations on the stage, and to reserve to the cinema the task of recording real life. These two forms of scenic representation would then prosper and live, each in its proper autonomous province, without mutual encroachment or harm.
Each might suit particular needs and tendencies and would be based upon different systems and technical means. It is imperative to watch the development of the cinema most rigorously, in the first place, because it offers visions of real life, and, secondly, for the fundamental motive that its cheapness makes it accessible to vast masses and widens its sphere of influence.

One need only attend cinema shows to realize the deep impression that motion pictures leave on our mind. Whether trivial or interesting, comic or tragic, the pictures on the screen are endowed with an emotive power which only few cinema-goers can escape. It is certain, however, that this force is so powerful that youthful minds cannot possibly offer any resistance. This perhaps accounts for the film-craze among the youth of to-day, but at the same time this is the reason which makes the screen so useful and so dangerous.

Others may, if they wish, emphasize the danger-element of the cinema. I shall confine myself to underlining its value. The cinema must become more and more an instrument of education and teaching, for, in this field, it has no rivals. No teacher, whatever the subject he deals with, can deny the importance of visual impressions for a better presentation of his lesson. Who amongst us has not made use of the blackboard and has not supplemented his oral or written lessons with drawings and diagrams? Images would acquire a greater demonstrative power when they are photographic reproductions of life in action. In the same manner medicine and surgery are compelled, in a greater degree than other sciences, to make an increasingly large use of the cinema, for purposes of illustration. The showing on the screen of an operation or of the movements of a patient suffering from nervous troubles, possesses a degree of persuasiveness that no other means can attain.

Speaking of the cinema as an instrument of education, I wish to draw attention in this paper to its value in the field of hygiene. It may safely be proclaimed that hygiene will not become part of our own life unless instruction in health matters is given a psychological basis. No benefit is to be expected from
coercion or from instruction based merely upon theory. It is necessary to show the dangers of a lack of health precautions, the facility and efficacy of preventive measures, the benefits, individual and general, resulting from their application. These suggestions can easily be realized. Nothing will be more useful to social education. In every country film-experts have, for purposes of health propaganda, created small perfect productions, of a documentary nature or the work of imagination. To follow all possible improvements in this field, bearing in mind what has already been accomplished, will be one of the most fruitful tasks of the International Institute of Educational Cinematography. The cinema may contribute to the attainment of an ideal which to-day seems distant and beyond reach, that is, to make of hygiene an interesting subject for the spectators of a film. This would be one of the greatest services rendered to humanity. Let this be one of the first successes of the Rome Institute. It will achieve other triumphs, but none will reflect greater honor upon it. It will be able in this way to contribute more and more to the aims of the League of Nations which has the activities of its Health Committee much at heart. This body will tender all its enthusiastic help to the International Educational Cinematographic Institute in its march towards progress along this path.

LEON BERNARD
Professor of the Faculty of Medicine of the Paris University
Member of the Health Committee of the League of Nations
Even to-day, for many cultured men, the film is a question and a form of purely visual enjoyment. We are, in fact, more impressed by the exterior and purely technical appearances of the film than by its content, and regard the essential part of the film as the synthesis and expression of elements that we already know, but that are put before us in a new form. Hence the conflict between the technical or formal and the substantial part of the film. This conflict grows more intense every year because the eye, being the first element of vision, claims more and more the right to become the controller and the only essential examiner of the projections. The film is even to-day too dependent on the word, whilst the word should represent in the film only what it does in music, namely an element on which musical harmony is woven. Therefore the word is an element of the least value, harmony of the greatest. When the film gets rid of this form of subordination and, like music, succeeds in stimulating through the sight our sensitive faculties of perception, a complete blending of both sensitiveness and mind will ensue and the film will have the same emotional value as music. Nevertheless, this language of intimacy between the film and the performance is still to be achieved by cinematography: an intimacy which will enable the spectator to understand at once what is displayed on the screen and have a prompt and easy insight into the silent dialogues, impregnated with sentiment and emotion, which take place in a landscape, in the relations between clouds and earth, between nature and man.

Only in this way shall we have the intimate perception of the things of which the word will only be a bond of union.

Only in this way will it be possible to make poetry by means of the film and create the new language, the music of the picture that
will be reflected on the raw and primitive element of human nature.

The stage-manager, to whom is reserved the privilege of seeking for and harmonising this musical form of vision, will be undoubtedly the man of the future, and he alone will be able to make perceptible to the bulk of the spectators what the author of the film has felt and accomplished, from Thibet to the Andes, from the North Isles to the far off Tierra del Fuego. No representative art has ever been able until to-day to bring forth with efficacy this musical and poetical effect proper to the film which must remain purely visual, because the sound film, which superadds other exterior elements to the purely visual and intimately musical element, means for the cinema a relapse into barbarity.

We have mentioned poets sharing in the film. They are now-a-days held aloof from anything connected with the conception and creation of the motion picture. As soon as a poet comes near it, he is at once put aside and his place is taken by the so called « Carpenters » whose task is to build a rough edifice out of the finer stuff of the poet’s brain, in other words, to render, in coarse, common-place and illiterate language, the words and thoughts of the only true creator, thus giving rise to what is a mere form of trade.

I should like some of our chief cinema-managers to imagine that they must adapt to the stage some of their most elaborate creations in the studios: creations teeming with false sentimentality and the most absurd psychological situations. I should like to know from them for how long yet the technique will be able to give an appearance of honesty and seriousness to the products of cinematographic industry. The modern cinematographic technique unduly saturates the film with all those exterior elements that should only serve to make the central creation technically possible. But in the long run no film will be able to live if the basic element given by the creative imagination and constituting the centre of the action is neglected, and if its value is not fully recognised.

The cinema-manager of the future will have to grant that
only in harmony with the work of a poet will he be able to compose something lasting, which can pass from the screen directly into our soul. The stage-manager and the poet must have an equal share in their common work. The former will put into the film his experience, his knowledge of technical possibilities; the latter, the prodigious strength of his soul, his faculties, his realisation of the sensitivity of the environment. For a long time yet, the stage-manager will have to be the leader in the common task, on account of his greater knowledge of the technique required. The poet, accustomed to use the word as his only means of expression, will have to submit his creative imagination to the critical control of his collaborator.

In the actual life of the cinema this collaboration, which the public does not yet realize and appreciate, has already achieved, though in a fragmentary way, things which are perfect.

This is due, above all, to the fact that the stage-manager, notwithstanding his not being a poet, has in himself often the sense of poetry and of beauty. He, therefore, feels all that is pure and lofty, all that is deeply emotional in the central creation of the film, so that he achieves his task in such a way as not to spoil that central creation, but to bring it into harmony with the necessities of the action. He accomplishes therefore that which would be difficult to the poet as a poet. He understands the representative value of light in the life of the sensitiveness and intimacy of things. In this artistic part of his work he refuses to be regarded only as a business-man. He allows us to believe in the possibility that in a near future the poet, creator of the central soul of the film, and the stage-manager may be blended into one person, a condition which is to-day realized only in part.

From my desk my eye wanders beyond the lake to the far off Alps, rendered more than ever plastic and harmonious by the mist that surrounds them. They are before me like so many arches of secret bridges of the universe. Through them, beyond the boundaries of unknown and far off lands and languages, I perceive blendings and harmonies between all men in regard to the questions that have or may have a general interest, which will set up beyond
the mist that encloses the Alps, the true, deep and no longer secret bridges of union, not of separation, bridges of universal knowledge and beauty.

Boundaries and languages limit, in space, the life of peoples. Art and music overcome and go beyond every limit set by the human will. The film, like music, with the universal power that is given to it more than to any other expression of art, by its unspoken language, is likely to help in the overthrowing of these boundaries between peoples of different languages, owing to the efficacy that it can draw from the emotion of visual representation. And precisely because of this very power of suggestion, the stage manager, until he succeeds in being also the poet of the film, must learn not to impose his own technique on the creative imagination of the poet, but rather to follow it harmoniously and to limit his work to a heartfelt and deep collaboration.

Norbert Jacques
THE RESULTS OF THE EXPERIMENT WITH EASTMAN CLASSROOM FILMS

At a meeting of this Association, held at Lake Placid in September, 1927, I had the privilege of presenting a general outline of the plan and scope of an experiment in classroom films which had been undertaken by the Eastman Kodak Company in cooperation with the National Education Association. To-day I am to present the results of that experiment.

It is desirable, at the outset, to have a clear understanding of the conditions and reasons which made it appear advisable

(Ed. N.) As announced in the first number of this Review, we propose to deal fully with the question of the cinema as a didactic auxiliary to the teaching of masters and text-books.

Before, however, dealing with the special aspects of the problem and opening the discussion on the methodological and pedagogic criteria to be followed, or dealing with the relation between cinema and text-book, new methods of teaching, etc., we propose with the help of leading authorities of the different Countries, to illustrate the results which have been achieved so far through the medium of enquiries and experiments. Professor Santini, in our first number, called attention to the noteworthy work done by the Italian Government; we now publish a highly interesting paper by Thomas E. Finegan, an eminent educational authority in the United States, who is to-day at the head of a powerful Corporation formed by the Kodak Company for the diffusion of scholastic films.

Later on, we shall publish articles from other authorities, such as Coissac, whose careful and interesting study will give our readers an opportunity of appreciating what France is doing in the field of educational cinematography; de Maday, who will tell of a remarkable experiment carried out in Switzerland, some few years back, on some thousands of scholars; as well as other papers contributed by the technical and pedagogical authorities of several countries.

This broad treatment of the subject will open up the way for a discussion of its particular aspects and for the formulation of practical suggestions.
to the teachers of the country to have this experiment conducted. The opinion was common among teachers and others who had experience in the use of films that motion pictures could be utilized to great advantage as an aid in classroom instruction.

Films had not, however, attained a recognized position in schoolroom practice. Their use in the schools was not only generally restricted to the service of the auditorium or general assembly, but they were intended more for entertainment than for systematic instruction. Very few films had been especially developed for the service of teachers in their regular daily work in the classroom. The films generally used were either made by industrial or commercial corporations for propaganda purposes, or they were assembled from extant material obtained from various sources. No criticism of these films is intended. They rendered good service to the schools which were fortunate enough to obtain them. The point is made simply that these films were not prepared for teaching purposes and could not, therefore, yield the full measure of service that films prepared especially for giving instruction on a classroom topic would provide.

No adequate experiment to determine the value of films as teaching aids had been made, nor had an experiment been made to ascertain if there were losses which would outweigh the gains afforded. The effectiveness and the value of motion pictures in classroom work was more a matter based upon individual opinion than upon exact knowledge. Under these conditions it did not appear that motion pictures could be given general recognition as a teaching agency until definite and reliable information, based upon a comprehensive and definite experiment in their use, was made available.

Under the conditions which have been described three fundamental questions were presented:

1. May a series of motion pictures be developed which are coordinated with modern standard curriculums, and which will be effective teaching agencies?

2. May a reliable measure be obtained of the contribution of such films in regular classroom service?
3. If there is a gain in the use of such films, is it sufficient to justify the expenditures required to make them available to the schools?

The purpose of the Eastman experiment was to reveal basic knowledge, not only upon these practical questions, but also upon the essential features of a sound classroom film program.

A knowledge of the details of the plan of the experiment, and the thoroughness with which such details were executed, is essential to an adequate appraisement of the reliability and significance of the results obtained. These will be stated briefly.

The enterprise was organized in twelve cities, widely distributed throughout the United States. These cities were Newton, Mass., Rochester, N. Y., New York City, Winston-Salem, N. C., Atlanta, Ga., Detroit, Mich., Chicago, Ill., Lincoln, Neb., Kansas City, Mo., Denver, Colo., Oakland, Calif., and San Diego, Calif. The Atlantic Coast, the Central West, the South, the Mountain States, and the Pacific Coast were represented in this experiment.

These was such general enthusiasm and such a fine spirit of cooperation manifested in each of the cities that more classes were organized and a much greater number of pupils included than we had anticipated would be possible. This of course makes the experiment of much greater value. Approximately 11,000 pupils were organized in 300 classes under the instruction of 200 teachers. Two courses of study, covering a period of twelve weeks each, were prepared. One course was adapted to Geography in the fourth to the sixth grades. The other course was related to General Science in the seventh to the ninth grades, or the junior high school.

The pupils pursuing each of these courses were divided into two groups. One of these groups was known as the experimental group. There were no restrictions or requirements on this group except that the films prepared for the experiment should be used in an adequate manner. In this paper the experimental group will be called the Film Group.

The other group was known as the control group. There was one restriction placed upon this group. The use of motion pictures in their classes was, of course, prohibited. This group did, how-
ever, use photographs, charts, diagrams, stereographs, slides, and other illustrative material. In this paper the control group will be called the Non-Film Group.

Thus there was in each of the twelve cities participating in the experiment one film class for each non-film class in each of the two courses. The number of pupils in each film class was approximately the same as the number in each corresponding non-film class. There were about 7,500 children in the Geography classes, or 3,750 in each group, and about 3,500 in the General Science classes, or 1,750 in each group. In nearly all cases the film groups and the non-film groups were in different buildings.

It is obvious that in an experiment of this type in which the superiority of devices and results are to be measured, the instruction of each group must be confined to identical areas. The course of instruction in each of the two subjects was built around ten topics. The topics and the order in which they were presented were as follows:

**Geography**

1. New England Cod-Fisheries
2. Wisconsin Dairies
3. Wheat
4. From Wheat to Bread
5. Cattle
6. Corn
7. Cotton Growing
8. Irrigation
9. Bituminous Coal
10. Iron Ore to Pig Iron

**General Science**

1. Hot Air Heating
2. Atmospheric Pressure
3. Compressed Air
4. The Water Cycle
5. New York Water Supply
6. Purifying Water
7. Limestone and Marble
8. Sand and Clay
9. Reforestation
10. Planting and Care of Trees

Detailed Study Guides were prepared on each of the above topics. This enabled all the pupils participating in the experiment to direct their study upon the same body of material. These guides were also of service to the teachers of each group by prescribing the general limitations of the field which the instruction should cover. The Geography guides formed a syllabus equivalent to
printes pages. A copy was given to each of the pupils in each of the two groups. The General Science guides formed a syllabus of 60 printed pages and a copy was given to each of the pupils in each group receiving instruction in this field. These guides were uniform in plan of organization, and contained headings and subheadings of each topic and notations of the various aspects of these divisions. They also contained elaborate notes in highly compact form upon the important features of the topics in general. In fact these guides served the usual purpose of a textbook.

The teachers of the film groups generally were without experience in the use of motion pictures. No teaching technique in the use of motion pictures had been worked out, and the teachers were not skilled in the use of a projector. They started in the experiment with this disadvantage. To meet this situation Teachers' Guides were prepared. These guides were purely suggestive. They indicated in a brief way how and when to use the films. Teachers, however, were given a free hand in their own method of the use of the films. The non-film teachers were not accorded the use of these guides. The films and the Teachers' Guides suggesting the plan under which the films should be used were the only aids accorded the film teachers which were not accorded the non-film teachers.

It was intended in carrying out the experiment that each class should be conducted under normal conditions, and that the children and teachers should maintain the usual study habits and attitudes toward their work in these courses that prevail in normal classroom instruction. Teachers were urged to regard their part in this experiment as if they were teaching a regular course prescribed by the school authorities for all the schools of the city, and to avoid if possible the development of a spirit of rivalry between the two groups.

It is an essential requisite in an undertaking of this type that the two groups participating in it shall possess a common level of intellectual ability. To approximate this condition as closely as possible the school having a film group was selected in the section of the city having the same general home environments and the same racial, social, and economic background that the school having the corresponding non-film group possessed. An examination
was also given to ascertain the intelligence of each group and to ascertain the achievement of each of the Geography groups in the subject included in their course of study. A similar examination was given to ascertain the achievement of each of the groups in the General Science subjects.

It was likewise important that the teachers placed in charge of the groups should be of equal training and teaching ability. The superintendent of schools in each of the cities selected the teachers for the experiment in his city and so far as it was possible to determine, chose teachers upon this basis.

In order that the experiment might be conducted on a sound professional and scientific basis, and without prejudice in either direction, it was placed under the charge of two leading educators of the country, who are experts in testing and measuring practices and accomplishments in school procedure. The men chosen were Dr. Ben D. Wood, of Columbia University, and Dr. Frank N. Freeman, of the University of Chicago. Each of the twelve cities, except the two on the Pacific coast, were visited by one of these directors before the work of the experiment was opened. The importance of an honest, thorough, professional contribution by the teachers was pointed out. The purpose of the experiment, its value to educational practice, and the conditions under which the whole enterprise should be conducted were thoroughly presented to all teachers identified with the undertaking.

The classes in each group in each of the cities, except the two on the Pacific Coast, were visited by one or the other of these directors during the progress of the experiment to ascertain if the experiment was being properly carried out, and also to get first hand information on the use of the films as a teaching device.

Considering the general scope, the number of teachers, pupils, schools, and school systems involved, the extensive and detailed preparations for it, the period of time occupied, the funds expended in conducting the enterprise and its importance to educational interests, the Eastmann experiment is the most outstanding experiment in education that has ever been conducted.

The next important aspect of the experiment to be considered
is the type of film used. The scenarios on which the films were based were prepared by groups of trained, experienced teachers. Each topic was studied to determine the fundamental knowledge related to it which should be presented in the classroom. Those features of these basic elements which are readily adapted to motion pictures were incorporated in the scenario. In other words, the first determination was, what material on this topic might be shown more clearly, accurately, and comprehensively with the aid of motion pictures than by means of still pictures and other teaching devices?

In developing these scenarios no thought was given to the entertainment aspects of a film. The traditional story and the usual dramatic features of motion pictures were purposely avoided. The scenarios were prepared with the sole thought that the films developed from them should be rich in teaching material and an effective aid in the hands of a teacher in her classroom instruction.

Having specified in the scenario the type of film best adapted to the teachers' needs in giving the instruction required in the courses specified for this experiment, we then proceeded to obtain the scenes necessary to the production of such films. The films used in the experiment were thus developed. One film was prepared on each of the topics in each of the courses. The procedure, therefore, in preparing scenarios and in the production of the films was based upon a sound teaching philosophy.

The films used in the Eastman experiment were not planned to make the work of either the pupils or the teacher easy. There is no royal road to learning. No sound teaching device will make it easy for the child to learn. Schoolroom devices, practices and methods should stimulate the mental activities of a child and cause him, through his own efforts, to explore new fields of knowledge and to acquire an interest in the manifold phases of our social and economic life.

These films, therefore, were not built to do the thinking for a child which he should do for himself. They were constructed upon a plan intended to arouse the child's mental powers and thereby stimulate his interest in the subject presented by the film.
They were designed to create in the child's mind a desire for more information, to induce him to ask questions, to lead him to make his own investigations, to become an accurate observer, to improve his descriptive ability, and to make application of his knowledge to new experiences and real situations.

The use of the film in this experiment was stressed to be that of a supplementary aid to the teacher. It was not used in any way as a substitute for any factor in present classroom practice. The verbal explanations of the teacher, the text books, maps, charts, still pictures, and all other agencies which have enabled the teacher to illuminate situations or processes, were used. The film simply took its place as an additional agency to render service in teaching, which it is better adapted to perform than other existing agencies.

The directors of the experiment, in their report, confirm these general observations of the place and service of the films as they state that the distinguishing characteristics of the films were as follows:

«First and foremost is the pedagogical nature of the films.

«In the second place, the experiment involved enough film material, and continued over a period sufficiently long so that the contribution of the films formed a large enough fraction of the total life experience of the individual for that period to be measurable.

«In the third place, these films became an integral and regular part of the curriculum and of the classroom procedure, so that in our comparisons we are concerned with the contributions of a normal classroom and curriculum agency, and not with that of a novelty.

«In the fourth place, this experiment involved a very large number of students in the six school grades, from the fourth to the ninth inclusive, scattered in a dozen cities, taught by nearly two hundred teachers in about seventy-five different schools».

One of the purposes of the use of films is to give pupils a concrete notion of the appearance of objects, events, and conditions in the physical world. This experience is a valuable one for the pupil, as it constitutes an important part of the foundation of his
thinking and action. It is an appropriate attempt to measure the accuracy and vividness of concrete impressions obtained by pupils in the non-film group as well as by those in the film group. A comprehensive unit of instruction must include not only concrete experience but reflection and thought about this experience for the purpose of giving explanations and making generalizations. For this reason the Study Guides already described contained many items which called for discussion and explanation.

Some portion of the class time in each of the groups was, of course, occupied in the discussion of these topics. In other words, it was essential to a fair evaluation of the use of the films to frame questions which would not only reveal the definite and clear-cut concrete ideas which pupils had acquired, but also the value of such an agency to stimulate pupils to make adequate explanations of their experiences. Effective teaching in the classroom should result in a continued interest of the children in a topic on which they have received instruction, and therefore implies the practice on their part to think about that topic not only as it is presented in the classroom, but outside of the classroom. This interest of the children may be considered as undoubted evidence of the thought provoking powers of films.

With these considerations in mind two types of written tests were used. These were known as Comprehensive Objective Tests and Topical Tests. This procedure had two purposes in view. The first was to secure a broader and more reliable measure than could be obtained from one set of tests alone. If two independently organized sets of tests give the same results they strongly confirm each other. The second purpose was to measure somewhat different forms of achievement.

The Comprehensive Tests were given at the beginning and end of the experiment. They consisted of an extensive series of items organized on the plan of True-False and Multiple Choice tests. These tests measure judgment and reasoning to some extent as well as a knowledge of subject matter. By the use of tests of this type a knowledge of the film group and the non-film group could be measured at the outset of the experiment, and their com-
parative progress during the period of instruction could also be measured at the end of the experiment.

These test papers were based exclusively upon the Study Guides, which constituted the syllabi during the courses of study, a copy of which was given each pupil in each group at the beginning of the experiment, as previously stated, to serve the purpose of text or study material. The first and second of these tests were constructed without reference to the specific content of the films and related almost wholly to ideas and concepts such as are ordinarily presented in verbal terms, and which are free from immediate visual material. The third of these tests was also based strictly upon the Study Guides with a view to testing the information, ideas and relations which could be derived from reading and from films. The directors in charge of this work stated that they purposely avoided in this test the framing of questions, the answers to which were found in the films and not in the Study Guides used by the students in each group.

The Topical Tests were intended to measure the attainments of the pupils upon each separate topic. This type of test also accorded the pupils somewhat greater freedom in organizing their answers, as well as in expressing themselves in other than verbal terms. In form these tests were mostly of the essay type. The questions were of two classes, one descriptive and the other explanatory. In the descriptive questions pupils were asked to reproduce by words or diagrams the appearance of things which they had seen, or about which they had read. In the explanatory questions they were asked to explain why certain actions or events occurred as they did. Each of these types of questions was also based upon the subject matter of the Study Guides. In other words, scrupulous care was exercised to make sure that the pupils in the non-film group as well as those in the film group had ample opportunity to acquire the information which was called for in the questions used in each of the two types of tests. The tests were given at the completion of the instruction in each two topics. Five of these tests were, therefore, given.

All of the test papers used in the experiment were prepared
by Dr. Wood and Dr. Freeman, assisted by graduate students of ample training and large experience in the formulation of tests. The tests were given on the same day and hour to each group in each of the twelve cities, and covered the same prescribed length of time. No teacher in the experiment was permitted to have any relation of any kind with any of the tests. They were not permitted even to see the test papers. A special representative of the directors in charge of the experiment was designated in each city. Either the Superintendent of Schools or one of his assistants, the Director of Research, a director of a division of instruction, or a school principal was selected to serve in this capacity. He received and administered all tests, and returned promptly all test papers written by the pupils. Comprehensive Objective test papers were reviewed and rated under the immediate supervision of Dr. Wood at Columbia University, New York City. The Topical Test papers were reviewed and rated at the University of Chicago, under the immediate supervision of Dr. Frank N. Freeman.

The results of the experiment show that the work of the film group was distinctly superior to that of the non-film group. The film group gained more than the non-film group during the twelve weeks of instruction. In General Science the average gain of the film group was 111% of the average gain of both film and non-film groups taken together. In Geography it was 117.9% of the average of both groups.

Not only did the film group gain more than the non-film group during the period of instruction, but the average score of the film group was higher than the non-film group at the end of the experiment, although the non-film group was superior to the film group in intelligence and grade placement, and made better scores on the tests given before the instruction began.

In General Science the average score of the film group on a test given at the end of the experiment was 111.8% of the average score of both groups taken together. In Geography it was 115.6% of the average score of both groups.

On the essay type of test the average score of the film group
in General Science was 111% of the average of the scores of both groups taken together and in Geography it was 115% of the average of the scores of both groups.

It will be noticed that these figures do not represent the superiority of the film group over the non-film group, but show the percentage by which the average of the film group is above the average of both the film and the non-film groups taken together. A simple illustration may make this clear. If one group of stocks average $10 a share and another group of stocks average $20 a share, the second group is 200% of the first group, but it is only 133 1/3% of $15 which is the average of both groups of stocks taken together. In like manner the percentage in favor of the film group would be distinctly higher if based on the average of the non-film group instead of on the average for both groups.

The term Standard Deviation is commonly used by the specialist in educational measurements. There seems to be no simple way to make this term understandable in common language.

In General Science the gain of the film group over the non-film group was 14.5% of the Standard Deviation. The average of the film group on a final test given at the end of the experiment was superior to that of the non-film group by 78.2% of the Standard Deviation. On the essay type of test the film group was superior also by 23.2% of the Standard Deviation.

In Geography the film group showed a gain superior to the non-film group by 33.2% of the Standard Deviation. In a final test the average score of the film group was superior to that of the non-film group by 84.5% of the Standard Deviation. In the essay type of test the difference in favor of the film group was 29.3% of the Standard Deviation.

We have now given those concrete results achieved in this experiment, which were revealed by written tests and which are measured on a percentage basis. There are, however, other results achieved by the skillful teacher in her classroom work which are vitally important and which go to the very heart of efficient instruction and of the real purposes of education, even though we are unable to measure accurately on a percentage basis their full significance.
The directors in their report confirm this viewpoint on the limitations of written tests. They say, «These tests, or any other written tests, could not adequately measure or even roughly register all of the contributions of these films. A large number of attendant features are embodied in each film that the tests do not reveal, but which afford a body of marginal material that greatly enriches not only the topics treated, but enriches also the incidental experience of the pupil».

The directors further pointed out a most significant service of the film which should be emphasized in any fair evaluation of the achievements of this undertaking. The material shown by the films was selected primarily because it was believed by the experienced teachers who prepared them that such material could be presented more clearly and vividly through motion pictures than expert writers could present it by means of detailed and elaborate written descriptions. The directors state that it is obvious that any written test would fail to bring out fully those aspects of a topic which were the prime considerations for the selections of the subject matter of the film on that topic.

Furthermore, as every person knows whose experience gives him knowledge of the power and influence of the film, each film affords opportunities for the translation of visual impressions into verbal forms of expression that carry a quality of meaning far richer and more integrated than the meanings acquired through verbal impressions alone. On this point the opinion of the directors, as stated in their report, is most emphatic and conclusive. They say, «It is doubtful if any known technique of testing can reveal adequately this difference. It is probable that the film groups' visual impressions were consistently in advance of facility for expression. The converse of this proposition follows, and that is, that in the non-film groups, instructed more largely through verbal forms, facility in expression naturally has a tendency to out-run the acquisition of meanings based upon experience with reality».

When the three hundred teachers who participated in this enterprise entered upon this work, each one of them was requested
to make a detailed report on the completion of each topic in the course. Near the close of the experiment each teacher was requested to express his opinion upon several features of pupil activities and interests during the period of the experiment which had transpired. The data supplied through such reports give much reliable information in evaluating the service of the films. Time will permit only a brief reference to these, and yet they constitute such a valuable contribution to the achievements obtained in this experiment that they should be reported.

In considering this aspect of the experiment we should keep in mind that one of its primary purposes was to ascertain the magnitude and nature of the contribution which classroom films make to the usual objectives of good teaching, such as the arousal and maintenance of interest, the development of originality and larger participation in self-activities, improving the quality of reading material, increasing the ability to discuss topics and to write about them, enlarging the vocabulary, enriching personal experience, correlating the work of the classroom with community life, the ability to concentrate mental activities, and many others. The attainment of these ends are among the most imperative and outstanding functions of the schools.

It was announced by the directors at the outset of the experiment that they would seek the unbiased opinions of these three hundred teachers upon these points. A summary of the opinions expressed by the one hundred and fifty film teachers at the end of the experiment indicates that:

1. Over 90% of the teachers expressed the opinion that the films were highly effective in stimulating the interests of the children. Furthermore, they state that this interest was not a passing one but a sustained interest. Weeks after a topic had been demonstrated through the use of a film, the children would bring material to the classroom related to such a topic, but which had just come under their observation.

2. The teachers were almost unanimous in saying that the films stimulated their students to an extraordinary degree in undertaking projects and other types of self-activity. These types
of activity were such as the making of models of windmills, schooners, farm implements, railroads, cotton fields, coal mines, and scores of other endeavors which were suggested to their minds by the film scenes and readings. The evidence is conclusive that the films are superior in developing the imagination and skill, and in increasing the knowledge of the children.

More than 5,000 separate articles made by the children were received at Columbia University. The boxes and crates in which they were shipped filled five average sized rooms. This is an indication of the extent to which the pupils voluntarily entered upon this type of self-activity.

3. The teachers stated that the films increased the quality and quantity of children's reading, a main objective of good teaching. This opinion is confirmed by administrative officers of the school system and in other instances by the school librarians. In many cases librarians reported that library facilities were not adequate to care for the increased library demands of the children involved in the experiment. The teachers stated that values growing out of this were the ability of the children to learn how properly to use reference books and how to select main points bearing on a definite topic; that they also acquired the ability to organize material in logical form.

4. The teachers are practically unanimous in saying that the films stimulated greater facility and freedom in discussion and resulted in more extensive writing by the children than they had ever been able to secure without films. The two directors also gave testimony upon this particular point and stated that during their years of teaching experience and observing classroom practice, they have not observed such liveliness or such sustained discussion as in these classes.

5. The teachers state that there is a better correlation and interpretation of materials due in large part to the fact that the films develop greater immediate self-activity and promote longer and more vivid retention. In many instances children visited a local bakery, a dairy, a farm, or some industrial or commercial enterprise, where they could see in actual operation scenes suggested by the films.
6. The teachers also testified that the films contribute to richness of material and accuracy; that the children get clearer information in many ways than they can get from reading; that many things which are difficult to understand from the printed page are clear in the film.

7. There is unanimous opinion that the films contribute to an ability to concentrate mental activities, to think more accurately, and to reason more soundly.

8. Likewise there is unanimous agreement that the films develop a marked improvement in the range and accuracy of vocabulary. It is the overwhelming testimony of the teachers of the film group that the films made large contributions to the major objectives of classroom instruction. The directors of the experiment state that their own personal observations of the work in the schools of ten of the twelve cities confirm at every point the opinions expressed by the teachers.

The service which a film renders a teacher in the arrangement of her material and in the presentation of a recitation is a matter of major importance in classroom practice. The teachers of the film group are practically unanimous in stating that the films were a distinct advantage to them in making a thorough preparation for the classroom work. They testify that they were able to prepare a more logical presentation of a lesson with than without the film. It is their opinion that the film presents the basic elements of a lesson or a topic. In the selection of classroom material they were able to choose from a mass of available material that which was most essentially related to the vital factors of the topic under consideration. They expressed the opinion that the film compels a teacher to conduct a more orderly and logical recitation, and that the film prevents her from digressing from the main points which should be clearly brought out.

In my address before Lake Placid meeting in 1927, I stated that the experiment was undertaken in the belief that it would reveal the essential information necessary to the development of a sound program in Visual Instruction through the use of motion pictures. The outcomes of the experiment have amply
justified that belief. The report by Dr. Wood and Dr. Freeman is comprehensive and convincing, but considerations of time made it necessary to confine attention to questions of immediate interest. It is the opinion of those who have examined the materials derived from this experiment, that it affords valuable data for a number of additional research studies in education that will reveal still further the many advantages to be derived from the use of motion pictures of this type in the classroom.

New York was one of the twelve cities in which the experiment was conducted. It was under the general supervision of Dr. Straubemuller, Associate Superintendent, and one of the best known and most highly respected school administrators of the country. Dr. Straubemuller made a thorough and comprehensive study of the experiment and of the report submitted by Dr. Wood and Dr. Freeman, which he reported to the Board of Superintendents of New York. In his report he says, «While there have been experiments which were controlled to an extent, your committee feels that no experiment has been so thoroughly conducted, so scientifically pursued; it is undoubtedly the outstanding report on this subject and will not be duplicated in its comprehensiveness for many years, if ever». Dr. Straubemuller further says: «Your committee, after careful study of the manuscript of the report about to be published, and from observation of the experiment as conducted in the schools of our city, believes that the motion picture can be successfully and profitably used if the pictures are made specifically for instructional purposes and fit exactly into the course of study». This report was approved by the Board of Superintendents of New York City and adopted by the Board of Education.

I am gratified in closing this paper to offer this confirmatory judgment of the comprehensive and painstaking report of Dr. Wood and Dr. Freeman by such an eminent authority as Dr. Straubemuller and his colleagues.

Thos. E. Finegan
President Eastman Teaching Films, Inc.
In Germany the initial stage of the Cinema had hardly been overcome — the motion picture had already gained popular favour because life in action was actually reproduced on the screen — when on the one hand attempts were made to exploit the motion-picture as a form of amusement, while on the other, teachers insisted on using it as a means of illustrating life in action, covering more especially biology, geography and technique.

At first the school authorities waited until the results of these tendencies were known, without either encouraging or thwarting the attempts to utilize the films as a means of education. It was only in 1918 that the Prussian Minister of Culture entrusted to me (I was at the time Director of the Pedagogical Section of the Central Institute for Education and Teaching) the task of examining the material possessed by the Cinematographic and Photographic Office — *Bild und Filmamt* — (a Cinematographic office of the Reich run on military lines) and of finding out whether there were any films that were suitable for educational requirements. This may be said to have been the first step taken by a German administration towards the use of the film as a means of visual education.

The German Reich has no school organization of its own. Education and teaching are, according to the Constitution, under the control of the 17 German States. The guiding principles in education, and therefore also the tendency to transform the film into an instrument of education, overstep the boundaries of individual States. Thus, in 1915 a Central Institute for Education and Teaching was founded. Although this body lacks independent authority, it is regarded by the Reich and the States as an organ common to all; it must follow the general education policy, stimulate it in certain cases and help the Ministry of Education with advice.
With a view to ensuring the satisfactory fulfilment of these tasks also in the field of educational films, in 1919 the cinema office (Bildstelle) was turned into an autonomous section of the Central Institute. When I completed my examination of the material of the Photo-cinematographic Office, I was put at its head.

After the war several big producing companies were formed, most of which, like the Ufa, Phöbus, Terra and Emelka, set up cultural departments of their own; and educational films covered ever new ground for presentation in the class room. It became necessary to see that all cultural films were examined, compelling the schools to show only such films as were passed by the Central Cinema Office (Bildstelle).

This Office had already functioned for one year when the Reich set up two special Control Bureaux (Prüfstellen) which, to say the truth, had nothing to do with the examination of educational films. A law was, however, passed by the Reich, enacting that no film could be shown on its territory, whether in public halls or privately, unless it had been examined by the Control Bureaux of Berlin or Munich, which granted the necessary permission only when they were satisfied that the provisions of the Law had been respected.

The competence of the Munich Control Bureau extends to all films produced in the Southern States, Bavaria, Württemberg, Baden and Hesse; the remaining thirteen Central and Northern States come under the competence of the Berlin Bureau. A Bavarian Cinema Office was set up as a counterpart of that of the Central Institute, with competence on a territorial basis.

There exists the following difference between the Control Bureaux (Prüfstellen) of Berlin and Munich on the one hand, and the two Cinema Offices (Bildstellen) on the other, namely, that the action of the former organs is, one might say, negative, in that, by withholding the necessary permission, they prevent infringements of the law, and the action of the latter bodies is positive, because they encourage the production of good films.

This stimulating action is carried out in two ways. In the first place, only those film scan be shown in schools which one of the
two Office has recognised to be suitable for educational purposes; secondly, because when educational films are shown in public cinema-halls, they are granted a considerable reduction on the ordinary entertainment tax. Complete exemption from this tax is accorded in the case of a display in which nine tenths of the films shown are of a cultural character.

Two other groups of cultural films are recognised, namely, those made for popular education and artistic films. In both cases they may be entertainment films (Spielfilme); they must, however, either be of an educational value because of the way in which they deal with, or present a problem, or the creative power of their author must be such as to make of them works of art. These films also are accorded a reduction on the entertainment tax. By their work these Cinema Offices, therefore, encourage the production of good films, acting directly from the moral point of view and indirectly from the financial standpoint, while their decisions are taken as a standard in the demand of good films.

The task of giving advice on artistic, educational or cultural films rests to a very great extent with the Office of the Central Institute because the film production of Southern Germany is far below the level reached by the Northern and Central States. On the other hand, the number of films examined by the Berlin Cinema Office is small compared with that of films submitted to the Berlin Control Bureau. The fact should not be forgotten that the Berlin Control Bureau has to examine every year more than 2,000,000 metres of film, representing the whole production of Northern and Central Germany on the market; of these films, only a few are submitted to the Cinema Office, that is to say, such pictures as are considered by the producers to be superlatively good. In its turn, the Cinema Office subjects these picked films to a fairly severe examination.

In the course of eight and a half years the Berlin Control Bureau has rejected slightly over 460 films out of almost 21,000. These figures should be compared, on a percentage basis, with the following number of films rejected or passed by the Cinema Office.

From April 1, 1919 to the end of March, 1929
3616 films 2,664.504 metres long were examined
and 2863 » 1,870.134 » » » approved
753 » 794.370 » » » rejected
divided as follows:

a) films for teaching purposes
   approved
   Rejected
2139 films, 1,128,740 metres long. 325 films, 152,814 metres long

b) films intended for popular education
   Approved
   Rejected
628 films, 499.157 metres long. 331 films, 406.726 metres long.

c) Artistic films
   Approved
   Rejected
96 films, 242,237 metres long. 97 films, 234,830 metres long.

The duties of the Cinema Office are by no means limited to the giving of advice. Producers, renters and public authorities may apply to it for information on all matters related to artistic, educational or cultural films. The Office may also, on request, tender advice to producers as to whether a rejected film might with certain «cuts», additions or modification of sub-titles, be allowed. Naturally the Office is not concerned with the production or marketing of films (sale or distribution), so as to be able to give an absolutely objective judgment. It merely lays down the general principles that should guide producers in their autonomous work, gives advice to their collaborators and examines the scenarios before the film is produced.

The campaign for «better pictures» is not enough; it is also necessary to see that the understanding of the value of cultural films on the part of teachers and of the school authorities is increased and intensified. By means of writings, lectures and meetings the teaching staff is unceasingly kept informed of all that is related to motion-pictures, as opposed to still figures, the value of using the cinema for educational purposes as a means of training the pupils to see, observe and grasp the significance of what they are shown and of acquiring positive knowledge. With this object in view, methodical instructions have been compiled touching upon the
proper way of showing cultural films in the schools and upon the training of pupils, whether these films are shown in schools or in other halls lent for the purpose in the presence of pupils from other schools. The question of the advisability of referring to the subjects treated by the film in a series of lessons in class belongs to the methodology of visual education.

As regards the requirements of the methodology of visual education, the Cinema Office must concern itself also with the technique of the showing of films in classrooms. The use of the projector should be left to those teachers or operators who have undergone a special examination and secured the «certificate of technical operator (Vorführen) of luminous projections in schools and in juvenile education». Special regulations dealing with the examinations of these «technical operators» (Vorführer have been introduced in Prussia and have been adopted in other German States. The first board of examiners was set up in the Cinema Office of Berlin; its chairman is at the same time the head of a syndicate of directors of Cinema Offices in Germany and keeps in touch with the chairmen of the other twelve boards of examiners in Prussia.

The Cinema Office has hardly any direct connection with the German Cinema Federation (Bildspielbund) and with its regional associations. This Federation practically represents all the German teachers who buy films for use in the schools, or on the occasion of scholastic ceremonies, or for special displays reserved to parents. It controls a sufficiently large number of regional associations or local branches and is presided over by Dr. Günther. To ensure a certain degree of cooperation between the Cinema Office as the competent body for the examination of films, and the Cinema Federation as the organ of distribution, Dr. Günther is the director representing the Cinema Office, and the latter body is, in its turn, a member of the Cinema Federation and honorary member of its managing committee.

Prof. Dr. Felix Lampe
Head of the Central Institute for Education and Teaching at Berlin
FOR CHILDHOOD AND ADOLESCENCE

(from the French)

My friend, Dr. Luciano de Feo, the Director of the «International Educational Cinematographic Institute, » has requested me to contribute a series of papers on the psychological reaction of the child and adolescent to the action of the cinema.

I desire, in conjunction with him, to launch an appeal to all those who, throughout the world, feel their hearts wrung with anxiety for the morrow when watching the youth of to-day.

(Ed. N.) As announced in our first number, we now have pleasure in publishing a paper by the illustrious scientist, Professor Rouvroy. The splendid faith with which this apostle of social welfare deals with the problem of the protection of childhood and youth from the perils of the cinema, calls for no comment from us.

As stated in our first number, this Review proposes to deal comprehensively with this problem, in connection with which the Institute — acting in perfect understanding with the Committee for the Protection of Childhood — has already started a great international enquiry to ascertain the views and experience of those who have devoted themselves to studying the social, moral, psychological and criminological aspects of the Cinema.

Maurice Rouvroy is one of the Institute’s most valuable collaborators in this enquiry. The object we have in view does not and cannot tend in any way to handicap the progress of the cinematographic industry; but, on the contrary, it aims at promoting it and improving it in its several aspects, so that the progressive improvement of films — of which there have been so many unmistakable signs of late — may lead to the removal of those artificial barriers which many countries have felt it their duty to raise for the protection of children and adolescents.

In a later number the Review will publish on this subject an article contributed by an authority on labor problems, the Spanish representative in the Children’s Welfare Committee: Don Pedro Sangro y Ros de Olano, Marques de Guad-el Jélú. In like manner we will consider and describe the many notable publications on this subject which have reached this Institute, among others a highly interesting paper by Carl E. Milliken in answer to the report of Roger W. Babson.
Proof of competence should always be the opening part of every plea; when social interests are at stake, false modesty is out of place. As far as I am concerned, I do not believe all that is written: and I think others are of the same opinion.

I am not writing this in a drawing-room, a study or a library; I am writing in my laboratory, where day by day I deal with some three or four precocious social wrecks, aged from six to twenty years, sent by our Judges to the Observation Station of Moll-Huttes, at a few metres’ distance from the pavilions occupied by the moral wrecks of children and adolescents whose past life, present personality, moral responsibility and future possibilities it is my business to study.

For more than thirty years I have been living with children, adolescents and youths; for nearly twenty years I have been «salvaging wrecks»; thousands of juvenile offenders have passed through my hands, before my eyes and soul: ailing in body and senses, sick, backward, abnormal, lunatics... perverse and perverted by all perversions, both inborn and acquired. I have been dealing with these unfortunate creatures, whose life it was my business to endeavour to recreate while waiting for those who discuss the eternal problems or dissert upon petty theses in the academies to come to some sort of agreement.

I have had to make them live for weeks under my eyes before proceeding to dissect their inner psychology in the laboratory; I have had to watch them closely everywhere, even while they were asleep or engaged in manual labour or in the playground, in all the activities of the students’ city... And every time that I wrote of any of them, that he was a difficult subject to deal with, that he was an obstinate incorrigible to be brought back to moral and social discipline by the most careful and direct methods... or that he was a psychical abnormal to be re-educated by degrees before reintegrating him socially, I knew that by doing so I took it upon myself to look after him and train him anew either at the Etablissement pour «difficiles» of Moll-Centre, or at the Etablissement special pour «anormaux» close to the Station d’Observation. I have had no time to discuss the eternal speculative problems or petty
academical theses. My time was taken up exclusively by studying the children thoroughly and by causing them to react in order to acquire a better knowledge of them, one by one.

* * *

I know what I am saying (and I say it without anger or arrogance, but with, I hope, moving emphasis). My complaints are directed:

against society, which does not take enough care of children and adolescents;

against those who set up psychological systems wherein there is no place for the living child;

against those who bring up children on ideological methods, where regulations are all-important and the child counts for very little;

against those who in their teaching devote their whole attention to the object of their didactic profession, to the matters to be taught and to be distributed piecemeal, as if it were only a case of portioning it out in dishes of the same form and dimensions... without giving a moment’s thought to the subject himself, to the child with delicate nerves, with a psychology so varying in its inclinations, powers of reception and possibilities.

My experience is that of a life-saver who knows how wrecks come about and who must be forgiven the rough words and ways he learned in the midst of storms.

* * *

It is not by an unusual product that one should form an opinion of a machine. I judge a machine by the average value of its daily output, and, above all, by its imperfect products and by its useless and costly wasteage of raw materials.

I cannot form an estimate of a system of education and teaching merely on some unusual success, but, above all, on the current results of a long-tested method and also on the number of
subjects whose physical, mental or emotional constitution has been injured by the method itself.

The instruments of education multiply themselves, are standardized and mechanized, are transformed into tools. Improved tools, of course.

Tools, however, demand of those who handle them or look after them, skill and care proportionate to their perfection. This is what is overlooked by most teachers who regard these tools merely as labour-saving devices for themselves.

The more complex the machinery is and the less skilfully it is handled, the greater is the quantity of raw material and product wasted. Educative tools must be regarded not as devices designed to spare the master time, efforts and thought, but as an aid for the child, whose intelligence thereby finds its avenues of approach invigorated.

Our schools of every rank have been supplied with projectors, wireless, « linguaphones » and « parlophones » of every form and description. And I already anticipate the scholastic records at the end of the year, giving the number of slides and recitals in statistical tables, that leave one in the dark as to the method of application of these tools which have the lure of mechanical contrivances for the big children which we ourselves are at times.

Among the educational tools there is also the cinema, with its appeal of life, reality in action and movement. The offer is too tempting not to engage the attention of all those who are interested in children and adolescents, and of all those who are being brought up and taught.

But, in less than no time, without training, the pedagogue becomes a « cinema expert ». Just as he had turned himself into an « economist » all of a sudden, on receipt of advice or instructions to that effect; just as he had become an « expert in gymnastics », « musician », « painter », « designer »... without the least preparation, in conformity to the trend of programmes, State circulars, the whims of chiefs, fancies of congresses, suggestions of technical reviews or occasional contributors...

Some persons may agree with me here who, perhaps, will
presently bear me ill-will for failing to see eye to eye with them on other points, and for having met them by this first concession: «Modern educational tools, including the cinema, are not properly employed. The teaching staff should be told how to use them; and perhaps it may be necessary to improve the tool itself, in order to facilitate its handling».

This, however, is not all: because this is true of all kinds of tools. It is almost negligible compared with what I would like to convey.

* * *

It is not the « tool » alone that is standardized and mechanized in education. The same applies to the child and adolescent, whom it is desired more and more to exploit industrially. An attempt is being made to transform the subject of teaching and education into a productive machine whose nervous and psychological system is tested in order to discover its qualities rather than its defects, and with a view to getting better results from the better-gifted, rather than to helping the less gifted.

I know certain schools in a great number of places where very soon the child himself will become nothing better than a receiving-apparatus, a sounding-board, a screen...

The child is not an inert screen which can be spoil’d only by the mishandling of workmen who knock it about.

The child is a screen that vibrates, reacts, rises and sinks under the flux of images and sometimes stretches itself to breaking-point.

When land is subjected to forced treatment, that is to say, to energetic manuring, it is necessary to know its properties thoroughly, the sowing time, the quality of the soil, its possible reactions and its resources, which should not be exhausted all at once... as is the case with children, adolescents and the feeble-minded, whose nervous and psychical resources are rapidly exhausted by applying to all of them, no matter when and how, the moving luminous vision.

When a machine is employed for industrial and commercial
purposes, one must reckon in the final accounts not only the gross returns of production, but also the wear and tear of the machine, deteriorations, breakages, irregularities of movement to be set right at a great cost.

From the profits one expects to make in future from the application of new modern scholastic and educative tools, one must detract what represents the wear and tear of the child’s personality, not only to be fair, but also lest one should be faced at some future date with a lack of the necessary capital for further exploitation.

For instance, I have near me, repairing a picture of which I have awkwardly broken the fragile frame, a youth 18 years old, the son of a neuropathic parent and slightly neuropathic himself, in a permanent toxic state which renders him susceptible to sudden reactions, of the toxi-glandular type, under the least nervous or emotional excitement.

Having caused trouble in his family circle, he had been sent to an institute where tranquillity and diet at last overcame his violent crises, and for some months eased his trouble.

One evening (thinking it was all for his good) he was taken as a reward to the cinema. He spent an agitated night.

On the following day he smashed the furniture of his small room while in a delirious state, stopped only by a shower-bath, which calmed down his nerves by decongesting the brain and by driving the blood back to the periphery and extremities. The thrill of animated scenes had invaded his feeble mind; the «agitation» of the cinema had, through the sight and the nervous channels, reached the brain-centres themselves... it had destroyed the work of months, prostrated his body and soul and demoralized the young man.

And yet this is not one of those in a serious toxic state which the doctors must disintoxicate systematically by means of a special medical regime — nor is it a case of disturbance of nutrition to be drugged — nor a case of an advanced neuropathic patient only to be calmed by saturation with stupefying drugs. It is a «temperament» which opportunity and environment alone imperil.

Amongst those who are brought to me there are many intox-
icated youths, whose intoxication is neither a crime nor a vice; they are, however, exposed to unusual dangers when their nerves and passions are carelessly aroused. Even in a group of normal children there are 20% at least of such cases.

It is not my intention to make use of the cinema here. The few shows which I formerly offered to my small world of feeble minded gave rise the same night or the following nights to such fevers that I did not dare to repeat them.

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One may admire a machine for what it yields when it is set going and is watched by an expert mechanic. When the wheels and transmission function as they should, very soon, to-night may be, the mechanic will pull the lever up to the stopping-point and the machine will remain inactive until it is again set going.

The spirit of the child and adolescent, which modern pedagogy more and more treats on industrial lines (as if it were a machine of production, or a production in accordance with carefully laid down tables), the emotional capacity of the child and adolescent stimulated by interest in order thereby to concentrate their attention on a given subject, the nerves of the child and adolescent have no stopping-points when the pedagogue-mechanic abandons them, their machinery continues to vibrate night and day... creating in its turn, once the impulse is given.

While I am writing, a lad fourteen years old, with abundant gesticulations and feverish cheeks has joined the neuropathic referred to above (in order to help him in his work of repair).

It is certainly far from my intention to write in this connection a treatise about illusion and hallucination. Those who suffer from illusion fasten to a given object or fact non-existent details of which the object or fact perceived is but the central element.

We have all suffered from illusion, who has not made of a tree dimly perceived in the night a gesticulating fantastic being?

Those suffering from hallucination, on the other hand, see
and hear nothing, but they conjure up imaginary visions and hear imaginary voices.

The boy of fourteen is in the initial stage of his adolescence; in the evening he is a prey to fear and during the night he has fearful dreams. Moreover, he was formerly given to somnambulism.

He went to the cinema and it was on his return from these shows that his crises became more frequent.

One night he did a criminal action, while in some sort of nightmare.

I set him to open-air work... but the least digestive or nervous trouble brings him back to that state of toxification. Last night, he was again restless and feverish. To-night, I shall have him closely watched, because, at times, his eyes have a strange fixed look with flashes, and immediately afterwards they are lit up with reflexions springing from a hidden thought, from an inner storm.

There are between this lad and the perfect human being, a non-existent ideal, numberless gradations, there are children and adults whose inner constitution secretes a kind of torpor and dizziness, whose blood, slowed down by their lymphatic under-circulation forms, as it were, certain swamps wherefrom rise to the brain a feeling of excitement or stupor according to circumstances, whose cerebro-psychical system secretes also dreams, illusions, hallucinations, nightmares, like those which we, who regard ourselves as super-normal beings, come to feel as a result of a badly digested dinner, of a suffocating or over heated atmosphere when we are tired, or of the faintest distant and confused premonitory warning of grippe.

Have you ever thought that with all these people (in varying degrees, but always) the multitudinous figures on the screen and the sensation of movement conveyed by them, impress upon their cells and intimate memory millions of details which cross and intercross one another, like elements in suspension in a liquid under reaction, ready to crystallise themselves into phantasmagorical images connected with objects or facts seen, or to crystallise themselves into pictures of fear and suggestion?
There must be agreement also on this point, friends and fellow pedagogues, who realize that the single method (and, with greater reason, the single « tool ») is not applicable to a group of children and adolescents indiscriminately... and that, in the case of several among them, it is necessary to proceed with the greatest care and precaution.

In how many cases of gravely deranged people have you claimed that the cinema had at last succeeded in awakening their attention? You have not, however, outside your classes or lecture-rooms, noticed the convulsive reactions similar to those of an epileptic whose attacks disappear for weeks as a result of treatment, but who, when the treatment is interrupted, wakes up again like a volcano. Come here and I will furnish you with a proof. In how many cases of « turbulent » people have you claimed that the cinema had restored balance to their minds? You were unaware, however, of their cerebral drama of imagination... they went elsewhere to reflect without your knowledge... Unless the act on which their attention of « types moteurs » concentrates itself to the exclusion of other details of the show, unless this act is dormant at the bottom of their minds for weeks and months at last to break out again... when least expected.

We must indeed come to some understanding on these questions.

It is not for me, but for the 30% of my morally lost children for whom the cinema, such as it is, appears to me here as one of the wreckers, for the 25% of them who will never recover.

Maurice Rouvroy
Director of the Central Institute of Observation and special Institutions of Moll — Professor of Pedagogic Psychiatry at the Higher Institute of Pedagogy of Brussels.
In ancient India, the inhabitants of the country shut in by the upper reaches of the Ganges and the Rivers Yamuna, Sarasvati and Drisadvati, were called the Kauravas, after Kuru, the ninth descendant of Bharato. Their territory was regarded as sacred. It was from here that there spread all over the Peninsula and beyond it, right into distant western lands, the wisdom of Veda, and the theological, legendary, philosophical and ritualistic collections of Brahminism, which, with the magnificent bounty of the old, forgotten wisdom, sowed far and wide a prodigious sense of faith and culture.

In this garden of the world is performed the epic cycle of Mahâbhârata, gathered together by Vaîçampâyana, the pupil of Vyâsa, in 18 parvas or episodic cantos, consisting of over one hundred thousand sloki.

Everything is chaunted in this Sanscrit poem, composed for the glorification of the Lunar Dynasty, for the possession of the City of Hâstina-pura, achieved by the death of the Kauranas, with the magnificent victory of the Pândavas, those pallid beings, descended from the blind Dhritarâstra, who later on, after the victory, devoted themselves to improvement and to pilgrimage, that they might rise, after death, to Svarga.

On to this poem, with its sacred background, is grafted the splendid gem of the Bhagavadgitâ, the Divine Song, with its purely philosophical conception of the universe, remembrance, tradition, and ritual.

Around these two songs there blossom in India, Mother of peoples and of human thought, the age-honored Veda legends, the Rigveda — a collection of 1028 hymns attributed to seers, inspired bards, holy priests and risi, who lived two thousand years before
the Christian Era: the content of this is both liturgic and profane; the Yajurveda, the science of sacrificial formula; the Sâmaveda, whose rites the priests repeated while drinking the soma, that sacred beverage dear to the Divinities and to the profane Atharveda. There blossom also the Upanisada, works supplementary to the Veda, theosophical speculations, passionately in quest of the intimate essence of Atman, the universal soul, and which offer to mankind meditation as a means of rising to the solar conception of life, in order that his earthly soul may identify itself, in the not distant future, with the soul of the world and of all things.

Thus the true devotee learns that this life is but the product of illusion — of Maya; that in truth the Supreme Being alone exists, and that all forms of life as we live and enjoy it, are but a mockery of the senses. Thus too he learns that there are, in this world, three guna (qualities) which he must shun: sattva (goodness), ragias, the life of the senses, tamas, spiritual darkness.

Like Arjuna in the Divine Song, he learns that man must free himself from these three qualities in order to suppress his own individual life, to break the chain that keeps him bound to mundane things, to drive away all those impressions of the senses, whence are derived pleasure, pain and desire. Thus the truly wise and devout man will have done with earthly achievements, since he knows the way of rightly adoring the Supreme Being, which is truth and knowledge, in its deepest and innermost essence, through the medium of contemplation, and he will keep at a safe distance from politeheistic life, which is the forest of error. He does not desire rewards (phalam) for his deeds on earth or in the svarga, since he must free himself also from sattva, those qualities that make him good, and, in order that he may himself be extinguished in the divine soul (Brahmanirvâna), he must cultivate Brâhvana, that is to say meditation, introspection, the quest of the sense which tends to identify his soul with that of the Supreme Being. Only those who perform their actions as a means towards obtaining immediate or later rewards, will suffer again, throughout successive births, their souls for long ages bound by the iron bonds of corporeal life, to the city of the nine gates.
In the Mahābhārata there appears the hero of the Yādani, Krishna; the Madhusūdana (slayer of the Demon Madhu); the Jhanārdana, or tormentor of mankind (Vishnū); the Vārsveya, or descendant of the Vrisni. A cow-herd in his youth, or govinda, son of Vasudeva and Devaki, reared in hiding, on the flowery banks of the Yamunā, in the care of Nando, amid flocks and the pastoral loves narrated by Jitagovinda, (the Shep-

Krishna and Shishupal (from the Mahābhārata)

herd’s Song) of insuperable lyric beauty, akin to the Song of Songs—allegorical, maybe, as the Song itself is, and symbolic of the longing of the earthly soul for the Divine.

Side by side with the Mahābhārata, and the Divine Song of India, is the gem of the Ramāyana, the epic of Rāma, an exile in the woods with his mate Sita, until Rāvana, the prince of demons, seized her, from the hut in which she was hidden, after killing Jhatayasi, the guardian vulture. And Rāma reconquers her,
in the Poem, with the help of Hanumat, the ape-like son of the Wind, at Lankā (Ceylon), after launching a living bridge into the sea and fighting, with the help of Sugrīva, against the demons loosed by his foe.

Rāma and Krihsna are earthly incarnations, the avatār of Vishnū, the active, industrious, mystical solar God of most ancient India, who united in himself the two conceptions, the speculative and the popular, of the Hindu Religion, and became the God of the Pantheist synthesis of the world.

The sacred and the profane are merged in the songs of old India. They sing of the trāilokya, of the three different and only worlds: the heavens, the air, and the earth. They sing of Prajāpati, the Lord of beings, the central theme of the 121st. hymn of Book X of the Rigveda; the unknown God, whose power is manifested in all created things, of whom the lesser Gods themselves execute and obey the command: the One, the Absolute,
Rāma shows Sītā the woods of the Dekkan (from the Rāmāyana).

Rāma asks for Vishamitra’s blessing (from the Rāmāyana)

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the Indestructible, the Aksara-m, in whom and of whom is produced the ethereal substance which envelops and forms the world and all things.

With powerful lyric impulse, it hymns the sweet and radiant death of warriors, of those who fulfil their duty, dying in battle,

Marnti bows before Shiwa (from the Râmâyana)

and who ascend to the Paradise of Indra, in the svarga; for heroic death in the field — the highest symbol and example of duty — purges of all sin.

It sings of the Açvini, the Indian Dioscuri, the twins, prototypes of eternal beauty and eternal youth, who appear in the dim
morning light on a golden car drawn by winged horses, eagles, and falcons, preceding the rosy pathway of Dawn; they are the doctors of the Gods, dispensers of health to mankind, and the patrons of seamen.

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To-day, after the long flight of ages, the Cinematographic Film reproduces, with all the color of local action, amid the sug-

Rāma in exile attended by his faithful Guhak (from the Bāmāyana).

gestive scenery of Nature, the most striking episodes of this great Epic, these legends, and these Divine Songs.

Religious and Documentary Films are a signpost on the pathway of the ascent of the spirit of man, of culture and science towards the highest and most luminous altitudes, which mark a revival in the life of nations; they make of the Screen, which we look to for amusement and entertainment, an instrument — and the most powerful instrument — of universal knowledge, of that knowledge which comes down to us from the remotest past.
A Cinematographic Company in Bombay, the Hindustan Cinema Film Co., has started and is about to publish a film illustrating the life and religious customs derived from the wisdom of the old world.

Narada, who is also known as Wisha Manya, the lord of thunderbolts, the Jarasandha episode, the scenes of the Mahābhārata, the figure of Krishna, all are brought before us to-day by means of the screen.

Side by side with the splendid French and Italian efforts for the production and elevation of Catholic films, (1) and with the Zionist attempt to show us the far-away glories and sufferings of the Hebrew people, the Brahmin tradition is creating the historic and religious film of India.

Thus the power of the Cinema as a means of spiritual uplift for the people of the immediate future grows greater day by day.

(1) Films of a religious character, bearing the titles of «The Infant Christ's Theresa» and «The Holy Crusade» are about to be produced in France, by the Films D'Art Company, under the auspices of Cardinal Dubois, Archbishop of Paris.

In like manner a Zionist Committee has in hand the production of two Films, «The Springtime of Palestine» and «The Exaltation of the Jordan».

It is further announced in the press that, with the support of the Vatican State, Italy has set up a Religious Cinematographic Company, the purpose of which is to produce films of a religious character.
COPYRIGHT IN CINEMATOGRAPHIC PRODUCTIONS.

(from the German)

A codification of copyright regulations relating to the cinema industry has not yet been effected, either by international treaties or national legislation. Cinematographic productions are generally protected as literary or artistic works. This may be due partly to the fact that the invention of the cinematograph is of recent date and, for this reason, does not yet lend itself to a definite codification of copyright questions relating to it. A further reason may be traced to the fact that erroneously the film is not regarded primarily as an industrial product but as a form of art, and therefore the juridical provisions relating to literary and artistic works are applied to it.

The cinema is a technical-economic process by means of which ideal values are shown to an unlimited number of persons.

(Ed. N.) With the paper by Dr. Walter Plugge, the renowned authority on the German cinematographic industry, this Institute opens its examination of the problem of authors' rights in connection with the film. This study and enquiry is being conducted by the International Institute of Intellectual Cooperation with all the competence which we associate with its name. By close collaboration, these two organs of the League of Nations should be able to find the right way to a solution of this problem, which is so intimately connected with and reacts so directly on that of educational cinematography. Indeed, an enquiry into the whole question of copyright, important as it is in the field of industrial cinematography, is certainly not less important in connection with the special production of educational and general culture films.

In any case, the I. E. C., which is anxious to give, wherever possible, its disinterested contribution to the solution of any problem affecting cinematography, tho' determined as ever not to encroach beyond the boundaries of the very wide field with which it is concerned, is happy to open this series of articles, and in its quality of technical organ, will always be found ready by the Paris Institute and more than happy to welcome in the pages of its Review the results of the enquiry which the Institute of Intellectual Cooperation is carrying out.
for purposes of education or entertainment. In its ideal form it combines the characteristics of a work of art and of an economic process, as opposed to dramatic works and also to industrial activity proper that is characterised by the production of goods.

The film itself may be regarded as an article only when one considers the substance it is made of. The film ribbon has a commercial value fixed in accordance with the general rules of the market. But what makes of the film an object of trade is not the string of celluloid, but the Filmlizenz which implies a right.

The international copyright regulations with regard to cinematograph productions are contained in art 14 of the revised Berne Convention. The International Copyright Conference held in Rome in 1928 has not modified substantially the provisions of art. 14; it has, however, inserted in the Berne Convention an article recognizing the «droit moral.» The admission of the «droit moral» essentially affects copyright in cinematographic films.

The much-debated question as to who is the author of a cinematograph production or as to who may be regarded as such, has not yet received an international solution. The provisions of national legislations reflect the attempts that have been made to settle this question.

Italy, for instance, admits in regard to the film a collective copyright in which the scenario-writer, the producer of the film (Filmhersteller) and the composer (Komponist) participate in equal shares; Poland, on the contrary, by her law of March 29th, 1926, confers the copyright in cinematograph films upon the impresario exclusively and in the case of works made on commission, upon the person who gives the order.

The most advanced application of the idea of collective copyright in films is embodied in the Egyptian Copyright Law of March 12th., 1927. Under the provisions of this law, the following persons share in the copyright: 1) the original author; 2) the scenario-writer; 3) the stage-director; 4) the producer; 5) the Komponist. It is not easy to understand how this law works out in practice especially when one considers that the actor and the hair-dresser (Filmfriseur) might have been included in the above list, on the same level with the other co-operators.
National legislations in regard to the fundamental question of copyright — namely, who is the author — contain widely differing provisions. The same applies to the duration of the «period of protection» in the case of autonomous film productions. In the absence of a special reference in national legislations to the period of protection of cinematograph production, the general rule relating to the duration of the protection of literary and artistic works is applicable. Special provisions exist in Poland and Russia. In the former country the term of protection in the case of cinematograph productions expires after twenty years from the creation of the film, while the period of protection extends generally for 50 years after the author's death. In Soviet Russia, under the Ordinance on Copyright of January 30, 1925, which is to-day in force, the term of protection for cinematograph works and films extends for 10 years, this being an exception to the general duration of the protection which is 25 years from the first representation of the work. This protection, however, is limited to national production; the Soviet Union has not yet concluded any international agreement in regard to copyright, although negotiations to this effect are in progress.

In the Copyright Conference of 1928 no definite agreement was reached, in regard to the term of protection in the case of cinematographic productions. Attention should therefore be given to the fact that the duration of the protection of the author's rights in regard to cinematograph works will continue to be regulated in individual States by widely differing provisions.

Up to the present day in Germany copyright is duly assigned to the film-producer by contract and is valued by him. This transfer of copyright to the producer has in practice presented no difficulty. Anyhow, the German cinema industry is, and will be, opposed to the tendency favourable to the creation of a collective copyright in the film.

The following considerations may be useful to a better understanding of this point of view.

It is the film producer who bears the risk of the marketing of the film. He advances the capital required for the production
of a film, which he cannot recover until after its sale. It is possible to know whether the producer's expectations will be fulfilled when the capital has already been invested. The scenario-writer, the cinema director, the operator, the Komponist, are the producer's necessary collaborators, but they do not share in his financial risks; on the contrary, they are the producer's salaried employées. And everybody knows how big a salary they draw. Those who take no personal risk in the production of a film cannot claim a share in the financial results of the exploitation of the film itself, after having been already paid for their services. This at least is true when the participation of the film-producer's cooperators in the exploitation of the film is imposed by law in the form of a collective copyright.

The suggestion that the droit moral should be inserted in domestic legislations relating to copyright is based upon the idea, which finds a logical application in the Czecho-Slovakian law, that an author should be protected against the deformation or mutilation of his work as a result of its adaptation to the cinema. In so far as this principle is correct, it has long been accepted by national legislations.

In Germany, for instance, an author whose work has been deformed as a result of its adaptation to the cinema, might invoke the protection accorded by the law against illicit actions. This reason alone makes the recognition of the droit moral as a distinct principle of law altogether unnecessary. Since, however, the droit moral has been, in spite of this, inserted by the Rome International Conference of 1928 in the Berne Convention, individual countries must judge whether such an addition is necessary wherever the droit moral comes under the general protection accorded by the law.

Moreover, the film-producer would be continually exposed to the danger of being disturbed in his business transactions by claims advanced by the author on the strength of his droit moral. The participation in the financial benefits resulting from the marketing of the film under a collective copyright without any corresponding financial risk, renders the amortization of capital in-
vested in the film much more difficult, because the number of those who, as collaborators of the author, might put forward claims is considerable. If the term of protection is prolonged owing to the recognition of both a collective copyright and the droit moral, the author would be in a position to put forward legal claims which go far beyond the economic possibilities of the exploitation of the film. As a rule the industrial exploitation of a film seldom extends beyond the period of 10 years, also for technical reasons. The author and his heirs, on the other hand, would be legally entitled to a much longer term of protection.

The consequences of all this would be a sharp break in the economic, organizing and commercial forces combined in the film-producer, to the individual advantage of a number of his collaborators.

Dr. W. Plugge

Official Representative of the German Confederation of Cinematographic Industries.
COLOUR CINEMATOGRAPHY

THE PRESENT AND THE FUTURE OF THE VARIOUS PROCESSES WITH SPECIAL REFERENCE TO THOSE IN WHICH CHEMICAL PRINCIPLES ARE APPLIED

**General Topics.**

Cinematography may be said to be the eldest daughter of photography. Apart from the scenic part, form and working of the camera, all the rest does not differ in the least from the technique of photography. It may therefore be stated that the progress of cinematography is intimately connected with the progress of photography. Thus, with regard to the preparation of photographic emulsions, special mention should be made of the great progress achieved in the increase of general and chromatic sensitiveness: it has already had a very great importance, which may increase in future, in the taking of motion pictures in any place and under any light conditions.

The technique in the toning process of the image by the replacement of reduced silver by other coloured compounds or by lake colour has had a great influence in increasing the suggestiveness of motion pictures, and has succeeded in obtaining, up to a certain point and in certain particular cases, by means of a proper blending of the toning and colouring of the film, something resembling to the natural effect of colours.

Nor can the progress made in the optical field be overlooked, especially as regards the luminosity of the lens, by which cinematography will profit more than photography, because a great luminosity necessarily implies a very much reduced focal depth, which can only be tolerated by cameras fitted with lenses with a short focus, suitable for small size pictures, as in the case of negative cinema films.

Thus, the very recent Meyer F 1.5 lens is described as a lens merely for cinematographic cameras.
Compared with the lens F 4.5 which up to few years ago represented the type possessing the highest luminosity obtainable, the new instrument possesses a luminosity at least ten times as great! If we exclude the films produced in the studios where, owing to their powerful light installations, large aperture lenses are unnecessary, it may be said that the cinematographic representation of current events will receive a great impulse by the progress made in optical photography.

It may be added, without overstepping the limits of this article, that also for cinematography in colour, the exceptional luminosity of the lens will greatly facilitate the trichromatic selection of animated natural subjects.

Photography and Cinematography in colour.

While, on the whole, the progresses made in photographic technique generally react upon the cinema technique, it cannot be stated that colour photography produced with coloured pattern plates, which is the method most generally in use at the present day, has found its counterpart in colour cinematography. The wonderful process introduced by the Lumière Brothers in 1906 under the name of autochromatic process, is largely used to-day by amateurs who feel the fascination of colour.

In addition to the autochromatic plates, the coloured Afga plates are to-day to be found on the market; in these plates the mosaic is considerably different from the mosaic in the autochromatic plates, although the principle is identical.

The usefulness of the plates prepared with mosaic colours is gradually gaining ground also as a means of recording landscapes, customs, monuments, works of art, etc., and certain American reviews, taking advantage of the great attractiveness of colour plates, reproduce trichromatic prints obtained from autochromatic pictures, including several illustrations of Italy and her Colonies taken by a very able colour-photographer, General Pellerano of Rome.

The principle of the three-colour mosaic applied to the ordinary colour plates could not, however, be extended to cinema-
tography, and all the attempts made so far, which the author of this article has been able to follow, have failed.

In any case, even admitting that a mosaic film may finally be obtained, if it implies the process of inversion in order to transform the negative into a positive, it would be available only for amateur cinematography. And in this case too, and apart from the great difficulties of producing anyhow an even mosaic upon a celluloid film without incurring an excessive expenditure, there would always remain the very serious disadvantage of having to increase the light in the projector, given the great absorption of light by the mosaic; damage to the film would be the unavoidable result.

In 1928 the Kodak Company of Rochester elaborated a process of Colour cinematography for amateurs, which is based upon the principle discovered many years ago by Lippmann, the great physicist, and styled by him «integral photography». In this system lenticular elements come into play, which are founded in the «gauffré» celluloid film, as it was called by the Frenchman Keller Dorian, who was the first to employ in practice, to a certain extent, the principle discovered by Lippmann.

The Kodak lenticular film, with a coating of panchromatic emulsion and used with a special trichromatic filter, splits up the image into its coloured elementary constituents, which are subsequently reconstructed during the projection of the film, showing the positive image obtained by inversion.

This process has already been applied in the United States of America, and those journalists who have had occasion to see the results obtained, have spoken of it with great admiration. In Europe, however, this system has not yet been introduced. As also here it is a case of a positive image, the reproduction of which appears to be very difficult, it is not likely that this process can be applied to ordinary cinematography.

*Three-colour photography.*

All processes of colour photography, including the autochromatic system, apply what is known as the three-colour principle,
discovered by Ducos de Hauron in 1869, which consists in splitting up the image into the three fundamental colours of the spectrum, red, green and violet, and afterwards in re-composing it.

But while, in the case of coloured plates, the analysis and synthesis of colours is produced automatically on the same stand, in the three-colour process the two operations are completely separated.

In colour cinematography it is precisely the three-colour system proper that has been applied; and with the improvements which are certainly bound to be introduced, it will lead to completely practical results. It may be said that no substantial change has been made in the three-colour process since the time of its discovery as regards the analysis of colours; this operation has merely benefited much by the great improvements that have been realized in chromatic sensitiveness.

The apparatuses which have been devised for producing the three-colour selection are innumerable; the mechanical and optical characteristics required in apparatuses for the production of fixed images are somewhat different from those necessary in cinematographic cameras. With regard to the former, the use of plates has made possible the construction of apparatuses, which by only one exposure, or by three exposures in very rapid succession can produce the three selected negatives through the three corresponding red, green and violet filters. A typical example of this method is employed in the camera invented by Prof. Miethe as far back as 1900, an improved model of which is to-day constructed by the Uvachrome Company of Munich. With this camera the Uvachrome Co. took the very large number of colour photographs of monuments and paintings which appeared in the fine volume *Roma Sacra*, published in 1927, on the occasion of the Holy Year celebrations.

Other cameras fitted with only one lens, permit the taking of photographs with only one exposure, which allows of a greater speed.

These cameras are based on the use of semi-transparent mirrors combined with light filters for selection. They are, however,
very costly and delicate, and up to the present day their use has been very limited.

I will not omit to mention the simplest of the methods that is applicable to the three-chromatic selection for photography, the so-called « Tripack » which may be adapted to any camera. In the Tripack, three films are superposed, and are separated by coloured strata; the sensitized stratum itself, suitably coloured, can act as filter for the successive film. This process represents the maximum of simplicity, but the colour selection is always imperfect, owing to the lack of a sensitive stratum capable of selecting the rays: should this be possible, also coloured filters, such as we are compelled to use in the Tripack, the action of which is now far from being perfect, might be found adequate.

An English Company is stated to have recently succeeded in obtaining fairly good results by this means, but we are sceptical on this point.

On the whole, it does not look, at least for the time being, as though the Tripack method can be applied to colour cinematography.

*Importance of Chromatic Sensitiveness in three-colour processes.*

As we have already stated, the three-colour process has become a practical realization, owing mainly to the discovery of chromatic sensitizers. Any process in colour photography or cinematography, such as the autochromatic process, interferential chromophotography (a process which is important mainly for scientific purposes), the new process of the lenticular film, etc., need a sensitive stratum with a sensitiveness extending to all the rays of the spectrum. This stratum, which is called panchromatic, has now been found, and its practical realization has required long and difficult research work in chemistry relating to dyeing materials. Although it may be said that the research work relating to chromatic sensitizers was somewhat helped by the principle discovered by Vogel in 1870, which formed the starting-point of this important technique, namely, that Silver Bromide can
extend its sensitiveness to diverse radiations when in combination with colours which have a strong absorbing power for such radiations, it is, however, an undoubted fact that of the thousands of organic synthetic colours which have the above-mentioned property, very few show any appreciable effect.

The research work concerning cyanide derivates, commenced by Miethe and Traube in 1900 and continued afterwards by Koenig, led to the discovery of those organic compounds, based on most complicated formulae which were called ethyl red, orthochrome, pinachrome, pinacyanol, dicyanine, etc., by which although it has not been possible to reach such high level of chromatic sensitiveness, especially in the case of green, as the three-colour process requires, notable results have been obtained. We cannot enter here into the chemical constitution of these colours or into their spectrographic and practical action. The subject has been dealt with in detail in a manual on Chemical Photography published by the author of this paper.

Until recently the maximum chromatic sensitiveness was produced only by emulsions having but a very moderate general sensitiveness. At the present date, however, owing to the great progress made in the chemistry of sensitive emulsions, which have made it possible to attain very rapid results without an excessive increase of the grain and to produce panchromatic emulsions having a sensitiveness of 700-800 H and D, there is no doubt whatsoever that colour cinematography will not be handicapped as a result of insufficient sensitiveness of the film.

Independently of its application to colour cinematography, the Kodak, Agfa, etc., panchromatic film, possessing a high general and chromatic sensitiveness, has found an important application in the ordinary cinematography in studios, illuminated with incandescent lamps.

It is also worth while mentioning here the hypersensitive process discovered by Monpillard and applied by Ninck to autocromatic and panchromatic plates, although this process cannot easily be applied to cinematography. This process consists in the use of an ammoniacal solution of silver salt, preferably silver chloride,
by means of which a great increase of sensitiveness is obtained in the panchromatic plates or films.

This process has found an important application in instantaneous autochromy and has made it possible to reduce the exposure in full sunlight, from $\frac{1}{2}$ second to $\frac{1}{50}$ of a second; also in night photography this process has proved very useful.

Having thus reviewed the basis on which colour photography and the three-colour processes are founded, as well as the panchromatic material which is available at the present day, we shall deal in the next article with three-colour and bi-colour selection as applied to colour cinematography.

(to be continued).

Prof. Rodolfo Namias.
From its appearance the cinema was rightly hailed as a powerful instrument of culture and education to be used either through parables or for the reproduction of natural phenomena or the works of man.

But after several attempts, in some cases really remarkable, the cinema was for long a time monopolized by the industry providing theatrical entertainment, which alone seemed to gain public favour. A profound change, however, has gradually taken place and, partly spontaneously and partly as a result of a deliberate policy on the part of the Governments, educational films have made good progress and tend more and more to be recognized as a branch of the cinematographic art in the service of lofty ideals, amongst which the protection and improvement of public health occupy a prominent place.

In the field of propaganda, for instance, the methods of realizing films relating to health instruction have no doubt considerably improved, and not very seldom we are shown pictures which, while being accurate from the scientific standpoint, succeed in arousing the interest of the public and in amusing it at the same time.

I have had the opportunity of seeing health propaganda films produced in several countries and have been able to note that the fantastic element was, for the purpose of rendering scientific instruction more accessible, so ably blended with the traditional element of local customs, habits and tendencies as to render the films really fine works of art. There is, therefore, every reason to hope that, in the field of health instruction, still more admirable results may be obtained by avoiding in every case the absurdities, mistakes and exaggerations which necessarily were found in the first attempts in the sphere of educational cinematography and which, instead of attracting and convincing the public, kept it away.
Public health propaganda, however, presupposes the existence of a solid system of hygiene principles and also the continuous training of a considerable number of health experts capable of turning propaganda to advantage and of directing it towards the supreme aim of the struggle against disease.

The cinema can doubtless render immense services in giving a practical and scientific training to these experts. The difficulties in the way are in this matter greater than those which had to be overcome in connection with the employment of the cinema for popular health instruction.

A few months ago in Geneva the League Health Committee was shown a series of films prepared by various bodies and intended for use in the higher training courses for health experts. We were all agreed in recognizing the beauty of certain of these films, but at the same time we came to the unavoidable conclusion that the main object for which they were made was seldom attained.

The outstanding difficulty lies in the clear and accurate rendering of the really instructive and important elements in the subject treated. It often happens that the films merely deal with scenery — which may be magnificent but not instructive enough — or that it gives too much prominence to trivial or tedious details, leaving the vital elements in the background.

There should be established, therefore, an intimate cooperation and a deeply-rooted sense of mutual understanding between the health experts and those who know all the resources of the cinema. The League Health Committee had this cooperation in view when it proposed that its Public Health Instruction Sub-Committee (which deals with the teaching of hygiene in the schools of all grades, above all in the Universities and in the special public health schools) should become almost the technical advisory body of the International Educational Cinematographic Institute on public health problems. In view of the fact that the members of this sub-committee belonged to various countries, they would be in a position to tender useful suggestions in regard to the conditions, customs and needs of each people and in this way to help the International E. C. I. in the fulfilment of its highly humanitarian mission.
In spite of the many obstacles in the way, I feel sure that the cinema, as a medium of higher public health education, will soon succeed in gaining a recognised position. The advantages will be really great. The practical achievements of hygiene extend to the whole world. Its progress as well as the training of health experts require that these achievements be known everywhere in all their smallest details: educational cinematography should regard the attainment of this end as one of its greatest and most noble conquests.

Prof. D. Ottolenghi
Director of the Institute of Hygiene, Bologna University
Member of the Health Committee of the League of Nations.
A Catholic International Congress of the Cinema has been held in Munich from June 17th to June 20th. This is the second Congress to be held, the first having taken place last year at the Hague from April 22nd to April 25th. In this first meeting eighteen nations were represented. These gatherings are merely the outstanding manifestations of a continuous activity; there exists, in fact, a permanent body, the International Catholic Office of the Cinema, the seat of which is in Paris.

(Ed. N.) We have pleasure in appending to the highly interesting contribution of Canon Reymond, that unflagging and inspired apostle of the Catholic cinematographic movement for educational and moral purposes, the text of the Resolution unanimously adopted by the Catholic International Cinematographic Congres held at Munich in Bavaria. The discussions which took place at the Congress were of the highest interest, and we hope, in later numbers of the Review, to examine them attentively together with the reports sent in on the several subjects.

The Resolution unanimously adopted:

The Second International Catholic Cinematographic Congress held in Munich, Bavaria, on the 17th., 18th., and 19th, June 1929, on the point of closing its proceedings:

1. calls the attention of Catholics to the enormous influence which the Film exercises on sensibility and conscience, to the serious responsibility incumbent on them to direct their efforts without delay to the Cinematograph, to the necessity of organizing themselves in all Countries in concert with the International Catholic Office in Paris;

2. affirms its desire to collaborate in the fullest measure possible with the cinematographic industry, for the common good;

3. recognizes the necessity for an official censorship, asks that films which are offensive to morals and religion should be prohibited, that Catholics should be represented in the Censorship Commissions and that these should devote special care to the protection of childhood and youth;

4. considers it desirable that the cinematographic industry should be relieved of the over heavy taxation burden now borne by it;

5. invites the Public authorities and especially Catholic Deputies to promote the production of educational, instructive and healthy recreational films.
In order to attain such a degree of development in the international sphere, Catholics must not confine their activities to initiatives of an international character, and, in fact, Catholic cinema organizations, varying in form but animated by the same spirit, have been set up in Italy, Belgium, Holland, France, the United States, South America and other countries.

Some of these organizations edit periodicals of their own, such as the *Dossier du Cinéma* of Paris, the *Rivista del Cinematografo* of Milan, and the *Revue du Film* of Brussels. Other associations have held Congresses of considerable importance, such as the one which assembled in Cologne in June, 1928, on the occasion of the Press Exhibition, and the Congress held in Paris on November 6th, 7th and 8th, and attended by one Cardinal and several Bishops.

These facts and the activity of which they are the indication, should surprise none but those who have no knowledge of the Catholic Church or are unable to understand the significance of the cinema.

In the Report which Mgr. F. Martin (1) submitted on behalf of the League of Nations Commission for the Protection and Welfare of Children on March 19th, 1928, he wrote: «This industry (of the cinema) does not possess the ordinary characters of industrial enterprises: the moral question crops up at every turn»...

If this is true, could Catholics refrain from taking an interest in «this industry», without neglecting all that they stand for?

The answer is obvious.

The screen, whether one likes it or not, is always, more or less, «an educator». It is not that one goes to the picture theatre seeking a lesson to learn; the cinema-goer’s object is to amuse himself; «sermonizing» films have no box-office value. None the less, the images, as they pass on the screen before the spectator’s eyes, act upon his feelings and, at least by reaction, on his mind and conscience. They impart a lesson, however unintentionally;

(1) Published by the League of Nations; Social questions C. P. E. 149; Page 2.
by the mere fact that they disclose "a fragment of life", they contain and set forth a "conception of life".

This influence exercised by the cinema is powerful, surpassing in intensity that of the press and of broadcasting. This may be easily accounted for by the old principle of elementary psychology that impressions obtained through the medium of the eye are more vivid than those obtained through the medium of the ear. The spoken or written word is a symbol that operates only through the image and, successively, through the idea it conjures up; everybody gives it his own interpretation; it may even be said that everybody finds therein what is already in his mind. It is not a question of minimizing the power of speech or of the printed page but it must be recognised that the image has over the word this advantage, that it requires no translation; it acts immediately upon all audiences.

Its action is all the more powerful as it is unconscious. Speeches and newspaper articles are manifestly intended to convince and, therefore, stimulate criticism. Before the screen, the spectator does not dream of defence. More than this, he abandons himself completely. He goes to the picture-theatre to get enjoyment and expects to derive from the "motion-pictures" the maximum possible entertainment in mirth or excitement. And the attraction he proves, the music and the darkness, tend to concentrate his passive attention. At no other time and in no other place is it possible to come across factors which render audiences so accessible to all kinds of suggestion.

What finally renders this influence extraordinarily powerful is the fact that it acts on, and through, one's feelings; in other words, in order to be in the right, the film needs no reasoning. A story with nothing in it, provided it causes deep emotion, will succeed in modifying the conception of life as seen by a young girl or the man in the street, much more effectively that a very solid argument might succeed in doing.

Realizing this power of the cinema as a medium of persuasion, the Church could not regard the cinema as a negligible quantity. Being responsible for faith and morals, the Church owed it to
its mission to direct its attention to this new invention, just as it had given its attention to printing from its first appearance. It cannot remain indifferent to anything that acts upon conscience. Catholics must, therefore, in so far as they are worthy of this name, turn their attention and their activities to the problem of the cinema, and at once.

So important is the part that the cinema already plays in our society that further delay in dealing with it would be fraught with serious consequences.

It is well-known with what enthusiastic infatuation large crowds all over the world attend the « pictures ». If France, Italy, Germany and the other countries of the old continent are far enough from knowing the meaning of the « cinema-fever » with the intensity which every week fills the picture-halls of the United States with a number of spectators, raging from 100 to 120 millions, the fact remains that in the cities of Europe all the children and young people regularly frequent the cinema, that the attendance increases year by year and that the country has now been « captured ». I will only mention the fact that in hundreds and hundreds of French villages permanent cinema-halls have been opened during last spring and autumn.

This influence, which has already grown to vast proportions and is continually on the increase, cannot fail, such as it is, to arouse alarm amongst all those who have morals at heart. Mgr. F. Martin says in his above-mentioned Report : « What cannot be open to doubt is the influence of the Cinema upon child delinquency. A German neurologist has drawn up a statistical table which condemns most of the adventure films ; in 250 films examined by him, he found 97 murders, 50 adulteries, 19 scenes of seduction, 22 kidnappings and 45 suicides ; the leading rôles in these films were divided as follows : 176 thieves, 25 prostitutes, 35 drunkards... The influence of the film is felt also in another direction. While public opinion does not appear to be inclined to allow in adult classes scientific discussion on biology, the film practically imparts instruction in public under conditions which cannot but over-excite the imagination of the young and arouse a natural curiosity which
is gratified in an unhealthy atmosphere»... This evidence, coming as it does from a body absolutely above suspicion as a result of thorough investigations and methodical inquiries conducted from 1925 to 1927 by the Secretariat of the League of Nations, renders unnecessary the producing of proofs, which can easily be multiplied. No other justification is needed by Catholics who, in the name of their faith and with all their charity, occupy themselves with, and are perturbed by, the cinema.

Who can then find fault with them?

It is the right of all to take an interest in what is nobody’s monopoly; at the same time, as Mgr. Julien, Bishop of Arras, said in the course of the address he delivered at the Mass of the Catholic Cinema Congress in the Madeleine Church of Paris on November 7th, 1928, «there is nothing in the spirit of our organizations that can give umbrage to the ideas or interests of film producers in France or even in the world».

It should not be thought that these organizations are concerned merely with certain productions of a religious character or with works adapted to children; on the contrary, they are interested in the cinema as a whole. They are not known as the «Committee of the Catholic Cinema» or as the «International Office of the Catholic Cinema», but as the «Catholic Committee of the Cinema» and «International Catholic Office of the Cinema». They could not have acted otherwise because all films are always, more or less, «educational» or «anti-educational».

It is, however, far from our thoughts, as a few foolish and malignant people have insinuated, to turn all picture-houses into austere temples or every screen into a tedious teacher of morality. The Church has never recognised as its children those who want to rob the flowers of their colour and fragrance. We do not insist that the screen shall become an untiring «preacher of morals»; we know and teach the adage «everything at its proper season» and «everything in its proper place». More than this, we affirm (and this may cause surprise) that the «moralising film» should be banished from the public picture-theatres, convinced as we are that the cinema can hope to «teach public
morals only by means of productions with no « moralising pretensions ».

No doubt we wish with all our heart for as many elevating and « moralising » productions as possible. But we are not opposed to any particular type of films: drama, comedies, novels, documentary or historical records, féeries and burlesques, spectacular films and all that the distant or near future has in store for us, we approve of every kind of cinema production, provided that faith and morals are safeguarded. Healthy entertainment, healthy emotions; Catholics have no right to demand anything more; they do not claim anything more; no one, however, will find it strange that they claim this much.

Finally, they do not insist upon their legitimate claims in a harsh tone. From its first public statement the Catholic Committee of the Cinema gave proof of its goodwill as well as of its intransigency: « If we are in duty bound to defend with firmness the principles of faith and morals, we are at the same time animated by the genuine desire to collaborate with all men of good will and to serve, within the limits of our power, the interests of the cinema industry. » It is in this spirit that the Catholic organizations meet the producers, stage-directors and distributors: with all frankness, without trying to throw a veil over the principles that must guide them, but also with all courtesy, offering to all concerned their widest co-operation with a view to realizing, as Comoedia (1) so intelligently put it, « the best cinema ».

These intentions were instantly appreciated; this attitude met with a favourable reception. Relations were rapidly established between our organizations and cinema circles, and are now being developed to the great satisfaction of both parties.

A striking manifestation of these good relations took place in Paris on November 7th, 1928, when the Catholic Committee of the Cinema invited producers, artists, stage-directors, scenario-writers, film critics and distributors to the « Mass of the Cinema ». The ceremony was presided over by the Cardinal-Archbishop,

(1) Comoedia (51, rue St. Georges, Paris) June 30th, 1927.
surrounded by several Bishops. Artists, stage-directors, producers, scenario-writers, distributors and cinema critics attended in great numbers, headed by the chiefs of their professional organizations; the immense Madeleine church could hardly hold them all.

After a few days it was possible for Cinémagazine (1) to state: «When the ceremony was over, a conversation took place between our officials and the prelates and Catholic leaders. Satisfaction was expressed on both sides that the meeting had taken place rendering possible a mutual understanding. The last prejudices if any were left, have certainly fallen to the ground. »

Canon. Joseph Reymond
Director of the International Catholic Office of the Cinema

(1) Cinémagazine, periodical (3, rue Rossini, Paris), november 16th, page 296.
In May 1928 the Academy of Sciences of the Union of Russian Soviets and the Notgemeinschaft for German Culture organized a large expedition to study the unexplored regions of Pamir.

The desert of Pamir is situated amongst the high mountain of Asia Minor, within the Russian Soviet territory, near the Chinese and Afghanistan frontiers. The western part of this desert comprises a region totally unknown and which has, up to now, been an enigma for the scientists of all lands. The greatest explorers, comprising Sven Hedin, have tried to open a way, but the mountain torrents and the formidable glaciers broken by enormous crevices as well as the impenetrable glacial masses closed the access to the most ardent explorers.

To open up this region of mystery an expedition was organized in which the scientists of Soviet Russia and Germany
took part. They were joined by a group of German and Soviet specialized Alpine troops to help them overcome the particular difficulties which this attempt presented.

A cinematograph section especially prepared and supplied by the Mejrabpom Film, composed of the director Chnéideroff and operator Coltchan, also took part in the expedition.

Towards the middle of June the expedition started from Oche, a city in the Ferghan region, fully equipped with food and
fuel loaded on 200 horses and 250 camels. They first crossed the Aliysk and the Saaliysk mountain ranges where, however, several horses were lost, being unable to withstand this most difficult march.

After having passed Death Valley, a desert at the entrance of Pamir and the Kara Kul Lake, which is situated in the midst of mountains almost as high as Mont Blanc, the expedition arrived at the Tanémas River which is found at the border of the unexplored region. Here the horses were left behind and the food and fuel were taken up by the Tadjiqs carriers engaged especially for this occasion. At this point the column entered the mountainous region following the course of the Tanémas.

The members of the expedition spent more than a month in this mystery region, often at heights of more than fifteen thousand feet, suffering from the lack of oxygen, mountain sickness and from the heat and the cold. Under these extremely difficult con-
ditions they succeeded in exploring a land which was still a «white spot» on all the geographic charts of the World.

The largest glacier in the World, the Fédenenko, was discovered, together with other very high peaks, new valleys and new roads. The expedition found gold, copper and other metals. They systematized considerable meteorological data, compiled detailed maps of the region, etc. In such a brief article it would be impossible to enumerate all the results obtained.

As a feat of mountain sports, the Lenin peak which is the highest in the Russian Soviet Union, 21,600 feet, was scaled.

The filming section accompanied the principal group in all its explorations and succeeded in taking the entire glacial region in all its austere magnificence. The life of the local inhabitants; the fatiguing progress of the expedition; the difficulties encountered and the adventures of the trip were all accurately filmed. The loss of the horses as they fell over the precipices; wading the dangerous, rushing mountain streams; the glaciers and hanging bridges and even the fall of one of the men into an ice crevice are faithfully reproduced by the films and within a short time the cinemas throughout the world will show this unknown land which up to a short time ago was only a little white spot on the map of Pamir.

V. CHNIEDFROFF.
Dr. Mihaly has invented steel wire cinematography. It is highly probable that the eminent Hungarian scientist was inspired in his researches by the experiences of the German engineer, Dr. Stille, who has recently perfected a system for registering sound on steel wire by means of electromagnetic variations.

So far, we lack precise details on this new invention, which may perhaps still be in the experimental phase, and, while awaiting that Dr. Mihali may endeavor to resolve the problem of television, we trust that the fullest success may soon crown his researches.

The scientific principle that guided Dr. Mihaly in his research has been much talked of. It is not new; it was already applied several years ago, and now again claims our attention, thanks to Dr. Stille's studies, which have rendered it of practical industrial value.

We feel sure that our readers will be interested in a brief description of this invention.

At the Paris International Exhibition of 1900, the renowned Danish scientist, V. Poulsen, exhibited an apparatus invented by himself, which he called the Telegraphone, which at the time roused keen interest in all who had an opportunity to see it.

This was a simple mechanism which, by means of a steel wire, registered and reproduced sounds through the medium of electro-magnetic variations. This brilliant invention seemed to promise the greatest success, but it has, on the contrary, been overlooked for 30 years; so much so that, being brought before us again in its present form, as perfected by Dr. Stille under the name of the Mnemophone, it claims all the interest of a novelty.

Poulsen's invention was based on the property of steel to receive a greater or lesser degree of magnetisation, and to preserve the same for a greater or lesser period of time, when placed close to a natural magnet or an electro-magnet.

Just as a variable electric current can create a proportional magnetic field, in like manner a variable magnetic field can create electric currents of identically the same variations.

Relying on this principle, Poulsen ran an electric wire between the nearly adjacent poles of an electromagnet inserted in the circuit of a pile and a microphone. The wire registered all the electro-magnetic variations produced by the vibrations of sound passing through the microphone.
When the wire thus magnetized was fixed between the poles of another electromagnet connected directly with a loud speaker, the electro-

magnetic variations of the wire were transformed into identical currents, which, by causing the membrane of the loud speaker to vibrate, reproduced the sound registered with the most perfect accuracy.

Dr. Stille has perfected the invention of the Danish scientist, by making it available for practical use. Thanks to a very tenacious steel
band, he has succeeded in registering the sound in a perfect and permanent manner on a very fine wire of barely a few tenths of a milimetre.

Poul sen's wonderful invention, as perfected by Dr. Stille, seems at last destined to a brilliant future. It may very advantageously be substituted for the phonograph disc, thanks to its small volume in proportion to the amount of sound registered; the elimination of all friction will afford perfect clearness, while its sensibility being so much greater than that of the disc, will ensure absolute faithfulness of registration and reproduction.

We may anticipate an early and practical application of the steel wire in the domain also of the Talking Cinema. If it is found possible to synchronise this system with the film, we shall be able to enjoy entire auditory spectacles without any need of changing the discs, and above all, with sound so faithfully and so clearly reproduced and sustained as to be infinitely superior to the phonographic or the photo-electric systems. Apart from the phonograph and the cinematograph, the Mnemophone will be of the greatest service as applied to the telephone, as it will make it possible to receive messages automatically.

This new rediscovery of man's genius is no doubt destined to an immense number of further applications and uses, besides those mentioned, and future experience will certainly show the whole importance of the listening and speaking wire.

THE TECHNICAL TENDENCIES OF THE CINEMATOGRAPH
AS REVEALED BY AN EXAMINATION OF PATENTS.

It looks as tho' Cinematography were rousing itself from a long and tranquil slumber and giving manifest signs of agitation in its sudden awakening.

Sound, color, relief — all these qualities which impart so much beauty to Nature — have hitherto been regarded as fascinating problems, but not urgent ones; to-day they seem to have become a sine qua non of the very existence of the Tenth Muse.

This up-to-date Muse, who combines a very practical business sense with her artistic spirit — a sense so keen indeed, that she is often tempted to abandon Parnassus and descend among men, shining with gold and full of its lure — is surrounded by such a throng of admirers and fanatics as often to arouse the envy of her elder sisters.

Few branches of the knowable have such an attraction for human ingenuity as the cinematograph. The allurement of big profits, the pas-
sion for progress, man's innate need to wrest her secrets from Nature and to imprison Life itself so as to bend it to his will, all these things tend to sharpen mens' wits and to urge them on in their researches.

A review of the patents taken out during the last thirty years would certainly show that in this field they have outnumbered those taken in any other single field. This alone is evidence of the engrossing nature of the problem and of the multitude of the followers of this bizarre tenth Muse.

Apart from the need which impels him to seek new things, man is often influenced, albeit unconsciously, by the atmosphere created by some necessity of the moment, which emanates and spreads, as from an invisible source, and penetrates the spirit of human ingenuity.

It being reasonable to suppose that the influence of this exceptional atmosphere affects more readily the world of inventors and students, in proportion to their higher intellectual level, we will endeavour by a review of the patents taken out in England in a given lapse of time, but at an interval of ten years, to analyse the trend of the cinematograph.

From January 1918 to June 1919, the British Patent Office issued a total of 168 cinematographic patents. 10 of these were concerned with color cinematography, 4 with synchronising sound with the image; 7 with relief and stereoscopy, 7 with continuous motion film projectors, 5 with mechanisms aiming at preventing the films taking fire in the event of a stoppage during projection, 17 are apparatuses for taking the pictures, 18 mechanical systems for film manufacture, — such as printing the positives, developing, fixing, washing, etc., 30 improvements or new mechanisms for photographing and projecting, 37 minor modifications to parts of mechanisms, 23 sundry inventions in the technical and photographic field.
By contrasting the percentage of the separate branches to the total number of patents, we have very clear evidence of the fact that at the period in question the most pressing need of the cinema was for the improvement of its technical means. Altho' cinematography was then in its twentieth year, it had attained but a limited degree of perfection, both in its expression and in its means of production. The inventions which give the highest percentage are those dealing with apparatus for taking the pictures, for projecting them, and for the mechanical preparation of the films: these needs were too urgent to leave much scope for attempts of a more ambitious kind. Color, sound, relief, were attractive ideas, but cinematography pure and simple had to be perfected in its essential elements before paying attention to the superfluous.

Let us now glance at the patents issued by the Patent Office, during 1928-1929, during the same lapse of time. Out of 256 patents, 52 are concerned with color, 57 with synchronism, 21 with stereoscopy, 8 with continuous motion, 10 are mechanisms to avoid fire, 9 filming apparatus, 5 mechanisms for preparing films, 30 for perfecting projection, 23 sundry inventions in the technical and photographic field.

This review shows that the highest percentage of patents are concerned with synchronization and color; there is a noticeable increase in the number of stereoscopic inventions, hardly any difference in the number of those dealing with continuous motion and with anti-fire devices. On the other hand we find a striking decrease in the number of inventions for perfecting material for film manufacture, filming, projection and similar devices. All this tends to demonstrate that, while the possibilities of further perfecting existing systems are not overlooked, the spirit of invention is mainly directed to the solution of three problems which were almost entirely neglected three years ago, but which to-day represent the goal of all inventors.
Now, what are the reasons for this change in the general trend? Cinematography had attained during these last ten years almost absolute perfection: machinery and technique together had placed men in a position to produce rapidly and well. But this very perfection and rapidity of production had led by degrees to the exhaustion of one of the main factors in the cinematographic domain: subject matter. The enormous output had well nigh exhausted the accumulated stocks of imagination and history; perfect technique had accustomed the public to impeccable exhibitions from every standpoint. Many subjects were dished up afresh and the public admired them as tho they were new, because they had been transformed by up-to-date technique. Cinematography, having reached this degree of perfection, had continued for some years at a dead level, and began to run the risk of growing monotonous. To-day the need of change is making itself felt. Something new is demanded: man grows too easily accustomed to the good and wants something better, and then again something new.

Mute pictures, pictures flat and colorless, have given us all they can give, but in their numerous and varied manifestations, they have opened up a vision of vaster horizons. It is necessary to raise the cinema from the now too narrow circle of its past possibilities, and endow it with those gifts the lack of which have kept it up to the present too far removed from Nature, and which have implacably limited its field of action. We must endow the cinema with color, sound, relief, and supply this dynamic branch of human activity with all the means it requires, we must enable it to reproduce faithfully and in their full splendor all the marvels of creation, to make visible and give form to the unreal, in order that it may pursue its giddy ascent. Thus only can Cinematography at last become a true and complete form of art.

This pressing and prepotent need has created of late a special atmosphere, which has influenced human ingenuity towards satisfying the need of the moment. Sound, color, relief — our review of the 1928-1929 patents all point to these needs. The plutocratic Muse is stirring round among the inventors to incite and guide them in their studies. The synchronism of sound, of the word and the image, has been achieved; color is on the right road, and relief will not lag far behind. Before long we shall be able to admire the marvellous results of this triple conquest. Then our Muse will be able to return and take her place, smiling and proud, among her companions; she will be on an equality with them, and indeed the bonds of kinship and friendly collaboration with some of them will be greatly strengthened. While resting awhile on her laurels, she can wait placidly till some new and imperative mission brings her down once again among men, to urge them on to new effort and new conquests.
THE CINEMA AS AN AUXILIARY TO THE SCIENTIFIC ORGANIZATION OF LABOR

In our last number, we illustrated briefly the desirability of getting into touch with the several International and National bodies that are concerned with the scientific organization of labor, in order that we may direct our investigations more effectually towards the most practical and helpful utilization of the cinematograph in the domain of labor.

The Institute, in this first phase of its activity, has traced the lines of a fertile program, and we are justified in feeling some satisfaction in the fact that we have already entered into practical relations with the International Institute for the Scientific Organization of Labor, in Geneva, the International Association for the Study and Improvement of Human Relations and Conditions in Industry at the Hague, the National Institute of Industrial Psychology, in London, and lastly, with the « Ente Nazionale Italiano per l'Organizzazione Scientifica del lavoro » (Italian National Institute for the Scientific Organization of Labor) in Rome.

Our first contact with the above mentioned organizations has been followed by closer relations, which we may well expect to lead to a fertile collaboration in the study of their respective aims, for the achievement of which the cinema could do so much as a means of propaganda, both by demonstrating the actual methods on which the scientific organization of labor is based and the many important branches connected therewith: the prevention of accidents in workshops and factories, the study of fatigue and automatism, industrial psychology and individual and collective psychotechnics, occupational selection and the general wellbeing of the worker.

It is surely not necessary to emphasize the enormous help that the screen can give in promoting these aims, by demonstrating the methods best suited to their diffusion and, above all, in seeking out the most rational systems for their achievement.

Nobody to-day is ignorant of the efficacy of the method of « visual » instruction represented by the screen, and we are more and more convinced that, especially in the domain of labor, it is capable of giving the most fertile results. The International Educational Cinematographic Institute is bent on arousing the interest of the business and labor world in these problems, and while waiting for its documentary enquiry to gather sufficient material to enable it to arrive at a concrete conclusion, it proposes meanwhile to carry out an analytical enquiry into the systems of organization in the several Countries in the specific field of labor and to
ascertain what steps they have taken towards making practical use of the Cinematograph.

We call attention in this number to the activity displayed by the Italian National Institute for the Scientific Organization of Labor. This Institute, which was founded in 1926 in Rome through the initiative of the "Confederazione Generale Fascista dell'Industria Italiana" (the Fascist General Confederation of Italian Industries), with the adhesion of all the leading organizations in the Kingdom, has aroused throughout Italy the keenest and most widespread interest in the technical and economic problems of labor.

The Propaganda of the "Enios" (Ente Internazionale Italiano per l'Organizzazione Scientifica del Lavoro) was during its earlier stages necessarily of a general character, its aim being to get employers to understand that, only through the use of the best machinery and the adoption of more rational criteria of labor, could they expect a more intensive output and a decrease in the cost of production. Thus both manufacturers and farmers are gradually coming to understand that, without any need of having recourse to complicated formulae, they must rely on their own commonsense for a revision of the organization of their business, and that such revision and improvement are necessary and urgent especially in view of the difficult conditions of world business; and lastly, that in this alone lies the secret of ampler means and fuller development.

Thus the employers came to be the best collaborators of the Institute, helping it towards the achievement of its various initiatives and imparting a practical content to the scientific organization of labor. The Hon. Gino Olivetti is the Secretary General of the "Enios". We wish to call particular attention to the work carried out by the section for "Studi e ricerche originali" (original studies and research), which has opened competitions, with the award of handsome prizes, for studies on the following interesting questions: "the cycle of production" "labor fatigue" and "Experimental Institutes". The "Edizioni" (publishing) Section has started a chain of publications comprising up to the present 15 volumes, dealing with the general and specific problems of labor: these publications are supplemented by an excellent monthly review "L'Organizzazione Scientifica del Lavoro" the circulation of which has in a short time increased to 12,000 copies. This year the "Enios" will be responsible for the publication of two fortnightly reviews: "L'Agricoltura razionale" (rational agriculture) and the "Casa del Lavoro" (the house of labor).

But the Italian National Institute for the Scientific Organization of Labor could not evidently neglect the most efficacious of all means that modern progress has placed in men's hands: the Cinematograph. Thus during 1927 there were published under its direct supervision 8 films, illustrating the practical benefits to be derived from the scientific organization of work in the several branches of industry.
The said films illustrated:

1. The Scientific Organization of labor in the Electro-siderurgic Mining industry (This film illustrates the organization of the plants of the Cogne Mines in Val d'Aosta).

2. The progress of the scientific organization of labor in the wine industry of the Società Anonima « Francesco Cinzano & Co. » of Turin. (This film illustrates most effectively the whole cycle of work in the production of Vermouth and sparkling wines, and contrasts the old fashioned with the up-to-date systems employed).

3. The scientific organization of labor in Textile Factories. (This film illustrates the organization of a big cotton mill, into which various innovations have been introduced with great advantage, among which the most important are: decrease in the number of hands employed; specialization of the workers, saving of time, etc.).

4. The Fiat factory at Lingotto, showing films of certain processes connected with the manufacture of motor cars.

5. The scientific organization of labor in a Tobacco Factory. (This illustrates the whole cycle of production of cigars and cigarettes, with the functioning of the automatic machines for their manufacture. It contrasts in a striking manner the old and new methods of production).

6. The « Fabbrica Italiana Magneti Marelli » (Marelli's Italian Magnet Factory). This is a short film showing the Psychotechnical Room where the factory's staff is selected).

7. The Class in the Scientific Organization of Labor at the Turin Military Academy. (This is a short film illustrating the experiments carried out under the supervision of Professor Fossati on the cutting of metals, by the students of the Turin Military Academy).

8. The Scientific Organization of Labor in Italian building yards. (This illustrates the organization of one of the building yards belonging to the S. I. P.).

THE LEGISLATIVE ASPECTS OF THE CINEMA

THE TARIFF QUESTION

(Continuation).

The foregoing statistical tables show the difference in the fiscal policies adopted by the several Countries with respect to blank films. From the absurd maximum duties charged by Brazil, Turkey, England, France, Siam, Russia, Belgium, etc., — without counting the unofficial figure of the Union of South Africa — we come to countries — such as Equa-
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nisia, Norway, Principality of Monaco, Nicaragua, Panama Dominican Republic, Russia, Syria and Lebanon. — 14 Countries.

Dividing the several nations into groups, according to their tariff rates, we have the following position:

Tariffs exceeding 12 gold francs per kilogram:— Belgium, Brazil, Turkey, England, Siam, Union of South Africa, Argentina, Egypt, France, Principality of Monaco, Nicaragua, Panama Dominican Republic, Russia, Syria and Lebanon. — 14 Countries.

Tariffs exceeding 4 gold francs and under 12 gold francs per kilogram:— Bulgaria, Cuba, Germany, Japan, Guatemala, Italy, Lithuania, Marocco, Norway, Holland, Poland, New Zealand, United States. — 13 Countries.

Tariffs under 4 gold francs:— Austria, Chekoslovakia, Chile, Columbia, Costarica, Estonia, Finland, Greece, Honduras, Yugoslavia, Latvia, Portugal, Rumania, Salvador, Spain, Sweden, Switzerland, Tur-nisia, Venezuela. — 19 Countries.

Exempt from Import tariffs:— Equador, Ireland, Hungary. — 3 Countries.

Among the English speaking countries considered, we find the highest rates in England and the Union of South Africa, while the United States and New Zealand are in the second category.

The Countries of Central and Northern Europe and Eastern States are divided between the intermediate categories.

The Latin Countries are to be found almost all either in the highest or the lowest category; the greater number are included in the 4 gold-francs per kilo category; but the countries with the biggest consumption and output are mostly in the higher category.

These data are of course insufficient as a basis for any definitive valuation; especially as they are to a great extent unofficial. They do however serve to show what an abnormally heavy burden is imposed on films, which are the raw material of works of art, education and science: a fact which certainly cannot remotely contribute towards making of the Cinema a universal means and instrument of recreation, science, and knowledge.

So long as the criterion for the valuation of « goods » for Customs Tariffs fails to discriminate between what is useful or necessary for purely material ends, and what may influence the moral trend and development of life, so long the splendid efforts of manufacturers and educators, which do not run counter, but parallel with one another, — since both pursue the same purpose, albeit by different routes — will be entirely frustrated.
This criticism cannot be disposed of by an argument which lies indeed at the root of the present system of taxation: i.e. that the blank film, which clearly counts as goods in its raw state, may be applied indifferently to scientific and educational purposes, — that is to say to moral, educational and artistic ends, which would justify its being accorded privileged treatment — but also to theatrical and dramatic purposes, purposes which have a strictly relative affinity to science and culture, and whose outlook is to a great extent bound up with quasi mercantile speculation and the satisfaction of popular tastes and needs, often the brutish needs of the masses; and that, consequently, given the uncertainty as to which purpose they may be devoted to, it is proper to tax them.

This argument is so trite in its simplicity as to be very easily disposed of.

First of all, there is the fact that the blank film, as it stands, can be devoted to cultural purposes. Until a method is devised for manufacturing a separate kind of film for scientific and artistic purposes — a type of film which would have an a priori claim to exemption or relief from duty — the normal film will have to be used. And since such a special type of film is out of the sphere of practical possibility, we have but two alternatives. Either to grant a different and special regime to films destined to cultural purposes, which would necessitate special vigilance to make sure that they were actually so used, or to reconsider the present regime and discuss and tackle it in a serene spirit.

We must also bear in mind the difference in the value of the scientific and cultural film from that of the ordinary theatrical one. The former is produced in the laboratory, and is the fruit of the patient and intelligent research of students and enquirers. It constitutes a document which has no limit in time or space. The negative that shows natural phenomena, that reproduces a moment of life which tomorrow will be gone for ever, but which will thus endure throughout many tomorrows as a living testimony from the past, possesses an innate creative value, an intellectual value, the value of the cerebral and spiritual synthesis of the creative and scientific mind. It has little or no business value, but its ideal value is very high. It offers but restricted possibilities of exploitation. The value of the cultural cinematograph lies in its depth, not in its superficials.

As regards the theatrical film, on the contrary, the negative constitutes an infinitesimal economic part of the actual value of the film, given its wide possibilities of diffusion and exploitation. The theatrical negative, therefore, within certain limitations, comes within the trade description of « goods », and, as such, is properly the subject of fiscal revision and taxation.

These considerations lie at the very core of the problem. It is for
this reason that an International Institute, whose main object is to protect that branch of cinematography which partakes of the universal dignity of science, culture and art, must emphasise the two diverse aspects of the question and demonstrate how impossible it is for the creations of pure genius and intellect, the vision of all the beautiful things which form the spiritual patrimony of the nations, to be considered in the same light as the trade products of speculators.

There is a further reason. The old fashioned, abnormal film, which was a source of perversion, commonplace in matter and form, clumsily fashioned and fit only for a primitive-minded audience, no longer exists or is on the road to extinction. New conceptions of art and a new sense of life, are unfolding around the cinematographic screen. The screen directors are seeking for collaborators among men of thought and creators of new artistic tendencies. Scenography is beginning to assume scientific and artistic importance; the plots are delicately wrought or are deserving of thought and consideration. The new fields of action in the cinema vanguard are, at the same time, a sign of this revival and a promise for the future victory of the artistic film.

Nor can we consider even the theatrical Cinema industry merely as manufacturing, financial, commercial or speculative business. The same may be said of the men directing the big companies. So keen is the competition, and so acute the need to attract and please the public, that they are bound to sense the wishes and the needs of the new times and to steer straight towards the goal of the future, that is to say towards a wider, saner, nobler, more educational and artistic conception of the Cinema.

Whether this may, in the long run, lead to some more subtle form of speculation does not concern us. The mere fact that there is a general improvement in the tone of films, due to the change in the intellectual and spiritual outlook of the masses of the people, lends a certain savor of culture and education even to films of a purely theatrical kind.

But while we are only indirectly concerned with this field, by reason of the reflex educational influence it may exercise, there is another in which we are immediately interested and which cannot fail to claim the attention of the governments — namely, the educational film, in the proper sense of the word; the film which is not concerned with speculative ends, but aims solely at raising the intellectual tone of the masses. The more diffuse this branch of cinematography, the more urgently it claims the attention of the governments.

Protectionist arguments cannot stand against an interest such as this, given the peculiar character of this article, scheduled for customs purposes as « goods », but which cannot properly be regarded as such, especially when it is used, or is able to be used, for the purposes of science
in the same way as a microscope, or a scientific instrument in schools, and laboratory and experiment articles by research students.

In considering films, we are not dealing with a standardized merchandise which can be produced equally everywhere, or of which any particular country possesses or claims the monopoly, and which it is therefore sought to launch in large quantities on foreign markets, while preventing possible invasions of the home market. We are here concerned simply with the quality of the product, quality being the *sine qua non* of a first-class film. This consideration is important for theatrical films, with commercial or technical aims; but it is clearly of paramount importance in the educational film, necessarily used for illustrating phenomena which demand the utmost precision and clearness and things which, in certain instances and instants, may constitute documents of incalculable value.

2. *Positive Films.* — The tariff treatment of positive films varies, in certain countries, as between exposed but undeveloped films and the normal exposed film that has been technically treated to bring it to the state of negative or positive.

The following tariff rules are in force:

a) *According to weight:*

*Austria.*

*Negatives and Positives:* Gold crowns 1.20 per kilogram, equivalent to Sh. 1.73; *equivalent to gold francs* 1.255, in addition to an exchange duty of 2% *ad valorem.* The rates are identical with those applying to blank films.

*Brazil.*

*Negatives and Positives:* Reis 25,000 per kg., *equivalent to gold francs* 40.71. The rates are higher than those applying to blank films.

*Bulgaria.*

*Negatives and Positives:* Gold francs 6 per kg., in addition to a communal duty of 20% on customs duties. The rates are identical with those applying to blank films.

*Chekoslovakia.*

*Negatives and Positives:* Crowns 30 per kg., equivalent to gold francs 4.58 (normal tariff). A preferential tariff of 12 crowns per kg., *equivalent to gold francs* 1.83, is applied to countries which have commercial treaties with the Republic: i.e. France and Belgium. The normal tariff applies to all European countries, with the exception of the U. R. S. S., and also to the United States, Canada, Japan, Turkey, Persia, the Union of South Africa and the Colonies of all the said Countries. The rates are higher than those applying to blank films.

— 208
Chile - Unofficial.

Negatives and Positives: Gold dollars 9 per gross kg., equivalent to gold francs 46.60. The rates are higher than those applying to blank films.

Columbia.

Negatives and Positives: Pesos 1 per gross kg., equivalent to gold francs 5.019. The rates are identical with those applying to blank films.

Costarica.

Negatives and Positives: Cent di colen 0.40 per kg., equivalent to gold francs 0.519. The rates are identical with those applying to blank films.

Cuba - Unofficial.

Negatives and Positives: Gold pesos 12 per kg., equivalent to gold francs 62.18 (normal tariff). A preferential tariff is of gold Pesos 6, equivalent to gold francs 31.09. Imports from the United States are granted a reduction of 20% in the tariff. The rates are higher than those applying to blank films.

Denmark.

Customs Act of 29th March 1924, No. 766, on the tariffs on Negatives and Positives. öre 70 per kg., equivalent to gold francs 0.97. The importation of exposed films is allowed in the case of a single country, to which Customs duties are repaid at the time of exportation.

Equador.

Negatives and Positives: Sucre 3.50 per kg., equivalent to gold francs 3.626. The rates are higher than those applying to blank films.

Esthonia.

Negatives and Positives: Gold francs 0.728 per kg. The rates are identical with those applying to blank films. The Countries enumerated under No. 1 of the Blank Film list, are granted a preferential tariff, allowing a reduction of 40% on the normal rates.

Finland.

Negatives and Positives: Marks 25 per kg., equivalent to gold francs 3.25. The rates are higher than those applying to blank films. For preferential tariff, cf. No. 1, Blank Films.

Germany.

Negatives and Positives: Marks 4 per kg., net of tare, equivalent to gold francs 4.95. The rates are identical with those applying to blank films.

Japan.

Negatives and Positives: Yen 8 and sen 25 per «Kin», equivalent to gold francs 45.70. The rates are higher than those applying to blank films.
Greece

Negatives and Positives: Gold drachmas 2 per kg., equivalent to gold francs 1.82. The rates are higher than those applying to blank films. For Preferential tariffs cf. No. 1, Blank Films.

Guatemala.

Section No. 1922 of the Customs tariffs of 15 May 1929. Negatives and Positives: Dollars 1.50 per kg., equivalent to gold francs 7.78, in addition to a duty of 8 % ad valorem, under the head of «Consular duties», of which, however, only 2 % actually goes to the Consulates which legalize the invoices. Thus the total duty, including the said 8 %, amounts to gold francs 15.23 on negatives, and gold francs 10.64 on positives. The rates are identical with those applying to blank films.

Honduras - Unofficial.

Negatives and Positives: Dollars 0.15 per kg., equivalent to gold francs 0.78. The rates are identical with those applying to blank films.

Irak.

Negatives and Positives: Rs. 5 per kg., equivalent to gold francs 9.41. The rates are identical with those applying to blank films.

Yugoslavia - Unofficial.

Negatives and Positives: Gold Dinaro 3.25 per kg., equivalent to gold francs 3.23 (maximum tariff). Gold Dinari 2.50 per kg., equivalent to gold francs 2.48 ( Preferential Tariff). The rates are identical with those applying to blank films.

Latvia.

Negatives and Positives: Lat 3.50 per gross kg., equivalent to gold francs 3.48. The rates are higher than those applying to blank films. A preferential tariff, allowing a reduction of Lat. 2.50 per gross kg., is granted to countries which have commercial treaties with Latvia.

Lithuania.

Negatives and Positives: Litas 1 per kg., equivalent to gold francs 5.70. The rates are identical with those applying to blank films.

Mexico - Unofficial.

Negatives and Positives: Piastres 5 per kg., equivalent to gold francs 12.95. The rates are higher than those applying to blank films.

Norway.

Negatives and Positives: Crowns 2 per kg., subject to a temporary increase of 50 %, equivalent to gold francs 4.14. The rates are identical with those applying to blank films.

Palestine.

Negatives and Positives: Mils 150 per kg., equivalent to gold francs 3.77. The rates are higher than those applying to blank films.
Poland.

Negatives: Zloty 50 per kg., equivalent to gold francs 28.90; preferential tariff Zloty 27.50, equivalent to gold francs 15.89. Positives: Zloty 62 per kg., equivalent to gold francs 35.83; preferential tariff, Zloty 34.10, equivalent to gold francs 19.70. The rates are higher than those applying to blank films.

Portugal - Unofficial.

Negatives and Positives: Gold Scudi 8 per kg., equivalent to gold francs 42.40 (normal tariff). The preferential tariff is reduced by one half. The rates are higher than those applying to blank films.

Rumania.

Negatives and Positives: Paper Lei 160 per kg., equivalent to gold francs 4.97. The rates are higher than those applying to blank films.

Spain.

Negatives and Positives: Pesetas 45 per kg., equivalent to gold francs 38.47. The rates are higher than those applying to blank films. For preferential tariff, applicable to the countries enumerated under No. I blank films, a duty of 5 pesetas, equivalent to gold francs 4.27, is in force.

Sweden.

No. 349 of the Tariff: Negatives and Positives: Ore 75 per gross kg., equivalent to gold francs 1.035. The rates are lower than those applying to blank films.

Switzerland.

Negatives and Positives: Swiss Francs 0.60 per kg., equivalent to gold francs 0.548. The rates are higher than those applying to blank films. Cf. the special regulations mentioned under No. 1, Blank Films.

Tunis.

Par. 469 quater Customs Duties: Negatives and Positives: Exempt from duty.

Turkey.

Negatives and Positives: Piastres 67.50 per kg., multiplied by the coefficient 5, equal to Piastres 337.50 per kg., equivalent to gold francs 8.49. The rates are higher than those applying to blank films. For addi-
tional duties and the treatment granted to the several countries, cf. the rules mentioned under No. 1, blank films.

**Hungary - Unofficial.**


**Venezuela.**

**Negatives and Positives:** Bolivars 75 per gross kg., equivalent to gold francs 0.75. The rates are lower than those applying to blank films.

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On the basis of meterage (length), exposed films are subject to the following Tariff rates:

**Australia.**

Section 52, Customs Act 1901: **Negatives and Positives:** Pence 1 3/4 per foot, equivalent to gold francs 86.10 per kg. Films imported from the United Kingdom are subject to a special preferential British Tariff, and certain series of films are exempt from duty.

**Belgium.**

Undeveloped exposed films. **Negatives:** Belgian Francs 0.30 per metre, equivalent to gold francs 42.90 per kg. **Positives:** Belgian Francs 0.45 per metre, equivalent to gold francs 64.35 per kg.

**Exposed Films:** **Negatives:** Belgian Francs 0.30 per metre, equivalent to gold francs 42.92 per kg. **Positives:** Belgian Francs 0.40 per metre, equivalent to gold francs 53.62 per kg. The rates are higher than those applying to blank films.

**Canada - Unofficial.**

**Negatives and Positives:** Centimes of a Dollar 3 per foot, equivalent to gold francs 72.99 per kg. Under the preferential British Tariff, the rates are reduced by one half for imports from the United Kingdom. Italian and French films pay 1/2 a cent per foot.

**India.**

1894 Customs Tariff amended 1st October 1928. **Negatives and Positives:** Rupees 0.46 per foot, equivalent to gold francs 58.617 per kg. When the negatives and positives are produced in India, a tariff of Rupees 0.10 is applied. Both Tariffs are subject to an additional Customs duty of 15%, which raises the normal tariff to gold francs 67.41.
England (1). 

Negatives: 5 pence per foot, equivalent to gold francs 246.02 per kg. Positives: 1 Penny per foot, equivalent to gold francs 49.20 per kg. The rates are higher than those applying to blank films. When the production of the film is organized by a company having its headquarters in the United Kingdom, or when the producer and the principal actors and artists (in the proportion of not less than $\frac{3}{4}$) are British subjects or domiciled in the United Kingdom, the films are taxed, under Art. 3 of the Finance Act of 1925, at the same rate as blank films.

Ireland.

Section 12 of the Finance Act of 1919 and Section 18 of the Finance Act of 1918. Negatives: Pence 5 per lineal foot, equivalent to gold francs 246.02 per kg. Positives: 1 Penny per foot, equivalent to gold francs 49.29 per kg. The rates are higher than those applying to blank films. The tariff is reduced by $\frac{1}{3}$ in the case of films manufactured in, or imported from, countries belonging to the British Empire.

Italy

Tariff Item No. 948b. Statistics File No. 2496. Negatives and Positives: Gold Lire 22 per every 100 metres, equivalent to gold francs 31.40 per kg. The rates are higher than those applying to blank films. This includes the supplementary tariff at the rate of 1.2.

The Belgian Tariff is applied.

New Zealand.

Negatives and Positives: 1 Penny per foot, equivalent to gold francs 98.40 per kg. The rates are identical with those applying to blank films. Plus a supplementary duty of 1% ad valorem. The preferential British Tariff, with the 1% ad valorem duty, is applied to films coming from the United Kingdom.

Siam.

Negatives and Positives: Satangs 30 per every 100 foot, equivalent to gold francs 14.08 per kg. The rates are identical with those applying to blank films.

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(1) It may be of some interest to give here the following (unofficial) data respecting the regime applying to cinematographic films in a number of British Dependencies:

Bermudas: Pence 5 per every 100 feet; British New Guinea: exempted from duty; Zanzibar: exempted from duty; British Honduras: 1.30 of a pound sterling on each roll of film; Barbados: 10 Pence per every 100 feet; Kenya: 1 Shilling per every 500 feet; Bahamas: from 10 to 12% ad valorem; Tonga: 4 Shillings per every hundred feet, conditional to re-exportation within three months; Nyasaland: exempted from duty on condition of re-exportation within three months; Somaliland: exempted from duty on condition of reexportation within three months; Dominica: 6 Pence per every 100 foot; Gold Coast: 10% ad valorem; Gambia, exempted with the obligation of re-exportation within six months; Nigeria, exempted from duty; Sierra Leone Metropolitan tariff.

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Negatives: Exposed but undeveloped. Dollars 0.02 per foot, equivalent to gold francs 48.66 per kg. Developed: Dollars 0.03 per foot, equivalent to gold francs 72.99 per kg. Positives: Dollars 0.01 per foot, equivalent to gold francs 24.33 per kg. When the negative has been produced in the United States, and exported for some addition (the film being however, produced to the extent of 60% in the United States), Customs duties are fixed at the rate of one cent of a dollar, as in the case of positives, upon a substantiated application being made by the interested party to the Secretary of the Treasury Department, and upon the ordinance of the latter.

Union of South Africa.

Negatives and Positives: Two shillings and six pence per 100 feet, equivalent to gold francs 46.60 per kg., or 20% ad valorem.

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c) The variable system of taxation according to value gives us a third group of data. In considering exposed films in the form of negatives or positives, it is necessary to bear in mind the big difference that may exist between the rough product (raw material) and the manufactured article, which lends itself to unlimited possibilities in the industrial field and owes to this circumstance its variable value. We have no precise information as to methods of classifying and specifying value. Thus the only way, presumably, is to follow the same system adopted in respect of blank films, and to consider merely the intrinsic value of the raw material

Argentine Republic.

Negatives and Positives: 25% ad valorem, equivalent to gold francs 28.47 per kg. The rates are identical with those applying to blank films. For the assessment of the value, cf. No. 1, Blank Films.

Egypt.

Negatives and Positives: 8% ad valorem, equivalent to gold francs 25.74 per kg. The rates are identical with those applying to blank films. For accessory duties and the assessment of the value, Cf. No. 1, Blank Films.

France (1).

Negatives and Positives: 20% ad valorem, equivalent to gold francs 26.49 per kg., for negatives, and equivalent to gold francs 8.96 for positives.

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(1) It may be of interest to give here the following data respecting territories belonging to the French Republic, notwithstanding the fact that the said data is not culled from official sources: Algeria: the French Continental tariff is in force, films coming from France are exempted; Indo-China: French continental tariff, films coming from France are exempted; Madagascar: French continental tariff, plus an exchange duty of 10 centimes per Kg., films imported from France are exempted.
The rates are identical with those applying to blank films. This includes a special import duty of 2 % \textit{ad valorem} (1). *Morocco.*

\textbf{Negatives and Positives:} 12.50 \% \textit{ad valorem}, besides a \textquotedbl{}de portes\textquotedbl{} duty of Francs 1.50 per gross Quintal, \textit{equivalent to gold francs} 11.23 per kg. for negatives and to gold francs 4.91 for positives. The rates are identical with those applying to blank films. Cf. No. 1 Preferential Tariffs for blank films.

Identical with the French Tariffs. *Principality of Monaco.*

\textbf{Negatives and Positives:} 15 \% \textit{ad valorem}, \textit{equivalent to gold francs} 13.97 per kg. for negatives, and to gold francs 6.12 for positives. The rates are identical with those applying to blank films. *Nicaragua* - Unofficial.

\textbf{Negatives and Positives:} 8 \% \textit{ad valorem}, \textit{equivalent to gold francs} 7.45 per kg. for negatives, and to gold francs 2.86 for positives. The rates are identical with those applying to blank films. *Holland.*

\textbf{Negatives and Positives:} 15 \% \textit{ad valorem}, \textit{equivalent to gold francs} 13.97 per kg. for negatives and to gold francs 6.12 for positives. The rates are identical with those applying to blank films. *Panama* - Unofficial.

\textbf{Negatives and Positives:} 15 \% \textit{ad valorem}, \textit{equivalent to gold francs} 13.97 per kg. for negatives and to gold francs 6.12 for positives. The rates are identical with those applying to blank films. *Dominican Republic* - Unofficial.

\textbf{Negatives and Positives:} 50 \% \textit{ad valorem}, \textit{equivalent to gold francs} 46.47 per kg. for negatives, and to gold francs 20.38 for positives, for countries which are not Members of the League of Nations. 25 \% \textit{ad valorem}, \textit{equivalent to gold francs} 23.29 per kg. for negatives, and to gold francs 10.19 per kg. for positives, for countries which are Members of the League of Nations. 15 \% \textit{ad valorem}, \textit{equivalent to gold francs} 13.97 per kg. for negatives, \textit{and equivalent to gold francs} 6.12 for positives for Turkey. The rates are identical with those applying to blank films. Importations from Palestine are exempt from all customs duty. *Syria and Lebanon*

\textbf{Negatives and Positives:} 45 \% \textit{ad valorem}, \textit{equivalent to gold francs} 5.33 per kg. The value is calculated at a fixed rate of 1 Uruguayan Peso per kg. *Uruguay* - Unofficial.
With the exception of a few Countries, the same Customs regime is applied to exposed films and to blank films.

Certain Countries, on the other hand, put such a heavily increased duty on exposed films, as to be accounted for only by a determined protectionist policy.

This is more particularly the case with English speaking Countries, including North America.

This fact, which renders almost prohibitive the introduction of exposed films into these Countries, is of particular importance when we bear in mind that the arguments put forward to justify the high rates placed on blank films cannot hold good for exposed films.

In the case of exposed negatives and positives, it is possible to differentiate clearly between films of a purely theatrical order and those whose value is purely scientific and educational. It is in this connection that the need for this Institute makes itself felt.

Indeed, while we are not concerned with Customs tariffs on importations of cinematographic material of a distinctly theatrical character, we cannot fail to attribute the greatest possible importance to the educational and cultural aspect of the film, and to make every endeavour in order that they may be accorded a different treatment.

It behoves us, therefore, to examine whether this view of the question, so obviously sound and logical, has been anywhere applied, and what legislative measures may have been enacted to differentiate the two kinds of films.

THE CINEMA IN THE SERVICE OF AGRICULTURE
AGRICULTURAL CINEMATOGRAPHY IN FRANCE

As already stated in the first number of our Review, the very ample and valuable information furnished us by the Service du Cinématographe agricole du Ministère de l'agriculture (Cinematographic Service of the Ministry of Agriculture) of Paris, enables us now to give our readers a comprehensive account of Agricultural Cinematography in France, of the highest interest.

Foundation and Organs of the Service. — The Act of the 5th. April 1923, by placing at the disposal of the Ministry of Agriculture funds allocated from the general Paris-Mutuel funds, rendered possible the foun-
dation of the Agricultural Cinematograph service. The credits thus assigned to it amount to 1,500,000 francs for the current year.

The Decree of 20th May 1923 laid down the bases of its work.

The principal organ of this department is a Commission known as the « Commission Permanente du Cinématographe agricole ». This commission studies all questions appertaining to Cinematography and considers the forms in which it can best serve the interests of agriculture; it submits to the Ministry its substantiated views on these matters.

An administrative Secretariat forms the liaison between the Commission and the central Administration and discharges its business.

Aims and Means of Action. — The general aim of the Service is to organize throughout the agricultural territory of France a vast system of agricultural and social cinematographic education.

In addition to the schools contemplated in the Act of the 2nd August 1918, the program aims at creating centres of agricultural practice and propaganda, firstly cantonal, then inter-communal, and lastly communal.

Cinematography assists and encourages these organisms by the gratuitous loan of films and by subsidies enabling them to purchase projection material.

Cinémathèques (Cinema Libraries) and Films. — In 1923 a Central Cinema Library or film collection was created in Paris.

The first collections were formed by commercial films (educational, documentary and scientific) specially chosen by the Commission after examining all the films produced.

A program has been drawn up for producing new films and their production has been entrusted to the best qualified publishers. Special subsidies facilitate the execution of such films, under the supervision and guidance of the Commission.

The program is brought up to date from year to year, in accordance with the necessities of the moment and the progress achieved in the technique of agriculture.

Donations of films by private persons and associations are earnestly solicited and are most welcome.

During the last few years, the establishment of regional Cinema Libraries, which are kept supplied by the Central Office, has prepared the way for a more active service in loaning films and for speeding up their transport.

Thus we have at Lille, Nancy, Lyons, Montpellier, Toulouse, Clermont-Ferrand, Bourges and Rennes so many cinematographic libraries, corresponding to the principal agricultural regions of France.

A further advance has been made in decentralization by the formation of departmental cinematographic offices attached to the several School Inspectorates. The Departments of Agriculture and Public Education
thus collaborate in perfect unison in this new work of social and occupational education.

Each of these organisms ensures to qualified applicants a regular supply of films loaned gratis, the only condition being the favorable opinion of the Director of Agricultural Services of the Department. It is, of course, also understood that all commercial or speculative use of such loans is strictly forbidden.

There is no lack of earnest and devoted propagandists: the Directors of agricultural services, Professors of Agriculture, the Directors of agricultural schools, and then, always and everywhere, schoolmasters and schoolmistresses are for the scheme.

The Post-Office grants the free carriage of all films despatched by the Cineréa Offices and returned to them.

Thus the principle of gratis service governs agricultural cinematography in all its phases, more especially, in regard to the active distribution of the films.

_Projection Apparatus._ — Side by side with the establishment of the Cinematograph Libraries, efforts have been directed to multiplying projection apparatus.

In the first place appeals were made to organizations possessing efficient projection plant. Subsidies were later granted to qualified bodies (communes and associations) for the purchase of apparatus of a type approved by the Commission, manufactured in France, and capable of projecting standard films of 35 mm.

The Ministries of Agriculture and Public Education, acting in perfect unison, allocate subsidies to scholastic enterprises aiming at the same time at the primary education of children and the agricultural and social education of adults.

_The Results achieved._ — All the films of the Ministry of Agriculture's collection are printed on uninflammable material.

The following table shows the number of copies and the total length in metres of the films distributed:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of copies</th>
<th>Total length in metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924</td>
<td>558</td>
<td>97,095 m.</td>
</tr>
<tr>
<td>1925</td>
<td>804</td>
<td>163,940 m.</td>
</tr>
<tr>
<td>1926</td>
<td>1,799</td>
<td>396,690 m.</td>
</tr>
<tr>
<td>1927</td>
<td>2,708</td>
<td>600,935 m.</td>
</tr>
<tr>
<td>1928</td>
<td>3,403</td>
<td>770,940 m.</td>
</tr>
</tbody>
</table>

The reason, and indeed the necessity, for these yearly increases is due to the multitude of applications for loans of films received from all the Departments of France.

The central Agricultural Cinema Library of Paris, while satisfying the requirements of the several cinema libraries and cinematographic
services throughout the Country, has provided for the loan of films in the following proportions:

<table>
<thead>
<tr>
<th>Year</th>
<th>Copies</th>
<th>Metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924 (for 9 months)</td>
<td>723</td>
<td>220,000</td>
</tr>
<tr>
<td>1925 (for the year)</td>
<td>2,274</td>
<td>1,412,000</td>
</tr>
<tr>
<td>1926</td>
<td>4,707</td>
<td>2,900,000</td>
</tr>
<tr>
<td>1927</td>
<td>8,233</td>
<td>—</td>
</tr>
<tr>
<td>1928</td>
<td>11,800</td>
<td>—</td>
</tr>
</tbody>
</table>

It should further be remembered that each film is projected on an average three times.

The Paris loan service at the present time distributes films at the rate of 130 daily, or about 30,000 metres of reel.

The activity of the regional cinema libraries and external services is on the same scale.

As a general rule the programs of cinematographic shows are well drawn up: our propagandists take care to avoid tiring or boring their audiences and to impart a recreational as well as an educational tone to the spectacles.

Films, songs, and music provide a suitable setting to the more serious documentary and educational films.

The number of subsidies granted for the purchase of projection plants has progressed as follows:

- From 21 in 1924 it has increased
- to 40 in 1925
- to 154 in 1926
- to 358 in 1927
- to 418 in 1928

The only handicap to more rapid expansion is due to the limitation of credits and the exigencies of the Commission in regard to the choice of apparatus and the real value of the agricultural activities of the applicants.

**Conclusion.** — French agricultural Cinematography, while still in the phase of growth and expansion, has none the less achieved the objects at which it aimed, namely:

- To reach the rural population, even that of the most backward Communes;
- To offer these populations an interesting and useful diversion from their work as well as healthy entertainment;
- To encourage them towards more remunerative intensive production;
- To initiate them in the campaign against agricultural pests: weeds, insects, cryptogams, etc.;
- To induce them to adopt modern methods, and machinery which economises labor and lightens the laborer’s task;
- To demonstrate to them the manifold advantages of association;
- To show them the benefits of cleanliness, ventilation, hygienic personal habits, and hygienic housing, food, production, etc.
THE CINEMA AS A MEANS OF PROPAGANDA OF HYGIENE AND SOCIAL WELFARE

India.

In reply to our Questionnaire on the use of the Film for the propaganda of hygiene and social welfare, which we published in the first number of this Review, the Government of India has furnished us with the following information, derived mainly from the 1927-1928 Report of the Indian Cinematograph Committee.

1. At present the control of cinematographs in British India is a matter for which the Governments of the different Provinces are primarily responsible, though subject to legislation by the Central Legislature in regard to the sanction of films for exhibition. The Central Government, in other words «the Government of India», numbers among its officials the Director of Public Information who among other things is specially concerned with films. The local Governments have no sections set apart for film propaganda in connection with hygiene and social welfare, but officials of their administrative department deal with any questions of this characters that call for consideration.

As regards the future, the Indian Cinematograph Committee have recommended the establishment of a Central Bureau and Advisory Committee (Chapter III of the Report, especially paragraphs 98, 103, 106-111 and 119). This recommendation is now under consideration.

2. There is no special law for the propaganda of hygiene by the film, but the following legislation may be referred to:
   Cinematograph Act 1918;
   Cinematograph (Amendment) Act 1919;
   and
   Devolution Act 1920.

Some Public Utility films are made by or on behalf of Government Departments or quasi-public Institutions.

Under this head mention may be made of the Central Publicity Bureau of the Indian State Railways which has films made and projected on its behalf. (See Par. 206 of the Report and the appended extract from a Report on the moral and material progress and condition of India during the year 1927-1928).

* * *

According to the Cinematograph Committee's Report (par. 201) a differentiation must be made between educational films in the strict mean-
ing of the term and educational films for propaganda purposes among the masses of the people, especially on such important matters as public health, hygiene, agricultural work, etc. No steps should be neglected for improving the general welfare of the people.

Coordination in these fields would undoubtedly have a beneficent influence on the native cinematographic industry, and would encourage the market of educational films. The exhibition of good films would develop and educate good taste among the people and accustom them to the cinematograph.

Par. 221: As regards educational films, the Committee appreciates and supports the views expressed at the Empire Conference on the necessity of an active exchange of films between the several Countries of the Empire. Considering the great illiteracy of a great portion of the population, India would benefit much not only by the exhibition of films from other parts of the Empire, but of films of other Nations as well.

The daily life of the people, the methods prevalent in agriculture and industry, conditions of work, sanitary methods, the life of the people in general, all these matters displayed in a telling manner by the Cinematograph would be most effective in enlightening ignorance and in improving the conditions of the population.

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Thus it is seen that there is an entire lack of all cinema activity in India aiming at the promotion of hygiene and social welfare.

The answer furnished by the Indian Government and the Report of the Committee are, however, of the greatest interest with respect to other branches of cinematography. They deal also in a comprehensive manner with the censorship problem, to which this Review will devote its attention, in connection with the legislative aspects of the cinema, as soon as our digest of fiscal policy is completed.

Another portion which is worthy of the closest attention is that dealing with the development of the national cinematographic industry, considered on its own merits and in contrast with the foreign productions introduced into the Country; the business done by Film hiring and trading Companies and concerns, the organizations formed by the actors and artists, and the character and quality of native productions.

This is a field that is not necessarily monopolized by the theatrical film, but which in its wider scope includes also cultural and scientific films — such as alone concern the studies and research of this Institute. In a later number we propose to examine the splendid progress that characterises the revival of the Indian film in the important spheres of documentation, research and labor.
CULTURE AND THE FILM

The Institute for Research on Sexual Questions has produced a new film which aims at demonstrating the heredity of criminal propensities. (Hamburger Echo - Hamburg. F. 14/20).

Dr. Thiel, Director of the Communal Cinemateca of Berlin, contributes a highly interesting article on the use, limitations and possibilities of the scholastic film. (Film Kurier - Berlin. F. 3/70).

John Stewart, Professor of astronomical physics at the University of Princeton, has directed the taking of a film of the moon, experimenting a new type of apparatus. (Corriere della Sera - Milano. F. 13/20).

Dr. Eberhard publishes an interesting article on cultural films, the systems that should be followed in producing them, and the uses to which they could be put. (Hannoverischer Tageblatt - Hanover. F. 3/7).

In the United States they are beginning to make use of the talking cinema for transmitting lessons and lectures from one University to another. (Courrier Cinémato-graphique - Paris. F. 76).

The « UFA » is producing a film on the little secrets of animals. This film will contain some reels taken in Heligoland and will make use of systems for accelerating and slowing down images. (Berliner Lokal Anzeiger - Berlin. F. 6/60).

The French Under Secretary of State for Physical Education has caused a film to be taken with the object of diffusing in schools and colleges an exact understanding of the technical methods of physical training. (Echo des Sports - Paris. F. 14/22).

The French Government is arranging to carry out a strenuous hygiene propaganda by means of the cinema in Algeria and Tunisia. (Courrier cinématographique - Paris. F. 14/23).

Major Kleinhans, of Berlin, contributes an interesting and comprehensive article on the utilization of the film for the purposes of agricultural instruction and on the infinite possibilities which the cinema opens up for progress in the technique of agriculture. (Munchener Neuste Nachrichten - Munich. F. 1/15).

R. Frollo contributes a noteworthy article on the advantages France would derive from the institution of travelling cinemas giving public shows in small villages. (Cineopse - Paris. F. 34/51).

Fovcau de Cournelles devotes a long article to the question of scientific and technical occupational instruction by means of the cinema. (Cineopse - Paris. F. 37/13).

George Kerr, President of the British Film Service Board, writes a letter to the Times, explaining the work carried on by his committee in regard to the educational film. He appeals to the governing classes in England to devote their attention to this serious matter. (Times - London. F. 3/79).

Emile Vuillermoz points out the necessity for a more strenuous agricultural propaganda in the country and small rural centres, through the medium of the cinema — which offers the only practical way of teaching and explaining to agricultural workers. (Comoedia - Paris. F. 1/16).

The United States Department of Agriculture is about to launch talking films for the purpose of instruction in farming. The films will be accompanied by lectures by the foremost authorities on agricultural matters. (Movie Makers - New York. F. 1/17).
In England the Greater Union Films Ltd., are about to produce historical films spoken as well as visual. These will be launched through the medium of the Educational Film Exchange. (Movie Makers - New York. F. 6/67).

Luigi Pirandello argues very clearly and shrewdly that the talking film will never be able to interfere seriously with the theatre. (Corriere della Sera - Milan. F. 10/110).

The establishment of a historical cinematographic Museum at Hollywood points clearly to the fact that at the present time, even in industrial cinema circles, the educational idea is making way. (Movie Makers - New York. F. 34/58).

The leading cinematographic manufacturers in the United States have placed some interesting historical-documentary films at the disposal of the City of New York with the object of forming by degrees important archives. (Kinematograph - Berlin. F. 6/68).

The French «National Alliance» has launched the idea of producing a great film illustrating the demographic campaign for the increment of births. (Film Kurier - Berlin. F. 33/31).

The Algerian Office of Health and preventive Medicine is doing propaganda work in the Colony by means of special autocinemas. The projections are accompanied by lectures. This is giving excellent results. (La Journée Industrielle Financière Economique - Paris. F. 14/26).

J. K. Raymond Millet, just back from a long journey of exploration in East Africa, will shortly present the scientific documentary films taken during his expedition. (Courier Cinematographique - Paris. F. 6/73).

The Bulgarian Minister of Public Education has concluded his scheme for a Bill on Educational Cinematography. All public cinema halls are required to include one film of an educational order in the repertory of each show. (This recalls the example given by the Italian law of the 3rd. April, 1926). At the same time, the cinema systematically takes its place in all schools, and it is foreseen that within the next three years all schools will be equipped with cinematographic apparatus. (Cinematographie Française - Paris. F. 37/19).

The Ludwig Blattern Picture Corporation will produce a film depicting the habits and customs of the mountain tribes of Albania. This talking film will utilize the Stille system for sound and the Blatten-Keller-Dorian system for color. (The Times - London. F. 6/78).

The British Empire Film Institute has purchased the film of Captain Scott's Antarctic Expedition, with the object of gradually getting together historical archives of films of enduring interest. (The Times - London. F. 6/79).

The «LUCE» National Institute, pursuing its vast and comprehensive task of cinematographic culture, has sent operators along with the great exploration expedition of Baron Franchetti in the unexplored regions of Abyssinia. Films of exceptional value and interest are expected. (Tribuna - Rome. F. 107).

It is announced that a Central Board of Educational Films is about to be formed in England. (Motion Educational Industrial Pictures - Washington. F. 86).

The R. K. O., together with two local explorers, have recently taken an important film in the Rocky Mountains. This film has been taken with stereoscopic and color systems. (Sound Waves - Los Angeles. F. 6/81).

Maurice J. Campel has taken an interesting documentary film of Bordeaux. The port traffic is shown with great wealth of detail and presents scenes full of local color. (Filma - Paris. F. 6/82).

A Company has been formed in Sweden with the object of taking films for the education of the troops. (Mo-
Clement Vautel publishes an interesting article on the lines which cinematography ought to follow at the present time. It is necessary that it should go back to Nature, for Nature alone is worthy of being known and loved by the masses. The documentary film should represent a great force for the peoples' education. (Comœdia - Paris. F. 34/79).

A long article illustrates the diverse influences which music can exercise on cinematographic representations. (La Tarde - Bilbao. F. 34/88).

Eral C. Mac Arthur contributes a long article on the educational importance of cinematography aiming at intellectual uplift, and refers to the various experiments and results that have been obtained in this field. (The Educational Screen - Chicago. F. 3/89).

The complexity and diversity of the problems connected with the German educational film are considered in an article which refers also to the present position of educational cinematography in Germany. (Weser-Zeitung - Bremen. F. 3/92).

The program of cinema aided education in the State of Pennsylvania is amply illustrated in a very interesting article. (The Educational Screen - Chicago. F. 22).

The direct interest of women in the cinema industry, in all problems connected with the film, and in its diffusion, may have the greatest influence on the future tendencies of industrial cinematography and on the development of a new program which will give proper weight to all that is true, beautiful and good. (Christian Science Monitor - Boston. F. 63).

The Siegert-Film-Produktion Co. of Chemnitz, has produced an educational film on the Saxon Fatherland. (Film Kurier - Berlin. F. 3/93).

In Russia propaganda grows more and more strenuous for the wider use of the cinema for educational and scholastic purposes. (Licht Bild Bühne - Berlin. F. 3/94).

The possibilities of the cinema in the study and popularization of Botany are fully dealt with in an interesting article. (L'Indépendence Belge - Brussels. F. 6/83).

Father Venceslao Fernandes, a Dominican missionary in Peru for more than 17 years, has given an interesting lecture in Madrid on the savage tribes of Peru and on Peruvian flora and fauna, accompanied by the projection of films which he himself took in those regions. (El Debate - Madrid. F. 6/85).

Thanks to a series of favorable circumstances and reports, the German photographer and writer, Martin Burliman, has succeeded in receiving the hospitality of the Maharaja of Nepal, and has for the first time been able to take films showing the customs and landscape of that most interesting region. (La Pantalla - Madrid. F. 6/86).

The Secretary of Political Education in Mexico has approved the program of physical education for primary and higher schools. This program does not confine itself to pursuing the anti-alcohol campaign, but aims at helping the young to avoid the vices of irregular life and to promote the passion for sport. (El Universal - Mexico. F. 78).

The Bundesfilm A. G. Co. of Berlin has opened a competition for the best educational film scenario. The first prize consists of 100 marks. (Licht-Bild-Bühne - Berlin. F. 3/97).

An interesting article demands that the short cultural films which are beginning to find great favor in cinemas, should be composed with greater care and be interesting and amusing so as to attract the public to this form of production.

An English explorer has flown over the summit of the Andes, at a height of 7106 metres, and has taken some interesting films with a machine worked by a motor. During a short faint-
The TECHNICAL CINEMA WORLD

Hugh Correll sets forth his views of a technical character on the cinematographic reproduction of musical works by means of the auditory film. He holds that in this field, for a great variety of subjects, international aims will be achieved if the songs are sung in Italian. (Film Kurier - Berlin. F. 2/102).

It appears that Warner Bros. have ready a great technical innovation in connection with color cinematography, an innovation which ought to be put before the public through some highly impressive film, to be launched with great éclat, as was the case in its day with the Vitaphone system. (The Cine-matograph Times - London. F. 4/29).

—L. E. Heifets maintains in a lively manner that the talking film develops the artistic and intellectual qualities of the actors. (Hollywood Filmgraph - Hollywood. F. 100).

It appears that successful experiments have been made with a special apparatus aiming at replacing masks in cinematography. (Exhibitors' Herald World - Chicago. F. 143).

The Radio Company of Berlin have brought out a film that aims at clearly demonstrating radio technique. (Kine-matograph - Berlin. F. 22).


It is stated that the Eastman Kodak Co. is manufacturing a special type of film for sound and color cinematography. Patents are being taken out in the different Countries. (Film Journal Berlin. F. 4/30).

J. P. Countisson describes in a most interesting article the invention of a new screen for relief cinematography. Dr. P. L. Couched is the inventor. (Comoedia - Paris. F. 21/150).


Engineer Johan Weil contributes a highly interesting article on the plastic film. (Kinematograph - Berlin. F. 36/66).

The Italian inventor Albertini, after long and patient research, is about to complete a new type of panoramic cinematographic apparatus. (Rivista italiana del Cinematografo - Rome. F. 21/156).

A highly interesting article on sound films and the educational problem of the future deals with all the aspects of this new discovery, its possibilities, dangers, and advantages. (Der Tag - Berlin. F. 16/1).

It is stated that Dr. Nuyten has invented a new apparatus to pass instantaneously from radioscopie to radiography by means of a simultaneous governor. The apparatus is called the tachigraph. (Science et Industrie Photographiques - Paris. F. 21/166).

It appears that a highly interesting discovery has been made by Dr. Pascaleau, demonstrating that the latent image registered in an emulsion of
bromide gelatine may be reenforced before development by rapid exposure to the light. (Science et Industrie Photographiques - Paris. F. 21/167).

We have here a comprehensive review of the discussions that have taken place at the French Photographic and Cinematographic Society on recent technical progress and the latest inventions. (Science et Industrie photographiques - Paris. F. 36/81).

The Russian Engineer, Chorine, is said to have discovered a new cinematographic process, enabling sound and vision to be registered simultaneously by a very simple new system. The apparatus will shortly be placed on view and tested officially at Leningrad and Moscow. (Comœdia - Paris. F. 21/170).

It appears that Dr. W. Hanchettet of Pittsburg has perfected a new system of blank films, manufactured from cotton, silk and paper. The emulsion is of selenium argentite and the films would be specially adapted for sound cinematography. (Sound Waves - Los Angeles. F. 36/87).

Cur Stille, the great inventor of the speaking steel wire, contributes a highly interesting article on his system and on the electro magnetic writing of the acoustic sign. (Die Kinotheknik - Berlin. F. 36/93).

An interesting article gives the first information regarding a new cinematographic apparatus, the «ultracinema», due to Pierre Nohués, and on the use and utility of this machine, which is evidently destined to slow motion filming. (Ciné journal - Paris. F. 21/180).

It is stated that the first demonstrations of color television have been given at the laboratories of the American Telephone and Telegraph Co. (Corriere della Sera - Milan. F. 17).

RELIGION AND THE CINEMA

Abel Gange, the renowned and brilliant French producer, is preparing to show some films of a religious character. One of these, and perhaps the most important, has for its subject the end of the world. (The Times - London. F. 11/15).

The Anglican Church Missionary Society has had a fine film taken illustrating India and Hindu religions. (Suddeutsche Zeitung - Stuttgart. F. 11/16).

The production of films dealing with the Catechism has recently received much attention in France. The films are prepared with great technical care and are carefully revised to make sure they are religiously correct. (Dossier du Cinema - Paris. F. 11/17).

Caplan Fahlse contributes a highly interesting article on the Catholic film for purposes of popularization and propaganda. (Deutsche Filmzeitung - Munich. F. 11/18).

It is understood that an important company for the production of religious films is about to be set up in Rome. This enterprise would have the support of the Vatican and its object would be the publication of films of propagandizing the Catholic Faith. (Film Kurier - Berlin. F. 11/20).

An interesting article describes the performance of a cinema show given by a missionary to negro miners and the great interest displayed by the latter in the film. (Manchester Guardian - Manchester. F. 11/21).

It is announced that a Company is being formed in Rome devoted to Religious Apologetics: it will produce religious films to propagandize the moral and social principles of the Catholic Religion. (Cinema Italiano - Rome. F. 11/22).

The Missionary Societies of Melbourne, Australia, have organized a lecture on the film and the work of the missions aiming partly at demonstrating the practical uses of the Cinema. (Kinematograph - Berlin. F. 11/23).

The Evangelische Bildkammer of Berlin owns seven films of religious propaganda with which it does considerable propaganda. (Film Kurier - Berlin. F. 11/24).

The progress of religious cinema as-
SOCIAL ASPECTS OF THE CINEMA

The Police authorities in Germany make use of the Cinema in training their men. The Department of Public Safety has set up a special cinema for this purpose. (Neue Berliner - Berlin. F. 8/30).

Mr. Richard publishes an open letter in the « Daily Telegraph » in which he argues the need of more rigorous censorship of films of a political interest. (Daily Telegraph - London F. 8/68).

It is understood that since 1917 the United States have made considerable use of the cinema for military instruction, and to explain to the troops the use of arms in military manoeuvres and in the event of war. (Kine matographe - Berlin. F. 8/31).

A correspondence in the « Excelsior » of Vera Cruz states that some Chinese men who were attending a cinema show, broke into the projection cabin for the purpose of destroying a film showing scenes of the Chinese Revolution which they considered insulting to their country. (La Pelicula - Buenos Ayres. F. 9/21).

An interesting report has been presented by M. Bouvoisin on the social importance of the Cinema. This report urges the Government to take measures likely to lead to a gradual improvement of production and to guide the cinema towards moral and educational ends. (La Journee industrielle et financiere - Paris. F. 45).

The Berlin Police, in collaboration with the higher organs of political vigilance, will produce a film on the task of the Public Safety department in the repression of female crime. (Cine Journal - Paris. F. 33/27).

An interesting note deals with the problem of censoring talking films. The excision of certain scenes often leads to the absolute ruin of a work of art. This note refers more especially to the Canadian Censorship. (The Film Daily - New York. F. 18/77).

It appears that in China students are taking to frequenting the Cinema much more freely than in the past, to enjoy singing and speaking films, partly with the object of learning English. (Exhibitors' Herald World - Chicago. F. 10/113).

Carl E. Milliken has delivered a very interesting lecture at St. Louis, U. S. A., pointing out the immense value of the Cinema in the education of the young. (Comoedia - Paris. F. 33).

The Court of Appeal of Montreal has rescinded the rule prohibiting children under 16 years of age from attending cinema shows and from entering places of amusement on Sundays where entertainments consisting partly of films are given. (The Film Daily - New York. F. 15/34).

The French Senate has raised the age at which it is allowed to employ children in cinema establishments from 13 to 15 years. (Comoedia - Paris. F. 15/35).

A long article deals with the influence of the Cinema on crime among children and describes the experiment made with 500 children by the Psychological Department of the Columbia University, under the direction of Dr. J. Holmes. (La Vanguardia - Barcelona. F. 15/37).

The Evald Film Company has produced a film for the purpose of instructing persons who want to learn to drive automobiles, to understand motors, etc. (Verkehrstechnik - Berlin. F. 8/34).

Dr. Franz and Prof. Thoroburg, professors at an American University, state that the talking film will render good service in reeducating the hearing of persons suffering from partial deafness. (Comoedia - Paris. F. 12/205).
The Berlin Council of State has accepted at a first hearing the new law on Cinematography, containing several measures for the protection of childhood. *(Film Kurier - Berlin. F. 15/39)*.

It is stated that the new Censorship Decree in the State of Illinois has been rejected by the local Congress. *(Exhibitors' Herald World - Chicago. F. 18/89)*.

A petition for the revision of the censorship will be presented to the competent authorities. This will contain the request that persons of high artistic and scientific ability take part in the censor commission, and that there should be a far reaching change in the systems of censorship. *(Times - London. D. 18/90)*.

A great Cinema is shortly to be opened in New York entirely devoted to children. Educational and instructive films will be shown here. *(Courier Cinematographique - Paris. F. 3/100)*.

It is not true that the orchestra musicians of New York have been badly hit by the talking film. Out of a total of sixteen thousand employees only 400 to 500 have been unemployed. *(The Film Daily - New York. F. 12/217)*.

William de Mille states that the censorship, as actually exercised, is both harmful and useless to the cinema industry. The cinema must nowadays be regarded as an art, and no form of art can be bound up in fanciful bonds. Police orders and rules ought to suffice to protect public morality. *(Sound - New York. F. 12/217)*.

It appears that the increase in offences against morals in South Africa is causing anxiety, and this is largely attributed to the diffusion of immoral films. *(Osservatore Romano - Vatican City. F. 33/34)*.

Will the cinematographic film replace advertisement posters by degrees? The use of the film for publicity is dealt with in a highly interesting manner. *(Kinotechnik - Berlin. F. 5/22)*.

The British Government is greatly concerned about the education of children. The Special Commission of the London County Council recommends the County Council to create a special advisory Commission to study the advisability of a wide use of the film in childrens' education. *(Comoedia - Paris. F. 15/41)*.

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**Dr. LUCIANO De FEO — Editor and Responsible Manager.**

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Last March the Council of the League of Nations nominated as members of the Administrative Council of the International Educational Cinematographic Institute Mr. Louis Lumière, Mr. Carl E. Milliken and Dr. Hans Gürlis, in order that these three distinguished authorities might contribute their vast experience, and technical, scientific and practical competence to the governing organ of the Institute. At the same time the League's Council resolved that an Englishman should be nominated to fill the fourth post and asked the British Representative in the Council to take the requisite steps for the appointment in concert with the acting President of the Council.

We have pleasure in announcing herewith that the new member of the Institute's Council has been nominated in the person of Mr. G. T. Hankin, H. M. I., of the Board of Education.

Mr. Hankin holds an eminent position in the world of education and of the educational cinematograph in England. He is an Inspector of Schools and Training Colleges under the Board of Education and represents the Board on the Central Council for school broadcasting. Mr. Hankin is also Chairman of the Film Enquiry Committee of the Historical Association and of the League of Nations Union Film Committee and a member of the Iconographical Committee of the International Historical Congress. He was one of the experts selected to assist in preparing the «common chapter» on the aims and organization of the League, as suggested by the Committee of Experts on League Instruction for the Young.

The International Review has great pleasure in welcoming this new and distinguished collaborator of the Rome Institute of the Cinema.
The much discussed question of censorship is frequently the subject of controversies in different countries, yet few people outside the ranks of motion picture film producers realize clearly its great importance as a factor in international relations. As the various censorship systems operate throughout the world, it can hardly be denied that many of them present obstacles in the way of a closer and more sympathetic communication among nations.

(Ed. Note) The problem with which Mr. Canty here deals with all the competence and knowledge deriving from the positions he has held in the past and now holds in the service of the great Republic, is one that has from the first claimed the Institute’s interest. Our brief comment appended to Dr. Seeger’s article in the first number of the Review heralded a big discussion of the question of censorship. In his masterly exposition, Dr. Seeger illustrated the principles underlying the cinematograph censorship in Germany. Mr. Canty expresses the hope that as much may be done for other countries, with the aim of attaining to something in the nature of an international codification of the diverse national systems. This goal is no doubt still somewhat far ahead, since, apart from general principles (and here we agree entirely with Mr. Canty) each nation, in its actual life and experience, is faced with its own particular problems claiming special care and control — a fact, indeed, fully acknowledged by the writer.

In any case, this is a question which we mean to pursue, and we are happy to announce that our next number will include the first of a series of reports on the organization and functioning of the censorship in different countries. Wherever possible — and we trust it may be so in all cases — we shall endeavour to describe the principles by which the various censorship offices are guided in the fulfilment of their tasks.

As soon as we have completed this review of the different national systems, we hope to be in a position to form practical conclusions, to determine the points on which all the different censorship are at one, and to indicate lines of general policy arising out of the universal need to protect morals and public health. Once this is accomplished, it seems reasonable to hope that the idea of an “international censorship” put forward by our distinguished contributor may make rapid headway. In any event, our Institute will have rendered a big service to the film industry by presenting an accurate and methodical review of the policies of the several countries and of the general principles recognized by them all.
Practically every civilized country can boast of its film censors, but the nature of these censorships is varied from one country to another and is often based on different, if not opposed principles and ideals. It is curious to note in this connection that film censorship has even been established in countries where it would appear that it is an open violation of the principle of liberty of press and thought, acknowledged by these states as the cornerstone of their respective constitutions. Not that prosecution of licentious and otherwise improper matter would be contrary to the principles admitted by the states in question. Prosecutions following an accomplished offense are considered necessary in every country without exception. But many minds hold that censorship is not a prosecution, rather that it is a preliminary restriction of something that has not as yet been recognized as being objectionable. This, it is often stated, is contrary to the essential principles of liberty.

Be that as it may, the power of the film as an instrument of communication, of education and of propaganda, the force with which it conveys a certain message, the subtlety with which it can insinuate a desired argument and its paramount importance as a means of international contact, have made it an early victim of the censor’s scissors. Numerous voluntary guardians of the public’s mind have repeatedly attacked it and clamored for a more efficient protection of the morals of the spectators, until in most countries it is now possible for an official, who has been entrusted with the custody of the moral status of his fellow countrymen, to prohibit altogether or to ruin a work of art and cause serious damages to those who have spent millions on its production.

This causes the difficulties with which a producer has to cope, if he desires to insure a wide and economically feasible distribution for his film, to be almost insurmountable. It is often claimed by the proponents of systematized international censorship that the majority of foreign films brought on a market are either cut or altogether banned. Certain British Colonies frown on films showing violence being done to white men; most countries will not allow any caricature of their governments or subjects; Italy prohibits certain war scenes; Japan objects to kisses altogether, and the French occasionally protest if they consider a kiss too long.
while many European countries strictly oppose films tending to create disorder or unrest among their subjects. Another European country includes in its Board of Film Control several film producers who, thus, are empowered to sit in judgement on their own product. It is impossible to enumerate all the peculiar restrictions with which the film has to comply, and the producer who desires his work to be approved by all existing censorships has to be very ingenious, if not indeed clairvoyant.

Producers were early in realizing the formidable barrier of censorship and the necessity of meeting their responsibility to the public. Thus, it is one of the principal functions of the Motion Picture Producers and Distributors of America, better known as « The Hays Organization », which is certainly the most powerful union of film interests in the world, to supervise the moral quality of the pictures produced by its members. The American film industry has thus become its own policeman. It has fully realized that it would be a disastrous policy even from the purely financial point of view to produce films which could be accused of being salacious in any degree. And yet, despite this evident desire of the greater part of the world industry to maintain an irreproachable moral standard, film censorship commissions freely function nearly everywhere. It would be a sad fact to acknowledge, but it is not possible to say that these commissions are entirely superfluous. It is not to be denied that they are in certain cases a necessary protective weapon and are justified in prohibiting the screening of films which would be contrary to generally accepted principles of morals and decency, including films that consist of political propaganda and attacks on « bourgeois » morals.

Total abolition of censorship is not possible, and it is doubtful whether this would be of any real benefit. But the present system or absence of any uniform international system, allows much room for improvement since many obstacles can still be removed without compromising the moral and cultural standards of any particular country. A uniform universal censorship system is hardly conceivable, inasmuch as the views of nations are often radically different. Besides, consideration must be given to special colonial, local or political requirements. A uniform censorship
is no easier to achieve than general free trade, but an effort should soon be made to obtain a more equitable international censorship. There is, for instance, no reason why an international committee could not examine all present existing systems and try to codify them so as to be acceptable to the various countries involved. No universal rules and standards but well defined, permanent regulations for each country are desirable and would give motion picture film producers an exact knowledge of the censorship situation throughout the world. It is useless to dwell further on the economic importance of such an arrangement. Producers and distributors would be better informed of the particular tastes of their sundry customers and would produce films accordingly. Restrictions lying in the way of free communication between nations would be reduced considerably and the film trade and the public would profit.

Every nation has its peculiarities, its tastes, its art and individuality and strives to have them appreciated by foreigners. Censorship should not stand in the way of unobnoxious manifestations of national characters and customs and censors should, therefore, take lenient views of films illustrating the character, manners and psychology of other people. But this is a broad question necessitating a meeting of the best minds.

No other medium possesses the same power as the film in sympathetically evoking the character of a nation and in making it comprehensible to foreign spectators. Misunderstandings, national hostilities and chauvinism are more or less based on ignorance. In bringing nations closer to one another the film is the most potent instrument of international goodwill. But in order that its action bear fruit, the way must be cleared from useless obstacles and artificial restrictions. Then only will the screen, appealing to the countless millions of all races and all countries, be able to exercise its full power as an ambassador of a better international understanding and universal peace.

George R. Canty
Provisions for the culture of the race rank high among the complex and manifold enterprises of the Fascist government.

Physical culture in its most varied forms, from simple medical gymnastics to sports of every description, is a foremost consideration. For this purpose the government has created the necessary instruments and centres, from gymnasium halls and simple playgrounds to vast stadiums.

Mental and spiritual culture is provided for through the agency of the far reaching and original activities of the National After Work Recreation Societies, the Cinema, and countless other enterprises, calculated to form the new consciousness of the Italian people.

It is beyond dispute that the activities of the cinema hold a commanding position among the numerous state activities.

Besides the National Institute of Cinematography, the Fascist government created the L. U. C. E. Institute which it reorganized by the Royal Decree of November 1925, and by later amendments (1926 and 1929).

Then followed the foundation of the International Educational Cinematographic Institute which, although an international organization, owes its origin to an initiative of the Italian Government, which offered to house it, placing at its disposal two stately and beautiful villas. By so doing the government showed its desire to collaborate in the achievement of a human, noble and universal goal, coordinating the energies brought to bear on the development of this powerful instrument of world culture.

In this connection the Head of the Government in his report accompanying the proposal submitted to the League of Nations wrote:
The cinema, which is still in the first stages of its evolution, scores the great advantage over the book and the newspaper of speaking directly to the eye, that is to say of using a language comprehensible to all the peoples of the world. It is from this fact that it derives its universal character and its consequent innumerable possibilities for international collaboration in the educational field.

The cinema is therefore a powerful means of education and, consequently, of moral elevation. An efficacious auxiliary of applied science, it contributes to culture a form of iconography which constitutes a universal language. This is a fact, and a fact that is generally acknowledged, but not everyone, perhaps, will enquire by means of what biological mechanism the cinema attains such elevated and beneficial aims.

This is an interesting point, which it may not be out of place to elucidate by a — necessarily brief — allusion to some principles of the physiology of the central nervous system.

« Nihil est in intellectu quod prius non fuerit in sensu », wrote Aristotle, defining in his lapidary style one of the deepest and most human laws of physiology, which unquestioned and unmodified, has withstood the passing of the ages and the vicissitudes of human affairs. The senses are, so to speak, the great entrance hall for notions and ideas, and sensation, as Professor Sante de Sanctis has pointed out, is the first contact with reality: transferred to the upper regions of the central nervous system, sensation is transformed into perception, that is to say into a conscious and therefore more evolved notion, by means of a mechanism which is still surrounded by mystery. Galileo Galilei said well that « to try to define essences is lost labour and a vain endeavour ».

As this is a basic conception which forms the pivot of the whole nervous system, it appears advisable to define more precisely the idea of the functions and the nature of sensations.

Normal man lives in an environment of sensation, both internal and external. From the interior sensational environment, that is to say from the depths of being, he receives, through his general
sensibility, impressions regarding the state of his internal organs, which are expressed in sensations of fitness or indisposition. From his outer surroundings he receives impressions and stimuli from the totality of his relations to environment. Such stimuli are numerous. They excite the terminals of the sensitive nerves in different ways, according to the nature of the stimulant, and of the nervous system on which they react. The sensations caused by external stimuli are always specific: visual, oral, olfactory and tactile, and a special sense organ corresponds to each order of sensation. To awaken sensation the stimuli must be adequate in nature, intensity and duration.

There is consequently a limit, short of which sensations do not register, and this limit is called the Threshold, taking its name from Flechner, who discovered it and built a doctrine around it.

Sensation, generally speaking, does not stop at the organs of sense but, conducted along the nerve apparatus (centripetal or outgoing nerves) rises to the central nervous system, projecting itself on the cerebral cortex, where again, by means of the still undiscovered mechanism, it evolves into that more perfect activity, perception, which is always conscious.

There is a profound difference between sensation and perception. Sensation is elementary and consists in the mere presentation of the object to the consciousness. Whereas, according to Reid, perception is a more concentrated state of relations and reactions, reinforced and illumined by a maximum of personal activity (de Sanctis). We have perception when sensation is enriched and completed by all the accompanying elements of judgment, transforming itself into the most highly evolved state of conscious impressions. Let us suppose that we are presented with a book. The first impression received by the sense of sight is that it is a book, but later, while examining it, we supplement the first impression by many other elements; the title, the author, the shape, the characters, the print, the number of pages, and so on. At this point perception follows sensation and discovers numerous other qualities which did not register in our consciousness at first sight.

In the child the impression stops short at the rudimental
stage of sensation. But in proportion to the development and perfectioning of the central nervous system, the sensations are transformed into perceptions, at first incomplete, then complete.

Among other aims, education has that of awaking adequate perceptions.

But perception does not stop or end where it arises. In other words, our higher nervous system does not react in the same way as a musical instrument, which, after the sound has been produced, returns to its normal state. On the contrary our cerebral cortex is like a telegraphic apparatus in which the transmission of the word remains impressed, as upon a strip of paper. In the same way the perceptions leave traces of their passage, adhering to our memory.

The perceptions themselves are the cause of other stimuli, which pass through the nervous system in an inverse sense to the primitive sense stimuli. Instead of rising like the former, they descend. That is to say, they move from within outward, from the center to the periphery, conducted down the centrifugal nerves to reach the several organs, where they awaken different orders of reaction. These are psychic-reflex actions, stimulated by experienced sensations and carried out by voluntary reactions.

Let us take an example: when climbing a hill, we see a precipice yawning at our feet. The image of the precipice, formed at the back of the eyeball, traversing the centripetal passage of the optic nerve, is projected on the cortex zone of the occipital lobe, where it is transformed into a conscious perception, permitting us, in this case, to gain a complete notion of the precipice, that is to say to form an estimate, with the assistance of our memories, of its depth, form and steepness, the rocky or earthy nature of its sides, the vegetation or lack of it, and so forth. This closes the first phase.

Then the second opens. The perception of the precipice and, consequently of the danger, releases a new stimulus within us, which by conduction from the center down the centrifugal nervous system, reaches the muscular apparatus of locomotion, where it is transformed into a series of voluntary motions, coordinated and adequate to obviate the fall.
This mechanism, constituting the "nervous process" which, arising from the simple sight of a precipice, continues and culminates in a series of reflex actions calculated to avoid the fall, takes place rapidly in the normal individual without any break between the first and the second phase.

Similar examples might be multiplied ad infinitum, also with regard to the other sensations, auditory (a sound that causes the head to be turned in the direction from which it comes, olfactory (the perfume of a flower that causes a dilating of the nostrils and a deepened respiration), and so on.

It is always a question of reflexes which are interwoven into our whole psychic life as "no sensory reverberation is without a centrifugal reverberation", according to Professor Patrizi. To believe, for instance, that "a word, a sound, entering the ear, stops at the alleged auditive-verbal center of the listener, and does not move down in minute waves to the muscles of his mouth, would be like supposing that a bell does not resound at the antipodes of the spot where the clapper beats". (The preface letter to R. Bruglia's book on "The Irreality of the Nervous Centers").

This question of reflexes is still enormously complicated, and although it has entered the field of experimental investigation and promises success, it is still full of incognita. So much so, that Paulow, after twenty years of memorable experiments, exclaimed that at the end of this first phase of his formidable task he saw stretching out before him a much longer series of problems than those he had seen before embarking on his venture.

As far back as three hundred years ago, Descartes had started the notion of the "reflexes", as a fundamental activity of the higher nervous system. Every activity of the organism, according to Paulow, is nothing more than a response (reflex) to the sensation produced by a stimulus proceeding down the nervous passages which serve as a diastyle arch of passage. The theory of reflexes has cast much light on the complicated phenomenon of the associative power of sensations, perceptions, representations in psychic life, all dominated by these reflexes, which are internal
and external, congenital (instinctive, according to some) and conditioned; simple and complex, positive and negative (inhibitory).

Among the reflexes that have been most studied are the alimentary reflexes expressed by animals when craving food, the degree of which Paulow estimated by the quantity of saliva segregated in a given unit of time under the impression of diverse and not only alimentary stimuli. Then there is the preservative stimulus, by virtue of which the animal recedes from destructive stimuli in search of safety. And further, the liberty stimulus, which provokes the defence reaction in the animal when one tries to snare it. And again, the investigation stimulus, which makes the animal turn its head and pricket up its ears as a sign of recognition of a sound. These reflexes manifest themselves in different ways, according to the subject. For instance, the investigation reflex that takes place in the animal, by the raising of its head and the pricket up of its ears, provokes in men of genius grand und unexpected reactions, sometimes leading to discoveries that further the progress of science.

Reflexes are largely dominant in emotional states: commotion, blushing, acceleration of the pulse and breath, weeping, laughter, heightened temperature, are so many reflex activities.

After these allusions to sensations, perceptions and reflexes in general, which are to be found among the fundamental elements of psychic life, we may now return to the specific sensations and the respective organs of receptive sense, the highest of which in normal man is doubtless the organ of sight. The eye is the window of the spirit on the outer world. It is also the fundamental organ for the cinematic function.

The eye is formed on the principle of the «camera obscura», in which the collective (crystalline) lens unites in the rear the luminous rays that form on the retina a diminutive and inverted picture of the objects perceived in the field of vision.

The retina is the indispensable intermediary between the physical phenomenon of light (vibration of ether) and the physiological phenomenon of sensory excitation (vibration of the nervous elements). The vision on the retina reaches its maximum intensity in the «macula lutea» or more precisely in the «foveola centralis».
The retina is not only sensitive to luminous rays, but to other stimuli; mechanical (pressure), traumatic (puncture), electric (current). But it invariably reacts to luminous sensations (phosphorous) according to the noted principle of the specific energy of nervous apparatus, whereby any given apparatus under the stimulus of different impulses always gives the specific sensations inherent in its nature.

The visual image projects itself along the optic nerve by means of a nervous impulse towards the primary optic centers. It passes these to reach the area striata of the occipital lobe of the brain cortex, a zone which is composed of one and a half billion cells of grey matter. Visual sensations are divided into sensations of light, and chromatic (colour) sensations (Sante de Sanctis). Altogether, there exist a total of 32,820 different visual sensations.

The visual sensations are extremely complex and, transferred to the upper nervous system, are the cause of innumerable perceptions and primitive judgments, mnemonic, singular, associative, static, dynamic, and so on. The visual sensation, like other sensations, persists for a certain time in the respective organs.

As a result of this fundamental character, a luminous dot, moving rapidly in a given direction, gives us the sensation of a continuous, not a broken line. This principle is fundamental for the continuity of cinematic images.

The images on the retina are inverted, but we see them upright, because what we see is not within, but outside ourselves, in space (psychic operation). Also the fusion of the images caused by the pair of eyes, is the result of a psychic operation.

Light, aided by the education formed by the example of the other sense organs, enables us to estimate (by psychic judgment) the form of objects, their dimensions and consequently their size. These are characteristics which we gather not from the dimensions of the images, which are well under life size, but through processes of the mind due to mnemonic residues and to the estimate of distance. Light enables us to estimate the shape of objects; their position in space (sense of locality), their condition of rest or motion, the direction and velocity of motion. It enables us further to estimate the depth of space.
In brief, a large, perhaps the largest part of the biological characteristics of the way of being, of the arrangement and relationship of all our surroundings, perceptions and sensations, is presented to our mind by means of sight, rightly classed with hearing and feeling, though certainly more potent than these, among the «senses of knowledge».

The reference made to the visual center of the occipital lobe of the brain incidentally reminds us of the vexed question of the existence or nonexistence of the cortical centers, custodians of all organic activity.

Authoritative voices have been raised against the concept of Charcot’s school, which considered the grey matter of the cerebral convolutions as a federation of organs (neurones) each of which had a distinct property, function and faculty. Cowers enjoined that this «center» must not be interpreted in a narrow, topographical, or geometric sense. Golgi himself believed that not only cell bodies but the diffused fibrillious net took part in the psycho-sensorial activity. The distinguished physiologist, Loeb, denied as far back as twenty years ago, that the various motor sensory and psychic reactions were necessarily restricted to special cortical zones. Brugia quotes these authorities in his recent work, «The Unreality of the Nervous Centers» and in the volume published this year «A Revision of the Doctrine of Cerebral Localisation», in which the author has accumulated an immense mass of evidence, taken more especially from war surgery, to support his new doctrine of the Functional Unity of the Nervous System, as opposed to the opposite doctrine of independent neurones and their localization.

In spite of all this, the old theory of the nervous centers has still many supporters who can boast of much experimental evidence. However that may be, this is not the place to discuss this much contended issue. It must suffice to have pointed it out.

But this controversy does not in any way detract from the physiological and psychological importance of sight as a most efficacious means of communication with the outer world, also because the activity of the occipital lobes (area striata and more especially the occipital pole) as a reference goal of the visual
sensory perceptive organs, is admitted even by many of the opponents of the doctrine of nervous centers. In the observations made on certain aspects of the physiology of the central nervous system, there are many elements that have a bearing on the biological mechanism of cinematic images, that is to say, on the influence exercised on our psyche by the living picture of the cinema. These include sensations in general, and visual sensations in particular, the phenomena of perception and the vast stretch of psychomotor and psycho-sensory reflexes.

The secret of the suggestive power of the cinema lies in the manner of utilising these various constituent elements of biological reactions, and raising them to a high degree of sensory significance.

Each of the Fine Arts has its own mode of manifestation, and its own appeal to heart and mind, and it is not my intention to make comparisons between forms of art that are incomparable. Nevertheless, it is unquestionable that as regards the sensory aspect, certain cinematic images are sometimes more significant than other forms of art.

Take, for example, a landscape. A writer may describe it in clear and adequate words, enabling you to perceive it with the mind's eye (mental vision) in all its fascination. A painter, on the other hand, will fix it on his canvas, giving you a conception of its reality: but it is a static reality, the fleeting moment held fast by the painter's brush. Whereas on the screen you see the landscape in all its reality, in its dynamic reality. The mountains, the valleys, the houses clustering round the church, the towering campanile, the animals moving under the shady trees with the foliage stirred by the wind, men going about their business. In these images all the manifestations of life are woven together with a grand variety of lights and forms that give relief to the picture. I do not mean to assert that for this reason cinematographic art is superior to that of writing or painting: each has its own special and unique advantages; but doubtless the landscape projected on the screen assumes for the majority a more convincing, more humanly eloquent appeal, because cinematographic representations
are not above anybody's level, while a certain habit of culture is required to understand the beauty of a poem or a prose passage.

The factors which contribute to the expressive energy of the cinema are of various orders. Some act subjectively, others objectively. The former are physio-psychological and refer to the spectator: the others are of a technical order and concern the art of the cinema itself.

Foremost among the factors of the first category is the elementary or fundamental character of the cinematograph: that of teaching us by natural images as Nature herself does. Man in relation to the cinema is in identically the same position as man in relation to nature. He learns by seeing. But there is a difference: the cinema shows a much greater number of images in a given unit of time than Nature can. Take, for example, the film of a scientific expedition: in an hour it will show you the events of several months.

There is another consideration to be made. Man is naturally inclined to be «visual». He is born an image maker and almost instinctively clothes every abstract idea in concrete forms.

The method of art, personifying incorporeal entities, is also that of nature. Thus a painter personifies the images of virtue, vice, justice, and so forth, on his canvas. Visual images predominate in our consciousness, and this is most providential, because without this tendency many abstract ideas would be incomprehensible to the majority of us, if they could not be conveyed by means of images.

«Mental iconography», as de Sanctis says, «is a common phenomenon». It is the instinctive tendency of man, who finds his natural mental food in the moving picture.

The cinema, as we have already pointed out, utilizes on a large scale the physiological phenomenon of the persistency for a certain period of the sensation at the back of the eye-ball, as a result of which the images corresponding to the various instants of the action follow in a succession of absolute continuity, giving the illusion of a single image of animated things, very much like what happens in nature. Interesting cinematographic specta-
cles have further the virtue of stimulating the attention of the spectator, which is a psychic aspect of the greatest importance, directing the attention towards the object in order to know it and its details. It often succeeds in awakening in the spectator the still rarer spirit of enquiry, the sense of «investigation», which lies beyond the threshold of sensation, making people «visual» who are not generally so. There are many who have not visual perceptions, in the sense of seeing what surrounds them. Among such are often people of high culture, absorbed in interior reflection. Such people, on returning from a walk, will not recall any faces they have seen. After a drive they will not know whether it was uphill or downhill, whether the vegetation was rich or consisted chiefly of trees, whether the sun shone or clouds obscured it. On the other hand, as Scarfoglio has pointed out, such details do not escape the «visual», and endow him with a psychological patrimony of images that are stored up in his memory. The cinema acts in this sense: awakening our attention, it leads us to look beyond the conventional goal, increasing, so to speak, the excitability of our visual apparatus, thereby lowering the threshold of sensibility.

The cinema is also a powerful memoriser, for its images which are merely living symbols distributed on the screen and woven into the pictures of the series, form a sort of mnemonic chain which clings to the memory.

This is an important aspect of our psychic life. We know in proportion as we succeed in remembering.

Once it was assumed that everything encountered by the senses remained lodged in the memory. Today it is generally believed that perhaps only about ten per cent of our mental operations become concrete and make an impression on our memory. All the rest remain in the vast domain of the subconscious. What we call conscious perceptions are nothing but the peaks of symbolic promontories the bases of which are hidden in the depths of the subconscious.

This has been pointed out by William Walker Atkinson who illustrated the concept by an apt comparison. We are, he says, so to speak in a forest on a dark night, holding a lantern in our
hands. The lantern lights up a small luminous circle around us, which is surrounded by an ample ring of shadow; beyond this there is complete blackness.

The bright circle is our consciousness, in which by degrees and as required, there arise subconscious impressions, as from the dark ring of shadow. In no one moment of our psychic life do we succeed in attaining consciousness of more than a small part of what is stored in our minds. And many things that seem forgotten and which we have possibly tried in vain to recall, rush up in our minds at a given moment almost involuntarily, by a sort of automatic impulse.

Our subconsciousness may be likened to a great reservoir, in which impressions are deposited and stored. *But not all impressions*.

Only those to which we have given a certain attention. The « size and form » of the impression is indeed in proportion to the amount of attention given at the moment when the impression was produced.

It has already been pointed out what a powerful stimulator of attention the screen is, and as such it must necessarily contribute to feed our memory and therefore to our education, all the more as the sense of sight is recognised as the one that is the most apt and most instrumental in aiding the mind to register correctly the impressions received.

The cinema also plays a large part in the zone of psychic reflex actions, both on account of the state of soul and the emotional impulses inherent in the nature of some subjects and on account of its « mimicry ».

« The face is the tacit voice of the soul », said Goethe, wishing to express how our most intimate sentiments are registered and transmitted by it.

Mimicry is a language apart, supremely capable of expressing our state of soul by the facial expression and by gestures. No fewer than seventeen muscles concur in the formation of our facial expression. Much has been said and written on the subject. There is passionate, natural mimicry, with automatic and reflex expressions, betraying the most diverse states of mind: joy, suffer-
ing, fear, anger, desire, and so on. And then there is intentional mimicry, voluntary or semi-voluntary, which is artificial and dependent on the will of the actor, who deliberately interprets the psychic states of which it is the expression.

The cinema avails itself largely of this form of language to exteriorise the states of soul of the actors.

By a similar complexity of subjective reactions, called forth in the spectators by means of psycho-reflective mechanisms, the cinema achieves its educational aims.

But what is the intrinsic virtue of the cinema, which makes it capable of arousing such vast psychic sensory reactions? It is doubtless the particular character inherent in this form of art and its technical excellence.

Foremost among its characteristics is that of universality. The language of the cinema, consisting of pictures, is universal, speaking to all peoples regardless of the bounds of state frontiers.

The technical means at the disposal of this cinematic apparatus ensures the production of images of extraordinary luminosity and vivacity.

Everyone has been at times impressed by the suggestive fascination of the luminous effects of sunrise, sunset, moonlight nights, and so on.

The cinema can further get inspiration from the real and often does so. Nothing is more interesting and more attractive than reality. I remember a cinema known as «The Real Cinema» that once existed in Rome, and that reserved every Friday for scenes from actual life. They were highly instructive and people frequented the cinema more on that day than on any other. I recall scenes of great artistic and cultural significance such as studies of the bottom of the sea, the life of infusoria, the biology of pathogenic germs, some manufacturing processes, such as that of iron, the picking and manufacture of cotton and so on: all processes not generally or only imperfectly known, and which yet contribute enormously to general culture.

Another asset of the cinema is that of movement, enabling us to appreciate, for example in an animal, all its typical characteristics;
not only its shape, size and general exterior, but also its movements, expression, way of jumping, running, etc., elements that escape a stationary projection.

The cinema takes us to the remotest parts of the earth, enabling us to perceive the configurations, hydrography, orography, uses and customs of regions otherwise inaccessible.

Over and above this body of intrinsic factors, objective and subjective, there is a body of extrinsic factors.

Among these are the captions which greatly facilitate the interpretation of certain situations, that are not rendered sufficiently clear by the image itself.

The musical accompaniment is another important factor, forming a significant comment on the action and a powerful auxiliary stimulator of the attention. In a well selected and well executed musical accompaniment the action lives and palpitates, following the various phases of the idea, the most subtle nuances of feeling and the impetus of dramatic situations.

The sense of hearing, coupled with that of seeing, increases the vivacity and number of impressions on the onlooker, awakening strong sensory motor reflexes.

But, as Mussolini pointed out in the words quoted at the commencement of this article, the cinema is still at the first stages of its evolution. There are « other peaks already being scaled », the cinematography of colour, the talking film and the three dimensional film.

Innovations that will revolutionize the whole motion picture field, by the realization of undreamt of efficacy of expression.

But that is beyond the theme of this article.

Concluding, I should like to state my belief that the educational film should draw its inspiration above all from real life. I have already pointed out the enhanced interest of such representations. But all false appearances, all trickery should be avoided.

Sometimes, no doubt, dissimulation is necessary, but it should never be exaggerated, as now is often the case when the whole action is relegated to a plane of unreality that is often grotesque. Such aberrations deform the aesthetic sensibilities, the good taste and spirit of inquiry of the public.
And here I am not alluding to the moral character of films, which should always be above reproach, as otherwise the cinema, with its powerful appeal to the imagination, risks becoming a school for vice and crime.

Here the objection may be raised that the public enjoys improbable situations and scenes of pure criminality. But this is not a good argument. I recall a famous orchestra director who resolutely faced unpopularity in order to inspire the public with a new sense of art. After years of patient and persevering labour he triumphed, awakening his audiences to enthusiasm for and comprehension of classical compositions, not easy to follow on account of their technical structure.

And such examples are to be found in all the domains of Art. They should serve as a warning. The great mission of the socalled silent screen is to raise the spiritual standard of the people, cultivating its taste for the beautiful and true, drawn chiefly from reality. The cinema, far from being silent, speaks a universal language to heart and mind.

Dr. Alberto Lutrario
Member of the International Health Committee of the League of Nations.
America is one vast landscape. It is certainly the home of a magnificent wealth of scenery, created by the different climates, and also partly by the populations themselves, who transfigure more and more the native physiognomy of the land.

Spanish America, more especially, is a veritable panoramic feast, a storehouse of beauty for the tired eyes of the old world, weary of its own geography, grown static and stale by familiarity. A sprinkling of groups of men, cities and villages scattered throughout vast stretches of bounteous land, which absorbs and conceals, as it were, the human element, and where geographical phenomena and the splendour of the local flora and fauna prevail.

Looking towards our Continent, Europe conjures up a vision of Spanish America with the far — off chain of the Andes, interminable plains, and its ocean — washed shores.

(Ed. Note) Señorita Mistral enjoys a high reputation in Latin America as a writer and poetess and an authority on all pedagogical matters. The subject dealt with in her article, which we have pleasure in publishing herewith, is one of very general interest. We do not hesitate to express our pride in the practical part we are able to play in the pursuit of what Señorita Mistral stresses as one of the fundamental purposes of such an Institute. The documentary film is a powerful instrument and one that offers great business possibilities to producers. It is obvious that it should not be abandoned to the arbitrary judgement of persons lacking in technical knowledge and general culture. The documentary film, as Prof. Jerefyeyew pointed out in our first number, is of immense value and presents the greatest difficulties; difficulties not less formidable, perhaps, than those with which the theatrical film has to deal. It should interest, entertain, and elevate, have the power to stir the spirit and to express the poetry and grandeur of the things it shows and teaches.

The conquest of sound and colour open up new and brilliant horizons to the documentary film. This Institute watches all its phases with the keenest interest, and we are grateful to Señorita Mistral for stressing its paramount importance to the Review and the Institute.
But how diverse and complex is this Chain of the Andes! The wild mountain imagined by the European is a complex system of uncultured peaks, of broad plateaus, of slopes and valleys that cut it up in all directions.

In Anahuac, the plateau turns into the richest geological station imaginable: volcanoes of fantastic shapes, set in a crystal-line atmosphere, surrounded by the most elegant and decorative of vegetation. Towards the Equator, the chain of the Andes forms the famous avenue of volcanic peaks, a kind of fantastic passage in a magnificent setting, along its whole course under the menace of that fearsome presence. Towards Bolivia, the plateau is known as the «puna», vegetation becomes scanty, but still sufficient to feed flocks. This is the country where herds of llamas, vicunas, and alpacas hold their sway — beasts more symbolic of this continent than the eagle on the shield, for in no other quarter of the globe are they to be found. After the plateaus, come the mountain chains, the «sierras», a zone intermediate between the summits and the plains; most beautiful in its variety, and the seat of towns which, like the Peruvian Cuzco, stand between the splendour of the heights and the fertile valleys, dominating two diverse zones of life and cultivation.

These mountains, so naked in their heights, so richly wooded lower down — the Dry Chain (Cordillera) and the Humid Chain, as the geographers term them — are but scantily recorded by photograph or drawing, and hardly known to their own people.

Our populations will acquire lucid and tangible knowledge of the Mother Mountain through the documentary film.

Right from its mountainous spine, our America is a plain, woody in the basin of the Amazon, steppe-like in Venezuela, a garden towards the centre of Chile.

The first, the typical tropical forest, has remained as unknown to us Americans as the mountain chain itself, the Cordilleras. Hidden in the heart of the Continent, and the living soul thereof, the forest of the Amazons is far removed from the coast, where the cities are. A few botanists have investigated some of its most essential aspects and its principal river has been crossed only by a few Indian oarsmen.
The Cinema will penetrate into this virgin zone, in which everything is still new and full of the beauty and mystery of the infancy of the world. The film will record the abundant foliage and the exquisite blossoms of the rarest and most aristocratic vegetation, vegetation to be found neither in the Hindustan forests nor in the Sudanese. The most powerful and colossal of these growths will yield photograms which will be to botanical literature what the ancient statues of Hercules and Jove are to the literature of the plastic arts.

These films will show us the rich life of rubber, bambu and liana, through which the deer of the Mexican valleys run swiftly and the Brazilian jaguar passes in a terrifying golden flash.

The American plain is a kindly region to mankind. The Argentine «pampa» is the freest community of men that this planet has created. Noble and monotonous, nowhere else does a solitary tree give such a sensation of company and comfort. The ombú grows human and becomes the Booz of the vast green plains.

The tamed plain, the Europe-like plain, which the hand of man has turned into fertile fields and cultivated with love, like the Chilean plain, proves by its circle of orchards and its perfect vineyards that we have in America lands similar to those of France and Italy, where the primordial wilderness has become a land of wealth and plenty.

America, in its geological, vegetable and animal aspects is a formidable virgin block of our planet. The descriptions of Humboldt, Reclus, Denis and Bruhnes have failed to make a wide appeal, because some are too arid, others lacking in synthesis; they will never reach the masses. Only the Cinema has the power to make geographically live in a way comprehensible to the popular imagination.

Modern man seeks to grasp the globe, to possess it with an avidity unknown to his forefathers. Asia has availed itself of this thirst for knowledge and reproduced in its monuments the completest expressions of nature. Our America is following in Asia's footsteps.

Maps appeal only to geographers. But children, like their
elders — who are even as big children in spirit — have a particular dislike of maps, a dislike with which I was only too familiar in my ten years’ teaching experience. Nothing more inert and aloof than maps could have been devised to teach something vital and concrete. Islands, however beautiful, lose all appeal to the emotions. Fjords become mere blue traceries; forests a dull green patch, the majestic line of the mountains a dark serpentine line that conveys nothing to the imagination.

To a child of ten a map is as remote a thing as a theological problem.

This pedantic and paralytic form of teaching will begin to quicken with real life by virtue of the cinema, which will show living landscapes.

It will give voice to the river’s flow, clothe the ocean wastes with colour; galvanize into life the serpentine line of the mountains and the little black rings that indicate the towns.

The new form of teaching will give organic form to the multitude of separate visions created by the cinema. Thus we shall have no arid text, but animated geography, that long-felt want, which all of us have felt: geography which will show the world to the child as the busy platform where men and beasts and plants live and have their being, not separated by artificially parallel lines, but merging harmoniously one with the other.

I believe that the documentary film will bring our minds into touch with the European mind, and that for efficacy as a medium of information it will be superior to any written propaganda, which is so generally trite and distorted by exaggeration. The film will tell of our beautiful country without hyperbole and without risk of falsehood.

The Educational Cinematographic Institute can do for us what no other International Institute in Europe has done by inciting the studious and the well-disposed to become acquainted with our land, pursuing the paths of work already accomplished, uniting them for a single purpose and purifying by the documentary and geographical film the morass of banal and ill-fashioned films which flood our markets. It need not come into clash with any
industrial interests in order to accomplish this purpose. It will suffice to point out to the American peoples what films there are available illustrating the problems, the panorama, the habits and the history of our land. The Latin American Countries will themselves make their choice.

In a later article, we will consider the documentary film as applied to the divulgation of the ancient civilizations of America, civilizations so much despised and so soon forgotten by the Europeans.

Gabriela Mistral.
THE EDUCATIONAL FILM IN FRANCE

(from the French)

No leader, no Alexander, no Napoleon, ever conquered the world with the lightning rapidity with which the cinema has conquered it, and no conquerer ever consolidated his conquest so firmly and lastingly.

Thirty-four years ago there was only one film screen in the whole world. The men who timidly installed it on December 28, 1895 in the modest sous-sol of a Parisian café at number 14 Boulevard des Capucins, were the brothers August and Louis Lumière, two great scientists with a predestined name. The apparition of a train at the end of railway line, advancing with a tiny engine, gradually increasing in size and suddenly looming large, as if it were going to invade the whole room and swallow up the spectators, made a tremendous impression. Nothing of the kind had ever been seen anywhere. In 1898, under the National symbol of the Gallic Cock of Pathé and that of the Marguerite of Gaumont, film screens were put up in most of the big cities of the world; then little by little, the great French invention affirmed its sway. Today the cinema is an ubiquitous and indispensable feature of civilization, and its suggestive power is unlimited.

Having rent the heavy veil of distance, it everywhere has its cities where it commands in its quality of founder and animator. It has its people of artists, workmen and enthusiasts. Every day, in the hundred and twenty or hundred and thirty thousand theatres scattered throughout the different continents, over forty million devotees passionately follow the pictures which it offers them.

For a certain time sceptics thought that the cinema was a passing vogue, but today one cannot escape the fact that it has definitely established itself as one of our major means of knowledge, a means more powerful than the printed newspaper. Has it not long ago been pointed out that the mind is much more
responsive to sight than to hearing? And has it not been proved that words penetrate the memory more effectively when they are illustrated by living images? It was these considerations that led to the introduction of the moving picture wherever it was able to teach or instruct, to develop intelligence and to improve taste. By illustrating life in movement, the cinema educates simultaneously the eye and the mind, as nothing can give a better reproduction of Nature and her manifold secrets, and the actions of men and of animals. It does not only imitate, but it analyses, often proving superior to our senses; thanks to the system of acceleration and « slow motion » it can, by revealing their several phases, illustrate processes which escape us, such as the growth of a plant, the birth of a flower and numerous other phenomena which cannot be rendered either by words, or by the most perfectly conceived book or marvellously drawn design.

An incomparable explorer, the cinema facilitates travel in regions difficult of access, for instance the north and south poles. With it we can venture into the strange and treacherous jungle, even to the bottom of the sea, to pursue fascinating and surprising studies of its flora and fauna. It reveals to us the curious life of insects, and penetrates, with the most surprising facility in the world, the physiological laws of the human organism. Thanks to its partnership with the ultra-microscope it opens up to us the vast realm of elementary life: amoeba, trypanosoma, phagocytes, bacilli, infusoria, etc.

In this manner it investigates occult reality, but, also on occasion a poet, it is a creator of dreams, and following its own caprice, can bring to life the fairies of olden times.

An incomparable instrument of thousands and hundreds of thousands of marvels, how could the cinema possibly fail to achieve economic and social importance in human society, as we see it doing every day? And what arguments can avail to oppose its future progress and the still undreamed of developments of its immortal art? Newspapers and reviews show us that the desire to utilize the motion picture to reflect their civilization and culture is common to all nations; by its means they display their
scientific, industrial and agricultural activities, their artistic wealth, their scenery, their colonial products, etc. And it is good that they should do so, for it is up to each nation to accelerate and advance the development of its own country.

The relations of the cinema to intellectual life could not fail eventually to attract the attention of the League of Nations. In the course of the session of July 1924, the League became acquainted with the study by M. Julien Luchaire, then Expert of the International Commission for Intellectual Cooperation, and officially recognised the cinema as a new art, and one of the most powerful means of expressing and spreading human thought and of forming the mind. This gave rise to the resolution taken by the National French Committee of Intellectual Cooperation to convene a great international congress, held in Paris from September 22 to October 3, 1926, which assembled a hundred and thirty-two delegates, representing thirty-two nations. M. Julien Luchaire, Director of the International Institute of Intellectual Cooperation, was general reporter, and N. G. Michel Coissac assistant reporter. It should be mentioned here that M. Coissac had taken on his shoulders the heavy task of studying and reporting, in collaboration with M. Jean Benoît-Levy, all questions having reference to the important problems of education by the film. A great step forward was thus made.

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In this Review, more particularly consecrated to the educational cinema, we propose to show in a brief essay what France has done to place the brilliant invention of the brothers Lumière at the service of every form of instruction, and to adapt it to every environment, from the Faculties and principal Schools, the Grammar Schools, Colleges, and Normal Schools, down to the urban and rural Primary Schools, passing through the Training Colleges and the Offices d'orientation (vocation selection bureaus), to the Schools of Agriculture, Public Health Offices, and Evening Schools.

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We do not for a moment propose to re-edit the voluminous reports and long studies forming the basis of the numerous congresses; that would lead us too far. We dare modestly claim however that, having followed the cinema from its cradle, we have always taken an unfailing interest in its intellectual future and its moral influence.

Let us here recall briefly the debut of the educational film in France and the pioneers of this most useful application of the moving picture.

While this creation of scientists was from its advent hailed in most countries as a natural instrument of teaching, it was, nevertheless, a far cry from intention to accomplishment. In its beginnings the film was simply a transmitter of realities, even in those pleasing fantasies which were then popular.

Neither the Brothers Lumière themselves nor those who between 1895 and 1900 gave their energies to this marvellous invention, would have believed that its principal purpose would for a long time have been completely overshadowed by what they then considered an accessory one. But this is what happened. The theatrical cinema swept all before it, while the original and essential office of the cinema of instruction was well nigh forgotten.

The principle of the educational mission of the film was formulated definitely in 1906. The late M. Edmond Benoit-Levy, M. Leopold Bellan, former president of the Municipal Council of Paris, and the writer were among its earliest supporters. A few experiments were made here and there, followed by some tentative lectures. In September 1910 we laid before the first International Cinematographic Congress at Brussels a report on the school cinema, along with another on cinema reform from the viewpoint of morals, for the infant prodigy was already growing into a prodigal son.

Traces of lessons accompanied by cinematographic instruction in 1907 are to be found at the primary school of the rue Vitruve in Paris. Then, in 1911, M. Brucker, Professor of Natural History at the Lyceé Hoche in Versailles, illustrated his lectures by moving pictures. It was after having assisted at one of these
lectures that the Inspector General M. Damirand wrote, « I left the lecture hall convinced of the importance of the services which the motion picture, judiciously handled, can contribute to instruction. »

As far back as 1912, M. Léon Riotor, General Secretary of «l'Art à l'Ecole» addressed the successive Ministers of Education of that date on behalf of the Society, requesting them to give their attention to the possibility of adapting the Seventh Art to scholastic purposes, to open the normal schools to the cinema, and to train the masters in the use of this new instrument, which was destined to transform methods of education and teaching. But unfortunately the war impeded the progress towards this goal.

In 1913, certain Paris Grammar Schools, the Condorcet, Louis le Grand, Voltaire, Fénélon, and Jules Ferry followed the example of the Versailles School. Had it not been for the war all the secondary schools of Paris and a large number of grammar schools and colleges in the provinces would soon have had their cinemas.

In the capital and the provinces a certain number of teachers, much to their credit, installed cinema material at their own expense, chosen at random from stocks which had been rather artificially assembled by the first publishers, Pathé and Gaumont. These were far from fulfilling the purposes of instruction for which they had been made, for close and sympathetic collaboration between experts, specialists and pedagogues did not yet exist. Our thanks are due to Dr. Doyen who in 1895, realising that an interesting process such as a surgical operation could not be made clear in its successive stages unless the cinema were employed, made and projected his own films for «his personal instruction and that of his pupils». This famous operator was indeed the first to show the importance of the cinema from the point of view of instruction. Despite this fact Americans and Germans both claim this honour of precedence for their own scientists and contest France's priority in the field.

Since 1901, Professor Garrigon Lagrange had devoted himself to detailed studies in physics and chemistry, which justify
his name being inscribed in the list of pioneers of the scientific cinema.

We will not say more on this subject, but refer those who from necessity or curiosity wish to follow the long and tortuous course of the cinema through its many transformations and its contributions to social and spiritual life, and those who wish to become acquainted with the work of its apostles, (le Collette, le Bruneau, Paul Drouard, and others who are still in the thick of the fight), to Part IV of the «History of the Cinematograph from Its Origins to the Present Day» (1).

On November 23, 1915, M. L. Breton, Deputy to the Chamber, placed on the table the draft of a resolution, requesting the Minister of Education to form an extra-parliamentary Commission to study the best means of diffusing the utilization of the cinema in the different branches of instruction.

Indeed on March 23, 1916, this Commission was formed by special decree: but its report, entrusted to M. August Besson, did not see the light till 1920. This commission composed of parliamentarians, directors and inspectors of education, professors and industrialists, assisted at numerous experiments: then convinced of the practical possibilities of the cinema, and desirous of promoting them, it invited the Syndicalist Chamber to make every possible effort to substitute films of a nature calculated to exalt generous and noble sentiments such as patriotism for those likely to produce a harmful effect on the imagination of the young and even on uneducated adult audiences.

The ministers who have encouraged, the educational film are numerous; we will only mention a few, such as: M. Paul Painlevé, André Honnorat, Edouard Herriot, Léon Bérard, Henri Chéron, Richard Ouenille.

(1) Histoire du Cinématographe de ses origines jusqu'à nos jours. Preface by I. L. Breton, former Minister, Member of the Institut. A work honoured by subscriptions from the Ministry of Foreign Affairs and of Agriculture, the Undersecretariat of technical instruction of the City of Paris, the Councils General of the Seine, the City of Lyons, etc. Paris 1925. GAUTHIER VILLARS and Editions du Cinéopse, pp. 515-587.
The City of Paris, acting on the suggestions of M. De Vill and Léon Rior, Municipal Counsellors, has, since 1921 taken a series of initiatives which have had a most favorable influence. The Municipal Council has thus set up cinemas in schools, established the Paris Cinémathèque (Film Collection) and a commission of Enquiry and has, since 1923, included in the municipal budget a substantial sum dedicated to producing films for the purposes of vocational selection. All this was done in perfect accord with the General Direction of Technical Instruction. Encouraged by public and administrative support the cinema is progressing slowly but surely.

It is true that though the screen has been installed in thousands of schools, grammar schools, institutions and Faculties, it has not yet been officially established as a compulsory adjunct, but it is none the less, officially approved, encouraged and supported, and we have every reason to hope that in the near future, thanks to the National Office of the Educational Cinema, the foundations of which M. Herriot formerly laid, cinographic teaching will become compulsory.

We should note in this connection that ten or twelve thousand official establishments already possess apparatus for moving pictures. If we add to this figure the free schools, the boarding schools, the soldiers' hostels and clubs, and including the after-school institutions, we count the different foundations, municipalities and associations of all sorts, it is no exaggeration to say that from sixteen to eighteen thousand apparatus are ready for use for school and educational films.

Within a short time this number will be doubled as a result, on the one hand, of apparatus better suited for the purpose and the use of films of smaller dimensions and more accessible in price; and on the other hand, of the multiplication appropriate films and the extension of regional or even local film collections in accordance with a methodical program now in process of realization both at the Ministry of Public Instruction and at the Ministry of Agriculture. As an innovation, several commissions composed of educational authorities and technical experts have been nominated
to examine films covering every field of instruction, including vocational training and guidance, agriculture, public health, etc.; the function of these commissions is to open competitions among specialised publishers on certain subjects the need for which has been recognized, or to view films presented by publishers and authors, to accept them with or without modifications, or to reject them. It sometimes happens that these Commissions themselves propose film subjects and even scenarios, leaving to the technicians the task of adapting them.

There are not a few publishers at the present time who have made a specialty of the production of educational films; some of these publishers have acquired a certain authority, restricting their activities to definite branches, such as scientific and technical films, films for vocational guidance, social and hygienic, agricultural and industrial films, etc.

Generally speaking, it may be said that our big firms dispose of a special service, to deal exclusively with instructional films classified in authoritative catalogues. The day of improvisations has passed; everywhere it is realized that films for the school cannot be treated as a commercial matter and there is no longer any hesitation about having recourse to the advice of experienced teachers, clever technicians, and when, necessary, specialized students.

According to many writers, we still lack educational films. It all depends what is meant by this word, and the importance given to the teacher. Being fairly well acquainted with the catalogues at the disposal of the public, and having, so to speak, dissected them, we can claim that there is a long series of good films mainly devoted to subjects of instruction; natural science, geography, history, etc., and a remarkable series on physical education, sport, arts and crafts, metallurgy, and mechanics, aeronautics and aviation, agriculture, the rural industries, vocational guidance, and training schools, public welfare, hygiene, medicine, surgery, etc.

Mention must still be made of the documentary films consisting of those built up from a scenario or picture, and those composed of elements taken from the news reels; these include
a far larger number of subjects appropriate to the education of youth than is generally supposed.

Nor must we forget that thanks to the complicated apparatus of micro-cinematography provided by M. Charles Pathé in 1909, Dr. Jean Comandon was able to reveal on the screen intimate phenomena of animal and vegetable metabolism and the development and movement of infinitesimally minute beings. It is not generally known how much patience was required to seize from the objective the precise moment of the anticipated phenomenon, in order to grasp and fix its successive stages on the cinematographic film and above all one has no idea of the number of fruitless attempts which preceded the capture of such processes as the division of a cell, an instance of phagocytose, etc.

The revelation of these marvels of a world beyond the grasp of our organs of sense has consecrated the science and mastery of Dr. Comandon and established his world reputation. No further particulars are necessary to justify us in affirming that as regards instructional and educational films, France has nothing to envy the New World; she may even be the richer, but she has yet to take stock of and publish her inventory; and we know that this task is now in hand.

(To be continued).

G. Michel Coissac.
There is no doubt that teaching is most efficacious when assisted by ocular demonstration, when the student is able actually to watch the thing he is studying.

As a rule, however, this is unfortunately not possible, either because circumstances do not allow the pupils to be present all together, or because many practical experiments are not fully demonstrable. This applies especially to the field of medicine, for instance to surgery, gynecology, etc., which demand many illustrations of such phenomena as operations, childbirth, and so on.

Such demonstrations may be satisfactorily replaced by moving pictures which, much enlarged, are made accessible to the spectator, adding the force of vision to the spoken word. Such moving pictures may be carried out either in black and white or in colors, by means of mosaic plates, which latter are preferable as the former reproduce only imperfectly the shading of red objects, the color most frequent in operations, making them appear almost black.

In spite of this, projections in black and white are much more frequently employed than colored projections, because they can be reproduced any number of times, can be printed on paper, and are less costly.

But both these methods have the great disadvantage of immobility, as a result of which it is only possible to reproduce single phases of a vital process.

(Ed. Note) We have pleasure in publishing herewith Prof. Tietze's article, and shall always be happy to open our pages to any papers dealing with new systems and processes and accounts of all that is being achieved in the domains of technical knowledge and science for the improvement of the cinematograph and so as to render it available for the purposes of teaching and general culture.
The motion pictures of the cinema eliminate this defect and render possible an analysis of complicated processes. For the above reasons, color cinematography ranks first in the field, also here, although it has not been possible to make an extended use of it, because the various processes which it includes, that is to say, the cumulative synthesis, are obstructed by numerous difficulties. Among these are the diminished luminous sensibility, the outlines which exhibit exaggerated or decomposed coloring, the complicated apparatus.

The « Emil Busch » Co. of Rathenow in Germany has succeeded in creating a process of colored cinematography for medical instruction which is free from all these defects and which has been used for over a year with satisfactory results in the surgical clinics of the Universities of Berlin and Marburg.

This process also is based on the cumulative principle, that is to say, with the auxiliary of philtres, colored respectively in blue-green and orange-red, by means of which two partial negative visuals are obtained differing only in tone.

On printing such negatives the positives are obtained for projection on the screen by means of two objectives; the colored films in green-blue and red-orange produce one red and one green image which unite. Thus one single image is formed of approximately natural tints, and fully meets many practical requirements and above all those of medicine.

The two-color system, however, does not reproduce the chromatic nuances as perfectly as a multi-colored process; yet it is adequate for the reproduction of the red – orange and the green –blue, with parts in black and in white, and also for white, grey, black, light grey-blue, and dark blue.

In contrast to the multi-colored system, this method has the advantage of a simple technical application and therefore of greater economy, especially as a normal film ribbon is used for taking the photograph and for the projection.

Figure one shows a Busch Color film and a normal film, and demonstrates how the partial images of the color film when united have the size of the normal cinematographic image, and that

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they are inclined at an angle of ninety degrees. This inclination permits the use of the usual longitudinal format and is a result of the horizontal course of the film during the making.

Consequently the film ought to run horizontally, also during the projection, for otherwise the pictures would be reproduced with the aforesaid inclination of ninety degrees. Now, in order to be able to use ordinary projectors the vertical movement of the film is maintained and the angular inclination of the images avoided by means of adjustment prisms.

Figure two shows the filming system and the finder.

It is composed chiefly of a double prism with a reflective semitransparent surface which divides the luminous rays reaching it,
on the film, which images differ only in tone, after the luminous rays have passed through the reflecting superficies \( s_2, s_3, s_4 \) into the prisms installed behind the objectives. As the design plainly shows, there is an equal distance, not only behind, but in front of the objectives; the result is a perfect identity of size of the partial images, no matter whether they represent distant or near objects. Moreover, the system of the division of the luminous rays produces figures taken contemporaneously and rendering the most rapid movements without incurring variations of position. The system is therefore absolutely free from the defects of parallax in time and space, thus avoiding the colored outlines so often deplored in other systems.

It possesses another very remarkable advantage, inasmuch as it can be used simultaneously as finder, thus making it possible to observe the object while filming it, to choose the most favorable view, and to regulate the focus at any moment. This is done by means of the reflecting surface \( s_3 \) which does not reflect all the light for the production of the red figure \( b_1 \), but transmits directly one fifth onto the opaque plate \( m \), thereby forming the image \( b_3 \), only faintly luminous though sufficiently so for observation. This image is adjusted by the adjustment \( o_3 \), so that the eye sees the image \( b_4 \) through the lens \( o_4 \).

The system of projection makes use of one of the ordinary curved reflecting lamps. Behind the gate there is a double system of prisms for adjusting purposes; this receives the rays from the partial images, directing them by divers axes to the two projection objectives.

The greater distance between the axes permits the use of very luminous objectives which is a detail of the greatest importance in color projection, demanding naturally more light than black and white projections. With the help of the philtres, the objectives project on the screen one red and one green image which, by regulating the objectives, come exactly one above the other.

The whole apparatus consists of the camera, the illuminant (constructed in two different models) and the color apparatus, which is attachable to the cinematograph projector.
Figures three and four show it closed and opened.

The movement is produced by an electric motor, the contact of which is shown in figure four on the left below; there is also a meter, a tachometer and a punch to stamp the films, besides the already mentioned finder which can be used while filming and is completely free from parallax.

As is shown by figure 4, the two vertical reels, which include a hundred and twenty metres of film, are fixed at the sides of the apparatus. The film is adapted to the horizontal passage channel by means of two rollers. Their movement is not regulated by clamps but by an accurate maltese cross gearing, allowing the use of a shutter with an opening to two hundred and thirty degrees. The ordinary apparatus for non-colored filming have much smaller apertures so that less light is needed for the formation of the image. The same frequency of images therefore causes a stronger illumination of the film, which is exactly what is required, as the films absorb a great deal of light. The images taken this way are better connected in the projection and are therefore less disunited.

The shutter could not be installed between the objective and the film, as is usual; but had to be placed before the objectives in order to obtain an absolutely synchronous opening and closing of the optical systems relating to the partial images.
The diagram shows only one knob of the shutter placed in the cylindrical attachment to the machine. By pulling this out and turning it, the aperture may be regulated according to a graduated scale varying from 120 to 230 degrees.

Fig. 4

The machine is also provided with two screws, one at the base and one on the cover, for fixing to an ordinary stand or on a Busch illuminant.

The Illuminant.

Figures 5 and 6 show the two forms of this apparatus for filming surgical operations.

Figure 5 shows the fixed apparatus invented by Prof. Klapp
of Marburg, in which the photographic apparatus is suspended almost perpendicularly and worked from a special platform to which a short ladder gives access.

By means of a special mechanism the machine can be inclined, turned on one side or moved upward; it is balanced by weights.

The support, made like a bridge, has at the right end six projectors, containing three lamps of two hundred and fifty watts and three of five hundred, adapted for tensions from one hundred and ten to two hundred and twenty volts and furnishing an aggregate of two thousand two hundred and fifty watts. These projectors illuminate horizontally six oblique mirrors which are visible in the centre of the apparatus, conducting the light downwards on the field of operation, exposing it to an almost shadowless light. The heat produced by the lamps is rendered bearable by the use of glasses which absorb the heat and form a satisfactory substi-
stitute for the basins of water which are an obstacle. The support also has a switch-board with six switches for moving each single lamp, or the series; further two contacts, one for the electric plant and one for the small motor of the filming apparatus, which is regulated by a pedal lever.

This iron support, varnished white, was invented for taking pictures which are beyond the visual field of the operator; and is constructed so as in no way to interfere with the operative process.

The distance of the platform from the floor is two metres, its length is three metres twenty and its inclusive height three metres fifty. This support is also excellently adapted for taking photographs.

In all other cases, when the picture has to be taken in the oblique or horizontal sense, the illustrated support of figure 6 is used, which, differing from the Klapp system, is moveable and can be taken anywhere.

It is formed of two high supports and two lower ones connected by crossbars and rungs. On the rungs an adjustable platform for the photographer can be placed.

Between the two high supports there is a bracket bearing two reflectors with lamps of a thousand watts each and the machine. This can be moved up higher from one metre fifty to two-forty and is balanced by two weights.

The machine is on a revolving disk so that it can assume any position, whether horizontal or vertical. Also the reflectors suspended from a double jointed support can be moved in any direction. The support, constructed in wood, has four rollers by which to move it; these can be put out of action if immobilization is desired, by means of screws placed near the feet of the support.

The projector.

In the Busch apparatus the projection is effected by means of a double objective, the upper objective is moveable by means of a horizontal and a vertical screw, so that the two partial images
can be placed one above the other. This apparatus along with a normal black and white projection objective placed lower down, is mounted on an ordinary carrier that can run upwards or downwards by means of a handle: in this way it is possible to alternate colored with black and white films.

The apparatus is specially adapted for a type of projector suited for a posterior illuminant, but it can also be used for other apparatus.

Figure 7 shows the projector in which, on the right, the exchange apparatus is visible with its two objectives placed below, so that the system for the colored projection is placed behind the aperture of the images, in order to project them in color.

Figure 8 shows the same projector with the objectives raised, ready, that is to say, for the black and white projection. The illumination, as has already been said, is obtained by a normal lamp with a curved reflector.
It should be noted that the handling of the apparatus is relatively simple, varying little from that of the projectors in black and white. In pictures in which only panchromatic films are used, for instance the Agfa, it is necessary, from time to

time, to insert occasional white effects, that is to say to prepare two partial images of a white object (such as for instance a plaster plate) which coincide in their chiaroscuro, but it is not necessary to have frequent recourse to this precaution, in view of the uniform quality of the Agfa panchromatic films.

Working with artificial light there are no differences of illumination and the motor motion leaves the operator sufficient time to put the figure in focus and keep the angle best suited to the picture.

Nor does the projection demand much supplementary work,
for it consists only in matching the figures and eventually in moving the apparatus when different films have to be shown.

The Busch Color Film, apart from the panchromatic photographic material, is not more expensive than the ordinary film

![Fig. 8](image)

and does not require special treatment, so that any developing and printing establishment can undertake the development of the negatives and positives.

Dr. P. Tietze

_N.B._ The apparatus described in this article was exhibited at the Barcellona Exhibition, in the Projection Hall (German Section, Stand 1).
Instructions.

Coloured reproduction and if possible imitation of voice.

While the pictures are being projected, it is necessary to repeat, together with the scholars, the letter in question, and the word beginning with the same, slowly and articulately. For instance: B ba-na-na, B ba-na-na.

It will also be found necessary to repeat the projection of every picture, especially those showing the formation of the letters. After the first projection of each image (animal, object etc.), there should be a pause of a few seconds.

The words used have been very carefully selected with a view to the conceptions equally well known and understood by children in both town and country, and care has been taken to avoid all words which might have a double meaning, likely to lead to misunderstandings.

The association and conjunction by word of mouth of sound, picture, formation and motion, will doubtless impress the shape of the various letters of the alphabet more profoundly on the childrens and adults’ memories than any other system could.

Since no word beginning with the letter X has been found which is familiar to every scholar, this letter can only be committed

(Ed. Note) Mlle. Alberti, of Budapest, who for many years past has devoted herself to the question of applying the cinema to new methods of teaching, contributes the scheme of a cinema alphabet which she has worked out in collaboration with Dr. Kupessy, all rights in which have been reserved.

As Prof. Santini wrote in the first number of the Review, the question of ocular demonstration in elementary teaching carries us far back in years, and indeed in centuries. It is our intention to return later on to this subject and to illustrate, in a systematic way, all the efforts which have been made during the past twenty centuries to replace oral by visual teaching.
to memory by its formation being repeatedly projected and the letter itself repeated by word of mouth at the same time.

Note.

The pictures are projected not from nature photographs, but from line drawings, developing after the fashion used in advertisements. When the picture of a letter is fully developed a thick black line must run through it, from left to right, as if it were being written by a hand. This serves to turn the various shapes and sizes of the objects represented into a smooth, calligraphical letter.

The various objects which form the shape of each letter of the alphabet need not always be multiplied, placed side by side and thus form the shape desired. It is also possible for a single object to form the shape by rolling, crawling, etc., in the direction in which the letter is shaped in writing it down. A thick black line, ultimately forming the letter, follows the object in its movement along the lines necessary to bring out the desired shape.

A

**Apple** - An apple-tree laden with large ripe apples. One by one, the apples drop from the tree and form, on the ground, the letter A.

**Aster** - (Fig. 2). A large bunch of asters, a hand picking them lays them one by one on a table, shaping the letter A.

Other figures which can be used eventually: Ants, Arrows, Axes.

B

**Ball** - Balls flying about the screen form the letter B.

**Banana** - (Fig. 2). Large clusters of bananas. They drop one by one and form the letter B.

**Bird** - (Fig. 3). Birds perched on trees and circling in the air. They are grouped in their flight in the shape of the letter B.

**Bell** - (Fig. 4). Small metal bells form the letter B. on the screen.

**Book** - (Fig. 5) A letter B is built out of books.

Other figures: Bat, boot, bottle, brick, boy, button, branch, brook, bear, berry, bed, bee, boat, belt, beetle, basket, butterfly, blacksmith, blackboard.
C

CRAB - Crabs creeping about form the letter C.

CARROT - (Fig. 2). A basketful of carrots on a table. A child’s hand overturns the basket and lays the carrots on the table one by one, shaping the letter C.

COCK - (Fig. 3). A cock crowing on a rubbish-heap. Presently he flies down, another cock appears beside him, then another, thus forming the letter C.

CH

CHOCOLATE - (Fig. 4). A pile of cakes of chocolate. A child’s hands forms the shape of the letter Ch out of them.

CHAIN - (Fig. 5). A metal chain, with large links, lying on the ground. A child’s hand picks it up and lays it down again, shaping the letters Ch on the ground.

Other figures: corn, cricket, calf, camel, cannon, cap, circle, cook, coal, cross, crown, cuckoo, cow, cucumber, coin, cup, clock, crest, cradle, china, chicken, child, cherry, chestnut, Christmas-tree, cotton, cat, cabbage, card, copybook, comb, crescent, crocodile, crow.

D

DRUM - A drum, with the drumsticks beating upon it. The sound should be imitated. The drum, turning on its side, rolls away, then comes to a standstill. Others follow in the same manner, placed side by side gradually forming the letter D.

DOLL - (Fig. 2). Typical wooden dolls, standing stiffly side by side, form the letter D.

DICE - (Fig. 3). Dice are thrown and roll about on a table. As they fall, they form the letter D.

Other figures: daisy, dagger, deer, dog, duck, dwarf, donkey.

E

EGG - The letter E formed out of eggs.

EYE - (Fig. 2). Eyes with long lashes are projected in line drawing on the screen one by one, forming the letter E.

Other figures: ear, earth, eagle, elephant.
**F**

Frog - Frogs jump out of a marshy pond one by one and placing themselves beside one another form the letter F.

Fly - (Fig. 2). Flies flying about on the screen, sticking to a sugar-loaf-shaped fly-paper in the shape of the letter F.

Flag - (Fig. 3). *Coloured picture.* The country's flags fluttering in the wind. Then the wind stops blowing. The flags take up their places one by one, forming the letter F.

Fruit - (Fig. 4). Various kinds of fruit in a basket. The basket is upset, the fruit rolls out, taking up its place to form the letter F.

Other figures: fairy, fan, finger, fish, fork, fox, fist, fire, fir-tree, flute, flying, foot, fiddle, flock, frame.

**G**

Grape - Large bunches of grapes. The berries drop one by one, forming the letter G.

Goose - (Fig. 2). From a corner of the screen geese walk in single file towards the centre. They form the letter G like the cocks at C.

Other figures: Glass, glove, gun, gardener, gold, grass, goat.

**H**

Hunter - Toy figures of typical huntsmen, like story-book figures, drop into line to form the letter H.

Horse - (Fig. 2). Horses galloping without riders. The horses (reduced size) come to an abrupt stop all in line, and form the letter H.

Hook - (Fig. 3). A boxful of hooks (enlarged) is upset, the hooks forming the letter H.

Other figures: hat, heart, helmet, hen, hair, hoe, hammer, hand, hard, hood, house, honey, horseshoe, head, hippopotamus, handkerchief.

**I**

Ice - On a thin sheet of ice, a child’s hand, holding a stick ending in an iron point, cracks the ice in the shape of the letter I.
INK - (Fig. 2). A bottle of ink is upset; pouring out, the ink forms the letter I.
   Other figures: ivy, island.

J

JACK-IN-THE BOX - A Jack-in-the box jumping out and withdrawing repeatedly to show its action. Other similar toys falling in to line form the letter J.

JAM - (Fig. 2). A jam jar of the universally known shape. It is upset; the jam, streaming out, forms the letter J.
   Other figures: jewel, jug, jar.

K

KNIFE - A number of knives on a table. A hand flings the knives at a wall, where they stick with their points, forming the letter K.

KITE - (Fig. 2). Children's hands fling kites. Up in the air the kites form a letter K together.

KEY - (Fig. 3). Keys appear on the screen one by one and form the letter K.

L

LIZARD - Lizards crawl out from among stones on rocky ground. They fall into line lengthwise and form the letter L.

LAMP - (Fig. 2). Small lamps are placed beside each other, lit consecutively, forming the letter L.
   Alternate figure.

LIGHT - (Fig. 3). Points of light being projected on the dark screen consecutively, in the shape of the letter L. (Care must be taken that the impression given should not be that of fire).

LOCK - (Fig. 4). Locks of doors forming the letter L.
   Other figures: lilac, lantern, leaf.

M

MOUSE - Mice running forth from a hole at the bottom of the wall. In a top corner of the screen, a cat's head appears
suddenly, then withdraws quickly. The mice seem frightened, scampering to and fro, then slowing down join each other, flattening themselves, and in a group form the letter M.

MOON - (Fig. 2). Half-moons, joining each other, form the letter M.

MONEY - (Fig. 3). Various coins, tumbling out of a purse, shape the letter M.

Other figures: marbles, matches, milk, monkey, mosquitoes, mallow, mallet, mulberry, metal, moss, monk, mushroom, mirror, mouth.

N

NEEDLE - A packet of needles, the needles slipping out of the packet one by one and joined to form the letter N.

NUT - (Fig. 2). A basket is upset on the table; large nuts roll onto the floor out of it, there to form the letter N.

Other figures: nail, nightingale, nose, nest, nun.

O

OWL - A large blinking owl sitting on a branch. The branch begins to grow in the shape of the letter O and as it grows other owls appear on it. When the letter O is formed the picture is removed to a greater distance to get a better perspective.

ORANGE - (Fig. 2). Coloured picture. One orange visible on the screen. Then another orange appears, and the next, etc., so forming the letter O.

Other figures: oxen, oars.

P

PEN - Pens slipping out of a box form the letter P.

PIGEON - (Fig. 2). Pigeons forming the letter P in their flight.

PIPE - (Fig. 3). Clay pipes appearing one after the other form the letter P.

Other figures: potato, paint, penny, porcupine, pebbles,
palm, parcel, pease, pearls, peacock, pencil, pin, pot, plum, puzzle, paper, plant, plough, pistol, poodle, pig, plate, pig-tail, plait.

PH

Photo - A camera out of which flutters a photo. This is repeated. The camera disappears slowly, the photos adjust themselves in the shape of the letter PH, on the screen.

Q

Queen - The typical queen of story-books appears in the centre of the screen, with crown and sceptre and long train, etc. Then another, etc., forming the letter Q.

R

Rabbit - Rabbits scampering about on a lawn. They cuddle up to each other, thus forming the letter R.

Ring - (Fig. 2). A couple of hands; the right hand slowly draws a ring from the left, shows it, then drops it. The action is repeated. The rings roll slowly into place, forming the letter R.

Other figures: rain, ribbon, racket, railway, rope, rose, river, raspberry, raven, rat, rake, rice, rider, road, root.

S

Soldier - Toy soldiers falling into line form the letter S.

Sunflower - (Fig. 2). Sunflowers growing out of the ground one by one. The sun rises and begins to shine in at the upper corner of the screen. The sunflowers are all suddenly turned towards the sun, shaping the letter S.

Scissors - (Fig. 3). Scissors, opening and closing to, form the letter S.

Snail - (Fig. 4). Snails crawl out from among pebbles, carrying their houses on their backs. They place themselves so that their group forms the letter S.

Strawberry - (Fig. 5). Strawberry plants, carrying berries, grow from the ground in a group that forms the letter S, or the berries are laid on a table in the same shape.
Snake - (Fig. 6). Snakes creep forth from a corner of the screen and form the letter S.

Other figures: sailor, slipper, snow, spoon, stairs, stamp, star, stocking, spade, swan, swing, spectacles, steam, spark, stag, stove, smoke, sword, sack, saw, sausage, stick, salt, seed, sceptre, sleigh, skate, stone, steel, spider, string, screw, sponge, sail, soap, seal, silver, sparrow.

SH

Ship - A surface of gently rippling water. Small ships appear on the water and placing themselves one beside the other, they shape the letters SH.

Other figures: shrubs, sheep, shepherd.

T

Tree - A tree that starts to grow and evolves the shape of the printed capital T.

Train - (Fig. 2). A T-shaped toy railway track, with a toy engine and train running up and down it.

Turtle - (Fig. 3). Turtles crawling beside each other form the letter T.

Trumpet - (Fig. 4). Toy trumpets appear one by one, together forming the letter T.

Other figures: table, tiger, track, tobogan, toys, tower, Turk, tooth.

TH

Thimble - Thimbles joined together form the letters TH.

U

Umbrella - Wet umbrellas that seem to have come out of the rain are closed up by an invisible hand and placed side by side to form the letter U.

V

Violet - Violets grow out of mossy ground in the shape of the letter V.
VIOLIN - (Fig. 2). Small toy violins, half covering one another, placed side by side to form the letter V. Other figures: vegetables, vases.

W

WRITING - Plump children's hands, writing clumsily the letter W. WATCH - (Fig. 2). A hand behind a shop-window pane arranging watches of equal size in the shape of the letter W. The rest of the shop-window disappears and only the watches remain. WHIP - (Fig. 3). Children's toy whips arranged in the form of the letter W. The printed capital W is formed by four whips, the lashes curving round the sticks, slanting right and left in the shape of the letter W. WATER - (Fig. 4). A jet of water issuing from a watering-hose. The hose disappears, the spout of water remains visible on the screen. The water, as it falls on the dust, forms the letter W in a damp line.

X

The letter X is formed by a thick black line, developing in the direction of writing, on the screen.

Y

YARD - Yard measures appearing one beside the other form the letter Y.

Z

ZEBRA - Coloured picture. Zebras galloping on the screen fall into line to form the letter Z. ZIG-ZAG - (Fig. 2). Zig-zag lines appear on the screen to form the letter Z.

Stefanie F. Alberti.
A DISCUSSION OF MOTION PICTURES
IN THEIR RELATION TO CHILDREN AND EDUCATION

A subject of this kind divides itself logically into five parts.
1. The motion picture as a "teaching tool", under the head of which we may discuss the experiments made in teaching films, the uses already made of films in schools, and the future possibilities as viewed by leading educators and students of the subject.
2. The effect of motion pictures on children outside the schoolroom. That is, the use by children of pictures in the regular theatres, and the influence exerted by the screen on their minds and habits.
3. The attendance of children at theatres and the results as discovered by psychologists who have conducted studies of these conditions.
4. The attitude of educators toward motion pictures with special reference to the attention being paid by colleges and universities.
5. What the motion picture is doing to further the cause of education and to meet its responsibilities both in the theatres and in schools, and institutions.

As a teaching tool, the motion picture is used in classroom work to make the lesson more understandable and more securely grasped by the child. The motion picture is, of course, already playing a most important part in the educational system throughout the country and this part will be increased as quickly as suitable films are ready for distribution.

Development of the teaching film has been one of our major objectives since the Motion Picture Producers and Distributors of America was organized in 1922 and it was one of the first suggestions that Will H. Hays made. He went to Boston in the early part of the summer, 1922 to speak at the National Educational Association convention and at that time he urged the use of pedagogic films in classrooms. At his suggestion, a committee was appointed to study the possibilities of pedagogic films and the report of that committee was highly complimentary to the method of instruction.

(Ed. Note). An eminent collaborator of the Review resident in the United States contributes the following paper which we have much pleasure in publishing. It deals in an arresting manner with the present situation of the American cinema in relation to the young and to education.

This subject will be further dealt with in forthcoming numbers in a series of original articles by authorities in the world of education, industry and politics.
For a number of years there have been so-called educational films for classroom work. Some of the entertainment pictures have been converted to the classrooms also, but no big company really began in a serious way to consider pedagogic films until about two years and a half ago. The several companies, all members of the Motion Picture Producers and Distributors of America, began experiments looking toward the accomplishment of the purposes Mr. Hays had outlined in 1922. These experiments have advanced with every indication of success.

The Eastman Kodak Company at Rochester, one of the companies interested in the project, acquired the services of Dr. Thomas E. Finegan, chairman of the Committee on Visual Education of the National Education Association, and with the advice and assistance of other well-known educators, undertook a two-year experimental program.

On this point we do not think it necessary to insist. We advise our readers to consult an article by Dr. Finegan, appearing in the second number of the Review.

It must be made clear that it is not proposed to substitute films for present school methods, or to revolutionize the means of education, but simply to use them as an addition to present devices.

Of course, the teacher in the classroom will always be the most important element in instruction. The oral teaching, interpretation, and explanation are the vital factors in education. And the textbook remains essential. But the screen does serve a splendid purpose and its use is the most important addition to teaching methods in the last century.

Educators generally are agreed upon this point. Dr. John J. Tig- gert, former United States Commissioner of Education, has called the screen "the most powerful weapon against ignorance the world has ever known."

Arthur Brisbane, the editorial writer, has declared that it will be "literally possible to teach a child in three quarters of an hour and to teach well, more than the child can learn under present methods in a dozen school days of eight hours each."

Whether this is true or not remains to be seen, but certainly it is that pictures give a more lasting impression. They make geography live. They can reconstruct history. They can catch phenomena of nature and reproduce them on the screen for close study.

The motion picture today is catering to the American family. That doesn't mean that every picture is to be made entirely suitable for the 12-year-old child, but it does mean that the motion picture industry is determined that the prevalent type of book and play about which you perhaps know too much already, does not become the prevalent type of photoplay.

It was this determination — a determination to establish and main-
tain the highest possible moral and artistic standards of motion pictures — and to put the motion picture to as many uses for the public good as possible that the Motion Picture Producers and Distributors came into being six years ago.

The industry has been concerned for some time now in finding out exactly what the effect of pictures is — on behavior, as an educator, and as a force for good.

Fortunately, the department of psychology of Columbia University was similarly minded and, on its own initiative, is now carrying on an extensive study, the first tentative findings of which may be presented to you. Men of much training are engaged in the study and their findings are immensely interesting.

One of the questions asked was: How many children go to the movies and how often do they go? Quoting from the tentative report, signed by R. S. Woodworth for the Columbia group:

"A public school in one of the poorer sections of New York City was selected for investigation. The teachers in this school were asked informally how frequently their children attended the movies, and the reply was often to the effect that 'they all go every day'. Then the children, about 1,750 in all, were asked how many times each had attended in the preceding two weeks. The results were astounding to the teachers of these children, for the average attendance per child was only 1.15 times per week.

"In August 1926, we made what seemed a fairly adequate sampling of motion picture audiences in New York City", the report continues. "Twelve theatres were selected, of varied locations; two in the main theatre district of Manhattan; five in more local theatre districts, in Harlem, on Lexington Avenue near 42nd Street, two in Brooklyn, and one in Newark; four in residential districts of Manhattan and the Bronx; and one in a suburban village (Mamaroneck). The total attendance at each of these theatres was counted on three full days, by one or two enumerators, who were allowed to sit near the entrance with slips for checking all who entered. Each person who entered the theatre was checked according to sex, and as belonging (by inspection) in one of the following age groups; under 4 years, 4-7, 8-12, 13-16, 17,20, above 20. The enumerators were selected and trained for accurate work, and their totals for each day, checked against the box office, indicated a high degree of accuracy. The counts were made, at each theatre, on Monday, Wednesday and Saturday of one week. The total attendance checked was over 150,000 persons. In each of the theatres, the majority, and usually the great majority, of persons in attendance were judged to be over 20 years of age, and the next largest age group was from 17 to 20. A brief indication of the results can be gleaned from the following proportions obtained for children under 17:

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In the Manhattan theatre district the proportion was . . . 3.4 %
In the more local theatre districts » » » . . . 7.4 %
In residential urban districts » » » . . . 8.0 %
In the suburban village » » » . . . 31.8 %

"The general run of urban picture houses is probably well represented by the nine remaining theatres, with a total attendance, for the three days, of 97,000, of which total about 8 % were under 17 years of age.

"As an approach, though not a very close one at first, to the problem of the influence of motion pictures upon childrens' behavior," continues the report, "we have sought to ascertain what and how much of the material presented is perceived, understood and remembered by children of different ages, as well as by adults. Quite possibly, for example, a sex situation which would make quite an impression upon an adult would pass over the child's head.

"All that we can certainly learn from our results, at the present moment, is that children under 12 years of age certainly fail to get a large share of the events of a picture which appears essential to the story from the adult point of view. With still younger children, this fact often comes out very amusingly when inquiries are made as to what a child likes in a given picture. Often the absorbing part of the story is missed altogether ".

A propos of this study is a similar study made at the Horace Mann High Schools and reported by Mary Allen Abbot instructor in photo-play composition, Columbia University Home Study. The questionnaire was presented to the boys and girls of Horace Mann High Schools a week after Christmas recess, a period of more or less movie going. The answers showed that 11 % of the boys and 13 % of the girls did not go to the movies at all during the Christmas holidays, the other children went on an average of 3 times during that period.

One of the questions showed that in the sixth year about 66 % of the boys go to the movies once a week and of the girls about 51 % in the fourth and fifth years, this falling off in the sixth year to about 40 %

A number of pictures were listed and the students were asked to select the ones they liked best. I shall read you the first ten selections made by the boys: first, Beau Geste, The Big Parade, Old Ironsides, Ben-Hur, The Better 'Ole, The Winning of Barbara Worth, Variety, The Four Horsemen of the Apocalypse, The Scarlet Letter, The Sea Beast. The first ten liked by the girls were: The Big Parade, Ben-Hur, Beau Geste, Old Ironsides, The Vanishing American, The Scarlet Letter, The Better 'Ole, The Winning of Barbara Worth, Stella Dallas, Brown of Harvard.

It is surprising to find that six of the pictures were selected by both the boys and the girls. It is also interesting to note that Grass and
Nanook of the North appear on both lists among the lowest ten, Grass standing last of all on the girls’ list.

The comments, according to Miss Abbott, showed that the boys and girls all look for action, plot, and suspense in a screen showing. Most of the reasons which both boys and girls gave for disliking Grass were that it “lacked plot”; there was in each case a comment “too educational”; and one girl gave this curious objection to Nanook — “lack of stars”.

“The same desire for plot,” says Miss Abbott, “caused unfavorable comment on A Kiss for Cinderella and this would seem to be a perfectly legitimate desire for drama. Other unfavorable comments from both boys and girls are: ‘too imaginative’, ‘childish’, ‘kindergarten stuff’, a boy says ‘a picture for a girl and not for a boy’.”

Quoting Miss Abbott again, “Referring to the list above, we see that the films disliked by the boys deal with the romance of a girl heroine.”

“In spite of these modifications and the noticeable tendency of the girls to dislike screen comedy and the boys to dislike romance in everyday life, we find the same facts that were found in the investigation conducted by Mr. Clarence Arthur Perry of the Russell Sage Foundation in 1923. In this investigation, answers from 16,348 boys and 20,095 girls in high schools all over the United States showed a 27% preference by the boys for comedy and only a 10% preference by girls; while there was a 28% preference for love stories by the girls and only 11% by the boys.

“The girls of Horace Mann High School have or at least express a greater sensitiveness to ethical questions; they like to have their sympathies appealed to and their good taste not offended. They also prefer the heroine of romance to the comedian. The boys show more knowledge of the problems of filming; they are more inclined than the girls to consider each film on its merits as a production.

“The similarities are as striking as the differences. The general standing is high for story, acting and setting for both the boys and girls. Both are sensitive to pictorial effects. Both are impatient of over-exaggeration whether in the detail of the story or in the expressing of emotions. In fact, their standards for judging a film seem to be much like those of cultivated adults with one striking exception — the comments on Grass and Nanook as well as the comments on the films liked show a consistent liking for plot with action.

“Among the boys particularly are some very good screen critics. Whatever may be said against the habit of movie going, these Horace Mann High School pupils seem to have used the movies as a school of dramatic criticism, and to have formulated for themselves standards and an interesting body of opinion.

“It is interesting to observe the comments on the motion picture
*Variety.* The most striking difference shown between the two top lists is in this picture which with the boys appears in the top ten and on the girls' list with the lowest ten. The understanding of the picture depends upon the mature point of view and interest in screen technique. One would not ordinarily expect children of the junior high school to see it or like it. One high school girl gave as her comment, 'Repents of past wrong.' The girls who did not like it were as emphatic in their disapproval as the boys were of their approval of the good acting, construction of the story, and screen technique. Three comments from the sixth year girls are these: 'Different from the ordinary movie and the photography was wonderful'; 'It was not the plot I cared for, but the acting which surpassed, I think, anything I have seen this year'; 'excellent acting, correct settings, good plot, excellent filming, almost perfection'.

"A fifth year boy says, *Variety, The Four Horsemen, Lady Windermere's Fan* showed true life, conflicting emotions. They have direct appeal and are masterpieces of theme and style. There is no pettiness, no cheapness and nothing but what is vital."

Going further to draw from a psychological study of pictures written by Dr. Carl Lashley and Dr. John B. Watson for the United States Inter-Departmental Social Hygiene Board in which a reaction to the specific picture, *Fit to Win*, was noted, this interesting observation is made in the summary: "No lasting effects upon behavior were found. The retention tests show that the main facts were remembered very well for a period up to five months but there is no indication that behavior is modified significantly. Interest dies out rapidly and the picture seems to be forgotten as quickly as the average motion picture devised solely for amusement."

All of this is a matter more or less of conjecture as yet but we are greatly interested in this whole subject of behavior and will continue studies until we are able to arrive at the most definite of conclusions.

The foregoing have been for the larger part negative factors. There are, however, certain definite positive values derived by children who attend motion pictures, and on these I shall touch lightly.

Basil King, in one of his recent books, called *Faith and Success*, spoke of the influence motion pictures have upon imagination. He said: "One invention or discovery, call it what you will, has done more to rouse the imagination in those in whom it was suppressed than all that the past centuries have contributed together. I mean the motion picture. I dare to think that the significance of this new departure in human effort is not yet apparent to the great majority even of our social thinkers. The fact is that for the first time in the history of man something is offered to the simpler folk which appeals to them on principles they can understand. For the first time they find their famished imaginations roused, stimulated, fed.

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"Those who hitherto have either been denied, or provided with that which was beyond their capacity, have now been given something which meets them on their level; and the response has been outside all possible calculation."

Young people, according to James E. West, Chief Scout Executive for the Boy Scouts of America, want thrills and action. These are perfectly normal cravings and should be and must be satisfied. The right sort of motion pictures provide the right sort of thrills and the right sort of action.

You have seen children at motion picture theatres laughing and skipping and squealing and exchanging what they consider repartee. You have seen them sitting on the edge of their seats watching the actual motion on the screen. Those children are getting facts and information which they are storing up. Geography becomes a panorama and history a series of thrilling stories. Science is a veritable wonderland.

Boys especially want to known how "things" are made, what makes a watch go? They are natural tinkerers. The moving picture camera explains many things to the boy and his interest is sustained while his information is increased.

More and more pictures are being used to teach athletics. The slow motion films allow for every detail of action in a game of tennis or a football match or in running, jumping or diving. Interest in natural sciences is likewise stimulated and under the camera's eye chemical reactions, bird life, animals in their natural habitats, rock formation, all phenomena of nature are revealed to the budding mind of the child.

Even more important is the effect of motion pictures on assimilation of current history. Hardly a news event of importance in the world today takes place without having a new reel camera focussed upon it. The inauguration of the Presidents, the war, the signing of peace, the flight of Lindbergh, all of these things are captured and held for the child to see and share in. Through them the child lives in a dozen worlds at once.

Mrs. Clara Tree Major, director of the Children's Saturday Morning Theatre, spoke recently of what the motion picture can mean to smaller children. She spoken of the part pictures play in giving children a knowledge of other children, the part they play in giving children a knowledge of birds and plants, and then the part the pictures play in giving children fairyland.

Any workers with children known how important it is to keep them enthusiastic. Children must go from one enthusiasm to another. They become hero worshippers. And the screen gives them heroes to worship. Not long ago, a group of school boys were asked to name the greatest ten men in history. Two of the ten named were popular motion picture
actors, and one of them stood above Napoleon, long an idol of boyhood. The heroes on the screen, let it be remembered, always defend the weak, defeat the villains, and triumph in the end through the exercise of many virtues.

Children are kept out of dangerous streets by motion pictures. That is a fact. And it is a fact that has some amusing corollaries as well.

This experience was met with recently by an exhibitor in a town in the Middle West. He said that he was standing in the lobby of his theatre on a recent Monday night when a woman approached the box office with two small children.

"This is a Monday night and an off night," she said to the ticket seller. "Can't I get these children in free?"

The ticket seller estimated the crowd and decided that the woman could.

So the woman thanked him and went over to the door of the theatre. There she said, "Now Mary, you and Johnny go in and find a seat and I will come back for you at 11 o'clock."

Mothers like that who make check rooms of the movies for their children are almost beyond consideration.

The motion picture in turning to the "classics" for its story material has told so entertainingly the stories involved that hundreds and thousands of people have been sent to their books to find out if such a story is really written there. To the surprise and surely the joy of these aroused minds, the classics have been revealed in entirely new lights. For the first time people have begun to look on them as real books and to realize that just because the dust of a few centuries have gathered on the covers there is no reason why the contents shouldn't be fresh and palatable. Once convinced that the term "classic" is complimentary and not an opprobrium, the reader is admitted to a new realm of reading through which he may browse with infinite relish for the rest of his days.

The habitual reading of fine books has come heretofore from the intellectual, if not from the social or financial, aristocracy; but within the past decade the habit of reading has reached through the upper strata and has become a universal necessity where formerly it was a luxury.

This growing intimacy between the motion pictures and the book has met with general although not universal approval. There have been those who feared that many people would "take their reading out in looking," but those same people no doubt feared that the phonograph would mean the abolition of orchestra and that the free library would spell the doom of booksellers.

The New Jersey Library Association tells graphically the story of the increase in reading due to films. Productions for the screen, it was said, suggest new lines of thought, stimulate interest in new nations, and bring
into prominence and favor many of the classics. Hence a desire for reading
is increased.

More books were borrowed for study last year in New Jersey, accord-
ing to the report, than ever before, the number lent showing an increase
of 34,000 over that of the preceding year. And the demand was for a
higher standard of book than formerly, too, and the greatest demand was
for historical novels. "Many of the old standard works have been brought
back into favor and prominence", the report read.

Books on the shelves of libraries make it possible for men to attain
a certain amount of knowledge and information by hard work and appli-
cation. But the moving picture presented as an amusement will in a few
years make it impossible for any average man or woman to remain
ignorant.

In recent months, there has been a decided tendency on the part of
educational institutions to "take up the movies". Columbia University,
Harvard, several of the Western universities and many high schools have
developed plans whereby instruction in motion picture technology,
motion picture business methods, and motion picture appreciation, has
become a regular feature of the curriculums.

Harvard has already established motion pictures as a part of the
curriculum in the Graduate School of Business Administration. A series
of lectures on the various departments of the industry have been delivered
by representative men of the industry. Three reasons assigned by the
Harvard Business School for such a course are that there is a growing need
and opportunity for trained business men in the motion picture industry;
that the influence of films in this country and elsewhere is too great to be
overlooked; and that the motion picture industry serves as an illustration
of an industry which has grown so rapidly that all stages of its commercial
development may be clearly traced.

Going still farther, and in an even more important direction, Harvard
University has established a library and archive of films in the Department
of Fine Arts. Reading from the announcement made by the Harvard
authorities:

"In the belief that the achievements in motion pictures deserve recog-
nition as part of the cultural development of the country and must be
considered in any serious historical and technical study of the art, the De-
partment of Fine Arts of Harvard University, in association with the Fogg
Museum and the University Library, plans to establish immediately a
library and archive of films.

"With the cooperation of Will H. Hays, President or the Motion
Picture Producers and Distributors of America, Inc., and of the producers
themselves this collection will be formed to serve the double purpose of
recording the evolution of the moving picture from its beginning to the

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present day, and of selecting annually those films which are deemed worthy of preservation as works of arts.

"It is hoped that it will be possible to use as criterion of choice the harmonious synthesis of pictorial, narrative, dramatic and histrionic qualities. The collection will undoubtedly be augmented eventually by the addition of cinematographic literature. The purpose is not to cover the field contemplated by the Archive in Washington for preservation of historical and current event films.

"In order to constitute and operate this archive a committee of the Harvard faculty, acting as a jury of award, after gathering from all available sources representative films of highest quality of the Past, will select in January of each year the films of the preceding twelve months, which, in its judgment, should be included in a library of this character. The announcement of its selections will be made public on March 1st. of each year. The enterprise contemplates also an annual or semi-annual formal presentation before members of the University and their guests of the chosen films."

Now we come to a consideration of what the motion picture industry itself is doing to make itself worthy of the opportunities for service offered by this great instrument in its custody.

Necessarily any discussion of this phase must be reduced to skeletonized form.

First of all, the producers and distributors of motion pictures have associated themselves together to do mutually those things that will be of common interest and good. Twenty-six companies, representing approximately 90 per cent of the pictures made, are members of the Motion Picture Producers and Distributors of America, of which Mr. Hays is the president.

The purposes of the Association are briefly to: «Establish and maintain the highest possible moral and artistic standards of motion picture production; and to develop the educational value as well as the general usefulness of the motion picture. »

The Association performs all those duties pertinent to any trade association. It is concerned with Film Boards of Trade, Arbitration Boards, prevention of fraud, alleviation of waste, conservation, protection, industrial improvements, care of actors, extras, children, animals in pictures, establishment of foreign relations, protection of legal rights, and all other matters which may arise in the production and distribution and exhibition of pictures and which affect and serve the whole group.

But here is where the Association is unique. It does not stop with the trade association duties. It goes far beyond and it is formed to establish and maintain the highest possible moral and artistic standards of motion picture production, and to develop the use of pictures in education, in
religion, in all those phases of life where they can be of greatest use to mankind (1).

(1) SUBJECTS TO BE OMITTED FROM CINEMATOGRAPHIC FILMS PRODUCED BY MEMBERS OF THE MOTION PICTURE INDUSTRY.

Trade Practice Conference for the Motion Picture Industry.

(Held at New York, October 10 to 15, 1927. Formerly producers' Resolution n. 2).

Resolved, That those things which are included in the following list shall not appear in pictures produced by the members of this association, irrespective of the manner in which they are treated:

1. - Pointed profanity — by either title or lip — this includes the words 'God', 'Lord', 'Jesus', 'Christ', (unless they be used reverently in connection with proper religious ceremonies), 'hell', 'damn', 'Gawd', and every other profane and vulgar expression however it may be spelled;

2. - Any licentious or suggestive nudity, in fact or silhouette; and any lecherous or licentious notice thereof by other characters in the picture.

3. - The illegal traffic in drugs.

4. - Any inference of sex perversion.

5. - White slavery.

6. - Miscegenation (sex relationship between the white and black races).

7. - Sex hygiene and venereal diseases.

8. - Scenes of actual child-birth, in fact or in silhouette.

9. - Children's sex organs.

10. - Ridicule of the clergy.

11. - Willful offense to any nation, race, or creed: And be it further Resolved, that special care be exercised in the manner in which the following subjects are treated, to the end that vulgarity and suggestiveness may be eliminated and that good taste may be emphasized:

1. - The use of the flag.

2. - International relations (avoiding picturizing in an unfavourable light another country's religion, history, institutions, prominent people.

3. - Arson.

4. - The use of firearms.

5. - Theft, robbery, safe-cracking, and dynamiting of trains, mines, buildings etc., (having in mind the effect which a too-detailed description of these may have upon the moron).

6. - Brutality and possible gruesomeness.

7. - Technique of committing murder by whatever method.

8. - Methods of smuggling.

9. - Third-degree methods.

10. - Actual hangings or electrocutions as legal punishment for crime.

11. - Sympathy for criminals.

12. - Attitude towards public characters and institutions.


14. - Apparent cruelty to children and animals.

15. - Branding of people or animals.

16. - The sale of women, or a woman selling her virtue.

17. - Rape or attempted rape.

18. - First night scenes.

19. - Man and woman in bed together.

20. - Deliberate seduction of girls.

21. - The institution of marriage.

22. - Surgical operations.

23. - The use of drugs.

24. - Titles of scenes having to do with the law enforcement or law-enforcing officers.

25. - Excessive or lustful kissing, particularly when one character or the other is a 'heavy'.

Resolved. That the execution of the purposes of this resolution is a fair trade practice.
You are not unaware of the changes, the improvements in pictures in the last five years. A few years ago there were one or two good pictures in a year, now scarcely a week goes by that some really outstanding production is not offered to the public while there are literally hundreds of splendid, worthwhile pictures entirely suitable for entertainment purposes.

Carrying out the purposes of the industry, there have been established:

1. Pictures for classroom use.
2. Special religious pictures for the churches, through establishment of a Religious Motion Picture Foundation, and the continued production of feature pictures based on religious themes.
3. Pictures for clinics and medical schools, whereby student-physicians and surgeons will be taught the methods of the greatest men of the profession.
4. Pictures on boats bringing immigrants to this country, that they might be given a chance to grow up with the country, through a knowledge of its history, and that they might be aided in establishing themselves in their new land by knowledge of its physical conditions, its manufacturing centers, farm districts, and the opportunities offered.
5. Pictures in several thousand homes for shut-ins, prisons, hospitals, homes for the aged, orphanages, the service in most of these being without cost to the institution.

And so on.

These purposes have been carried out by the following methods chiefly.

1. Establishment of an Open Door policy which invites all interested individuals and groups to cooperate constructively with the industry by bringing suggestions, giving advice, and offering criticism through the Department of Public Relations.
2. Adoption of a formula by which offensive books and plays do not reach the screen — a thoroughly legal method of selection which keeps the members from making mistakes in filming questionable material.
3. Enlistment of the advice and active help of various groups and individuals who can give expert assistance in the filming of plays. For instance, when The King of Kings was made, a priest, a minister, and a rabbi went to Hollywood to work day in and day out with the directors and stars in order that the interpretation of the life of Christ might be fine and in the best possible taste.
4. Encouragement of support of the best pictures on the sound and established theory that when the best pictures pay best they will be the standard of pictures produced.
5. Active cooperation whenever possible with groups in order that the best possible minds might be set to work for the improvement of pictures.
6. Employment of the best possible personnel — writers, directors, mechanics — that the quality of pictures may be bettered constantly.

Motion pictures, today, are more than an instrumentality for recreation. They have been made available to the classroom, to the church and to the doctor's clinic. Whenever and wherever motion pictures can be of service, there they are being placed.

In all of this, there is direct public responsibility. A responsibility in each community for finding out what the best pictures are and for then supporting those pictures.

There are now available through many clubs, lists of recommended pictures. Reviewing committees in the California Federation of Women's Clubs, International Federation of Catholic Alumnae, the Church and Drama Association and other bodies are seeing pictures often in advance of their distribution and are publicizing those films which they endorse. Access to these endorsements is possible through the clubs mentioned, their house organs or through compiled lists of the Motion Picture Producers and Distributors of America.

You can help the industry by giving it the advantage of your own experience. If you find good pictures, say so. If you find anything which is objectionable, also say so through the Open Door.

The industry wants specific information, specific scenes — information that can be acted upon directly.

Of course, perfection hasn't been reached yet in motion pictures nor in life but the movement is in the right direction and that is the important thing. It is not always the length of the step that counts most but the direction. Do not, therefore, be too impatient. Overnight miracles do not happen.

The motion picture is engaged in giving people the opportunity to play. Play is essential in character building and in social work. It is giving them a place in which they may dream, offering them a new foothold in the realm of the imaginative.

It is training men and women for active, intelligent, and efficient participation in an associated, living, and democratic society. The leaders of the motion picture industry seriously realize the public responsibility for the right use of this subtle, powerful, attitude-forming force. They stand at attention to do their utmost toward making community life happy, inspiring and wholesome for boys and girls, the men and women of tomorrow, who must provide those spiritual reserves of character which alone assure the safety of the republic. Than this, there is no more essential patriotic duty.
CRIME AND THE CINEMA IN THE UNITED STATES

(from the Italian)

A debate on one of the most absorbing questions of the day has recently been opened in America: the influence of the luminous screen on the minds of the spectators and on their criminal propensities.

There are three parties to the debate: Roger W. Babson, of the Babson Institute of Mass, Frederick Hoffmann, consulting statistician and specialist on criminology and Carl A. Milliken, secretary of the Motion Picture Producers and Distributors of America and a member of the Administrative Council of the I. E. C. I. We have here the names of three outstanding personalities in this vast field of study and the complicated domain of industrial life at grips with a problem that for years has held the interest of the nations of the world. It is a problem of absorbing interest to scientists, artists, thinkers and readers of the human soul, and one that has suggested new goals to teachers, psychologists and criminologists, all intent on the pursuit of a truth that has not yet clearly emerged from the labyrinth of investigation, owing to the contradictions between conflicting heses and the quasi impossibility of conciliating them in such a manner as to permit a definite conclusion to be reached.

It is the purpose of the International Institute to ventilate this still unsolved problem with the utmost energy. At a recent meeting at Geneva of the Commission for the Protection of Childhood, after hearing the report of the director of the Roman Institute of the Cinema, this was officially entrusted with the task of tackling the subject, also by means of an investigation of an international character.

This task is now being silently and actively carried out.

But meanwhile it is necessary to keep all those who have the social problem at heart in touch with what is being said and written on the question and with the contingent aspects of the subject in life and in discussion.

For this reason it may be useful to summarise the chief points of a debate of great documentary and evidential value that took place on "the other side".

In an open letter of April 8 of the current year, entitled "The Crime Wave", Roger W. Babson, referring to criminal statistics computed by Dr. Frederick L. Hoffman, and directed more especially to the study of the homicidal phenomenon in the United States in 1928, quotes the following data:

303 —
For the six chief cities of the United States:

<table>
<thead>
<tr>
<th>City</th>
<th>Homicides</th>
<th>Percentage for every 100,000 inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit</td>
<td>228</td>
<td>16.5</td>
</tr>
<tr>
<td>Chicago</td>
<td>498</td>
<td>15.8</td>
</tr>
<tr>
<td>Cleveland</td>
<td>134</td>
<td>13.3</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>182</td>
<td>8.8</td>
</tr>
<tr>
<td>New York</td>
<td>401</td>
<td>6.7</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>70</td>
<td>4.7</td>
</tr>
</tbody>
</table>

For the 10 chief cities of the south:

<table>
<thead>
<tr>
<th>City</th>
<th>Homicides</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memphis</td>
<td>115</td>
<td>60.5</td>
</tr>
<tr>
<td>Birmingham</td>
<td>122</td>
<td>54.9</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>74</td>
<td>52.6</td>
</tr>
<tr>
<td>Atlanta</td>
<td>115</td>
<td>45.1</td>
</tr>
<tr>
<td>Little Rock</td>
<td>30</td>
<td>37.9</td>
</tr>
<tr>
<td>Macon</td>
<td>22</td>
<td>35.9</td>
</tr>
<tr>
<td>Savannah</td>
<td>31</td>
<td>31.0</td>
</tr>
<tr>
<td>Nashville</td>
<td>39</td>
<td>27.9</td>
</tr>
<tr>
<td>Houston</td>
<td>72</td>
<td>26.2</td>
</tr>
<tr>
<td>New Orleans</td>
<td>111</td>
<td>25.9</td>
</tr>
</tbody>
</table>

Roger W. Babson proceeds to point out that the statistics clearly indicate the progressive development of disregard for law especially as regards the younger generation.

"Statistics clearly show" writes the author, "that something is developing a disregard for law and order throughout the world today. This is especially true among the youth. Some say this is due to prohibition, under which so many respectable people are defying the Constitution, the bulwark of American life and property. If these crime waves were limited to the United States, one might seriously consider this as a plausible reason. As, however, this disregard for law is world-wide, it cannot logically be laid to prohibition. It is much more logical to consider it a natural aftermath of the great world war, which necessarily taught men to shoot, steal and deceive.

"Twenty years ago, we would have been justified in believing immigration to be the cause of this bad situation. In fact, it was primarily to prevent such lawless conditions that the present immigration restrictions were enacted. Yet, although we had but little crime twenty years ago, when nearly a million immigrants entered the country annually, we are having much crime today when less than 200,000 are entering annually.

"Statistics even show that crime has increased as immigration has decreased. Hence, immigration cannot be blamed as the cause of our..."
crime waves. In fact, statistics should show that none of the common reasons given are the real cause of the crime waves of the large cities.

"Such studies as I have made lead directly to the movies as the basic cause of the crime waves of today. Furthermore, when one considers that ten million people (largely young people) in the United States alone attend the movies every week, their tremendous influence in all ways must be admitted. In view of statements by psychologists that impressions through the eye are very much more powerful than those which come through the ear, it is evident that the movies are the greatest force today in moulding character for good or evil. In fact, I sent a questionnaire to the school principals of New England asking which of the following had the greatest influence in moulding the character of our young people today — the school, the church or the home — and 70% scratched off all three and replied: "The movies!"

"If you — my reader — have any doubts as to the very evil influences of the movies, go to a movie house in the poor quarters of your city and see what is there being portrayed. Clients should not make the mistake of judging the movies by the pictures which are being shown in the good theaters which they attend. Such pictures represent only a small fraction of the pictures shown every afternoon and evening of the year.

"This better type of motion picture is both educational and recreational. I believe that educational motion pictures will play an important part in the future education of children. But at present, the greater percentage of pictures are crime-breeding and plant seeds of vice and deceit. Why we American people will continue to spend thousands of millions on schools and teachers to train the children of our cities and then permit a bunch of irresponsible men to exhibit each night crime-breeding pictures within the shadow of the school building, just to make a few dollars, is beyond my comprehension. Such pictures in one night uproot all the good seed which the schools can plant in a month. It is exactly like appropriating money for a fire department and then permitting anyone to set buildings afire just to collect insurance."

In an open letter of May 13 last, Dr. Frederick L. Hoffman, cited by Roger W. Babson, stated that in his statistical studies edited by the Prudential Life Insurance Co. he had never expressed the opinion that the cinema was the principal cause of the increase of crime in late years in the United States. He even maintained that the figures he had published might have justified the deduction of the opposite conclusion, because cases of murder were more common in rural zones; especially in the South, where the proportion of moving picture shows was considerably lower than in the North or West. He therefore considered it opportune to make the following remarks.

A systematic study of murders stretching over a period of several
years had not been sufficient to prove a relation of cause and effect between the film and violent crime.

Some films doubtless favored the development of criminal statistics but the good done in the aggregate by the cinema as an educative factor is incalculable.

These films facilitate a form of cheap instruction for a vast public that would otherwise remain adrift. According to students of social conditions and of educational progress, the cinema must be considered one of the chief, if not the most efficacious method, of acquainting, the public with subjects of the greatest importance which would otherwise be neglected.

On the other hand, the tendency of the industry itself was towards eliminating what might be harmful to social life. All industrial effort is doubtless subject to error, but in view of the good done by the cinema the evil of which it might be the source and its possible relationship to crime pass for negligible.

To the contribution of this statistician, Carl E. Milliken, Secretary of the Motion Picture Producers and Distributors of America, added an open letter published almost contemporaneously with that of Frederick L. Hoffman.

Mr. E. Milliken remarks that, first of all, instead of making a questionnaire to discover whether the school, the church or the home has most influence on modern youth, which is to put the problem incompletely, the circular to the educators and psychologists should have included questions referring to films, newspapers and reviews, thus giving them an opportunity of making a definite choice between five or six, instead of only three, terms of comparison.

a) Questionnaires. — On the other hand questionnaires as such have doubtless a relative value. Recently, under the auspices of the Psychology Section of one of the American Universities, a questionnaire of the Babson type had been distributed among a certain number of masters and University teachers. Seventy of the hundred and nine answers received affirmed the influence of the home on the moral development of the young, thirty-seven that of the school, one that of the church and one stressed the influence of the streets and of friends.

b) The world crime wave. — Furthermore, the observation that the murder wave was increasing the world over, and that this should lead to the consequence of excluding any influence of prohibition laws limited to the United States, was incorrect. From statistics compiled by Thor- ster Sellin regarding murders in Northern Europe from 1900-1923, that is to say referring to that group of nations which have most affinity with the United States as regards climatic conditions and general characteristics of the population, it is remarked that the maximum was reached in

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1903-1907 and that since then there has been a tendency towards diminution.

One of the real reasons of the development of criminality was that indicated by President Hoover in his message to the Associated Press in New York, that is to say the disregard for law.

c) Major and Minor cinemas. — The industrial market of the cinema could not agree with the statement made by Roger W. Babson as to the difference between films shown in the central and the poorer quarters of the town, which resulted in choice films being exhibited in the former and inferior ones in the latter, that is to say films that were liable to corrupt and to instigate crime.

The total takings on a 100 basis were derived as follows:
- 60-70% from first-view theatres in central quarters of the big cities.
- 20% from the downtown suburban and provincial theaters.
- The remainder from the cinema theaters of the poor quarters.

It should be remembered that all films followed this triple round without distinction.

There was therefore no difference in the type of film supplied to either class, because the only difference was in the classification of the theaters as first, second, or third-view theaters and the difference in the takings were in proportion to the value of the entrance ticket.

d) Immigration — that immigration to the United States in consequence of the restriction laws had descended from a million to 200,000 persons a year was an incontrovertible fact, just as the increase in the number of murders was another.

But all this could not justify the peremptory deduction denying all possible correlation between the two social phenomena, in view of the fact that not the mere number, but the moral and spiritual aspects of immigration might to a certain degree have had an influence on crime.

Indeed, Professor E. H. Sutherland of the University of Minnesota observed in a speech made at Des Moines in 1927, at the fifty-fourth meeting of the National Social Workers’ Conference, that the principal effect of immigration on crime in the United States came from «the production of a conflict of cultural values to the detriment of traditions and the consequent inevitable conflict regarding the respective conduct of the peoples».

In one of his works on criminology Professor Sutherland himself observed that in Massachusetts in 1920 for each hundred thousand inhabitants of the white race and over fifteen years of age, there were the following number of persons in prisons or adult reformatories:
- 120 indigenous sons of indigenous parents;
- 226 indigenous sons of foreign or mixed parenthood;
- 143 foreigners.
If therefore one will not or cannot assume that the chief tendency to crime in the immigrant is derived from the habits he brings with him, it is nevertheless evident that foreigners and children born in America of foreign or mixed parents grow up in an atmosphere of conflict between the old mentality and the traditions and habits of American life.

This is the old theory of the conflict of races that at one time existed between north and south, and that now exists in the moral and spiritual conflict between east and west.

e) Wealth. — Contradictory as it may seem, the fantastic increase of riches in the United States is of great importance in the investigation of the motives of the crime wave.

In 1900 it was estimated at about 88 1⁄2 billion dollars. In 1904 it rose to over 107 billions, in 1912 to over 186 billions and again in 1922 to nearly 321 billion dollars and to 355 billions in 1925.

It is sufficient to reflect that, with a population representing 6 or 7% of the inhabitants of the globe, the United States consume annually 35% of the total world production, to realize that, apart from the undeniable influence of such a fact on the immigration problem, such sudden pressure of wealth must react in a harmful and dangerous manner on the character not only of the individual but of the whole nation.

f) Motor cars. — Closely connected with the increase of wealth is the number of motor cars, that has reached fantastic figures in the United
States between 1900 and now, with a total of about 24 million machines, exercising a definite influence on social habits, especially of the young, and favoring crime by the possibility of rapid removal from one place to another.

g) Newspapers. — Another point worthy of notice is the increasingly wide diffusion of the press, not only the political and specialized press, but also of all the publications that for commercial profits are wont to dramatise crime in the most sensational form, making a hero of the criminal, describing the technique and circumstances of the crime, with a wealth of description and the most insidious and dangerous illustrations.

In one single big city the increase of the copies sold between 1919 and 1929 was 1500%.

![Graph](image)

Increase in the Number of automobiles in the United States.

h) Legislation. — In 1908 the United States promulgated 28,478 different laws. By 1913 they had risen to 139,498, and in 1926 to the
number of 233,663. All this besides the legislation already existing from former times.

There is no brake on delinquency corresponding to this national orgy in the field of legislation, but a confusion which in itself favors an

![Graph showing increase of crime from 1919 to 1929]

increase of crime. Indeed Judge Harlan F. Stone of the Supreme Court observes that the demand for a reform generally found its expression in new laws, that always caused new crimes.

The abundance of laws, besides giving rise to confusion also creates a lack of efficacy. There is a difference between the single, curt, synthetic law envisaging and striking a specific offence and an accumulation of provisions overlapping and frequently contradictory in terms, if not also in substance.

The people ends by no longer recognizing the validity and authority of this congeries, from which there often arises contempt and disregard of the law itself. Such contempt and disregard are not limited to those who tomorrow may be potential criminals, but extends even to those who are called upon to enforce the penalties.
Charles A. Selden in the New York Herald of August 5, 1928, notes that, between 1926 and 1927, 670 murders had been committed at Chicago and in Cook County. One third of these remained unpunished. Verdicts of guilty were obtained in only 22% of the other two thirds, and the death penalty on 760 murderes had been executed only in ten cases.

130 of the above cited murders had been committed by groups of bandits, and not one of them had been prosecuted.

Writing on «Crime Statistics and Police Problems» in the supplement of the Journal of the American Statistical Association, L. D. Upton observed that of ten persons arrested for crime in Detroit only three reached the tribunal and one the penal institutions.

Thus, from an investigation conducted at St. Louis and at Kansas City, it was proved that only in 3% of the cases the culprits were found guilty.

This is in obvious and violent contrast not only with what happens in Europe, where it would seem absurd that 97% of the crimes should remain unpunished, but with what has also been verified in Canada, because in Canada, in the words of Judge W. R. Riddell of the Court of Appeal «a trial is not a game but a serious and solemn investigation to ascertain crime». In nearly 90% of the cases the criminal has not the possibility of escaping punishment. If a person stands surety for another, he may compromise not only his property but his liberty, and may be sent to prison in the place of his ward. In 1922, the city of Chicago alone had a number of crimes exceeding those of the whole of Canada.

Increase in the number of Laws in the United States from 1908 to 1926.
i) Cinema and Censorship. If the cinema were an incitement to delinquency it might be hoped that a severe censorship, above all of films reproducing crime might cause a corresponding reduction in the number of the crimes themselves.

Yet Detroit that has the high quota of 16.5 murders for every 100,000 inhabitants, has one of the severest municipal cinematographic censorships. Chicago with a quota of 15.8, enforces the following vigorous provision:

If a film or series of films for projection is immoral or obscene, or presents scenes of depravation, criminality, or tends to exalt acts of disloyalty, reproduces the acts of hanging or lynching, it will be the duty of the Police Inspector to refuse permit the projection.

On the other hand Los Angeles, the city of the cinema par excellence, has a quota of 4.7 murders for every 100,000 inhabitants.

Noteworthy among the largest cities of the South, is Memphis with a quota of 60.5 murders for every 100,000 inhabitants. Since the first of January 1921 Memphis has a municipal cinematographic censorship with unlimited powers that cannot only deny or suspend permits of projection, but also punish the operators, actors, scene designers or scene directors interested or having control in the censored representations. A revision of films exercised according to with such a rigid standard that it even forbade the performance of the "King of Kings"!

d) Cinema and Frequentation. Assuming a correlation between the cinema and criminality, it has been stated that the frequentation of the cinema theatres is in direct ratio to the tendency to delinquency.

The section of psychology of the University of Columbia during the summer of 1928 carried out an enquiry regarding a series of representations in which, of the 155,949 persons constituting the public of several Broadway theatres and outlying and suburban cinema halls, 49.10% were composed of men, and 50.90% of women.

An exhaustive study on criminality by Healy and Bronner, published in 1926 under the title of "Delinquents and Criminals", gives for Chicago for every thousand youthful delinquents the ratio of 693 boys to 307 girls and for Boston the ratio of 722-278.

In the volume Criminology and Repressive Systems by John Lewis Gillin, it is affirmed that for all the territory of the United States, counting both persons arrested and those condemned, the proportion between males and females was 8.6-1. In Massachusetts, according to Edward H. Sutherland, men were arrested in a proportion 15.4 times superior to women.

Frequentation of the cinema has a bearing on those few and sporadic cases in which a particular crime is attributed to the imitation of deeds shown in the cinema. In this connection it should be noted that compared with crime in general, such cases are strictly sporadic and the publicity given to them in the papers, although in keeping with the prevalent habit of putting all the blame on the cinema, is usually at variance with
the truth, because in the course of the prosecution the alleged influence of the cinema disappears.

The moral standard of American films, moreover, is such as to exclude any possibility of corruption. Of 620 films produced in the United States in 1928, 33.70% contained neither criminals nor crime. In 33.80% the criminal ended in prison, in 10.40% he repented of his evil doings and tried by good conduct to regain the approval of society, in 4.90% the corporal chastisements applied constituted an admonishment rather than a punishment.

Add to this that, according to the statistics of Dr. Hoffmann himself, the maximum number of murders in the United States was reached in 1925, and from that period there was a decrease or a slump, while exactly at the same time the slum films were placed on the market.

Another point that claims consideration is the number of seats placed at the disposal of film frequenters. Rochester and Memphis have about 15,000 seats for each 100,000 inhabitants, but the former has an average of 3 murders for every 100,000 in 1928, compared to 60.5 for the latter. Portland, with 20,171 seats, has a proportion of 5.1 murders to 100,000 inhabitants, while Portsmouth, with 7,871 seats, has 17.9. Davenport 17.9 Iowa, Ottawa, and Somerville with about 20,000 seats, have a quota of 1.5, 1.4 and 1.0, while Detroit with 19,000 has 16.5. Los Angeles with 24,339 seats counts barely 4.7 murders.

There is not, therefore, nor can there be, any correlation between crime and film frequentation. This is proved by students of great value such as George W. Kirchway, for years Dean of the Faculty of Law of the University of Columbia, later on director of Sing Sing Prison and finally Chief of the Criminology Bureau of the New York School of Social Work. William Healy, in his volume Delinquents and Criminals, compiled from the data of an enquiry relating to over 4,000 cases in Cleveland and from the reports of the Baker Foundation of Harvard University, Cyril Burt for England in his work on the Juvenile Delinquent, the psychologist Phyllis Blanchard, author of the volume Children and Society, the medical psychologist Dr. Louis E. Bisch of the Medical Polyclinic School of New York, Carleton Simon, alienist of international fame, for twelve years psychiatrist of the Police Department of New York in a study on Crime and Cinematography, and countless others.

The conclusion at which Carl E. Milliken arrives is that there can be no relation between cinema and crime. That the crime wave, if such it may be called, in America is attributable to other reasons, such as prohibitionism, immigration, increase of wealth, insufficiency of legal and penal preventive and repressive measures.

On the other hand the American industry has for some time past been carrying on a campaign of rehabilitation of the cinema that has not failed to take effect.
Thus the bi-weekly projections of cinematographic news reels are viewed not by the ten million spectators quoted by Roger W. Babson, through an obvious error of computation, but by one hundred million who really form the cinema public.

Let us recall here the Pact, known as «The Formula», to which all the manufacturers belonging to the Motion Picture Producers and Distributors of America have acceded, whereby they bind themselves to ban from their films a long list of subjects which might really be dangerous to public morals.

Of a like tenor is the principle of the Open Door, which not only admits but encourages opinions and criticisms of cinematographic productions. This gave rise in Hollywood to a special Committee of Studies directed by Col. Janson S. Joy, in which bodies which certainly have no interest in immorality and corruption, such as the Federal Council of the Churches, the Daughters of the American Revolution, the National Congress of Parents and Teachers, the International Federation of Catholic Alumnae, the American Library Association, the American Association of University Women, and the American Boy Scouts, have been invited to participate.

In this connection it is noteworthy that in 1928 the Revisory Committee of the International Federation of Catholic Alumnae indicated as especially suitable for children 254 among the films produced in America, thereby reaffirming not only the principle of the morality of the American film, but the concept that no relation of cause and effect between cinema and crime, and especially juvenile crime, could be traced.

Through the study of the social problems of the screen, the Cinema gains in strength and dignity. It is no longer merely a prodigious instrument created by man's genius for the delight of our eyes, imparting to us a sense of the joy or of the profound sadness of life. It has become a most subtle instrument, having power to wound the soul to death, to injure the very spirit of the race, and it is now the duty of science to contribute its part so that, rather than a generator of evil, it may become a propagator of all that is good.

The International Institute has taken up this subject from the first number of its review with articles by Henry Carton Wiart, Aloysio de Vincente and Maurice Rouvroy. In this issue we return to it by summarising a debate that has awakened great interest in America. It will continue by inviting opposed opinions, comparing them, and causing them to clash in the serene fields of scientific discussion.

The columns of the Review are open to all who bring us information, suggestions, articles, to all who wish to express their opinion on the central problem which brings society and the cinema in touch, who wish to discover whether there is an incurable contrast or a logical possibility of comprehension between the cinema, understood as an industrial and economic expression and the cinema understood as a means of moral and spiritual elevation of the peoples.
The Cinematograph and Publicity

On the initiative of the *Spitzenorganisation der Deutsche Filmindustrie* (The Central Organization of the German Film Industry) and the Lehrfilmbund (Educational Film Association), the first International Congress of the Cinematograph as applied to Publicity was held in Berlin from the 13th. to the 15th. August.

The importance attached to this Congress was evident from the number of the representatives of all Countries attending it and from the official adhesion of the leading publicity organizations of Europe and America.

The Congress opened its proceedings with an address by Dr. Walter Plugge, head of the Spitzenorganisation. Dr. Plugge, after welcoming the Congress in the name of the German Film Industry, described at length what Germany had done, and what it was preparing to do in this field. He stressed the immense possibilities which the cinema offered to advertisement, especially now that new horizons had been opened up by the talking and the colour film.

Dr. Plugge referred to statistics showing the contribution of the film to publicity and mentioned the increment registered in the production of films of this character.

Lastly he pointed out how the cinema, while contributing efficaciously to the formation of public taste and general habits of life, had established its claim to be the most effective instrument known for the purposes of systematic publicity, propaganda, and advertisement.

Dr. Plugge's speech, which closed amid enthusiastic applause, was followed by an address by Dr. Cürlis, President of the Lehrfilmbund, which we have pleasure in reporting hereunder.

« Cultural film » said the speaker, is a term applicable to all films the purpose of which is to transmit a knowledge of men and of things, as contrasted with the mass of theatrical films which hold so wide a sway and are of incomparable economic value.

« There is, however, no definite line of demarkation between the two groups. Thus we have dramatic films of an educational tenour and cultural films of a distinctly dramatic character.

The term « cultural film » denotes a class; the term « publicity film » defines a purpose. While the boundaries between the cultural film and the theatrical film are not very distinct, it is often equally hard to fix those between cultural and advertisement films. From the business stand-
point, the advertisement film ranks as the most powerful of the cultural films.

"We have at the two poles the publicity film, pure and simple, and the "investigation" or study film.

"Between these two extremes, there are a number of films of various kinds, scheduled under different names, as experts may deem expedient. There is, for instance, the scholastic film, suited to the purposes of teaching and created for this end, and the publicity film made to advertise a given article. While, on the one hand, the economic power of the advertisement film offers a chance of increment to the educational film, it is certain that the cultural concept of the latter influences a wide field in the domain of the former. We may claim that our best producers are steadily endeavouring to impart a cultural tenour to publicity films; that is to say, to make of them a medium for diffusing a knowledge of facts. It is in this field that the German producers of advertisement films should endeavour to pursue their mission of culture.

"Thus, it is by no mere hazard that the producers of educational films in Germany are frequently also producers of advertisement films.

"Our Congress has acknowledged the importance of this principle and has entrusted to the Association of German Educational and Cultural Film Producers the task of organizing their work and programs of publicity films in concert with a group of experts and specialists.

The Film is the essence of Publicity. No other means of propaganda has the magic and magnetic force of the sequence of events following one on the other on the screen. All those who come within the range of its light are subdued. This is the secret of the world success which, in the course of a few years, has made of the cinema a popular means of entertainment to which all barriers of race and of education are as nought, without, alas! any heed being given to its quality. The film is the essence of publicity, for it attracts all eyes and compels men to see. It is not necessary for the plot to hold one's attention; the movement of the shadows on the screen offer a sufficient fascination. Noiselessly, the film penetrates our mind, and we are powerless to resist. It is difficult to close ones eyes during a cinema show; it is easier to close a book in the middle of an interesting passage. The cinema has proved such an efficacious means of propaganda in the country that supplies 94% of the world's film requirements that the masses throughout the world may be said actually to feel many sentiments through the medium of the American nervous system!

"There is no cause for surprise, therefore, if the film is being used for the purposes, and as a means, of publicity. Rather is it matter for wonder that it is not still more generally used for all forms of indirect propaganda.
«The reasons, however, are not far to seek. A film exists only from the moment it is ready for projection. Then its advertisement value depends directly on the number of projections; and, considering the projection system prevailing in cinemas at the present time, the so-called «projection life» of advertisement films is brief. In order to prolong it, it is necessary first to create other projection possibilities. It is possible to increase the number of projections but at considerable cost. Publicity films of all kinds have attained almost to technical perfection in Germany, where we have many admirable examples. The reason for this is the diversified order of work which the German producer pursues; this variety, specialised in all its particulars, avoids sterile uniformity.

«The earnest producer of educational films must, first of all, combine a sound knowledge of film technique with an understanding of what does and what does not lend itself to representation on the screen; what is likely to interest the audience and what means must be used to arouse its interest. It is not enough to possess a good camera and to instruct an operator to take some films. All publicity films must have a solid background of painstaking preparation and experience. Both big and small firms have produced a great deal up to now in the field of the advertisement film, but unfortunately, they have frequently been induced to promise more than they can accomplish.

«This is often the fault of the persons ordering publicity films, and who are apt to demand impossible and technically unrepresentable things. It is superfluous to state that not only films which reproduce events and ideas demand special ability on the part of producers. The pure advertisement film also, which lacks the requisites of the educational film, being concerned solely with advertising, finds its place in cinema programs among the short turns and this renders it necessary for its theme to be carefully and intelligently selected in order that it may have some realistic value.

«The members of the Educational Film League are convinced that mutual understanding between educational and publicity film will be of advantage to them both. The producer of educational films will gain by the greater economic possibilities opened to him, and the advertisement film will have the advantage of the more scientific guidance of the educational film. We manufacturers of educational films are proud to place our knowledge on this subject at the service of world economy. The value of our help is conclusively demonstrated by German statistics, which show that during these last years nearly as many metres of cultural and publicity films have been produced as of dramatic films.

«It is earnestly to be hoped that an understanding of the unlimited possibilities of the publicity film will make headway in the ever widening field of world economy».
Dr. Curlis's speech was followed by an address by the Director of the International Educational Cinematographic Institute, who had been invited to take part in the Congress and to take the Chair. Dr. De Feo, after some opening words of greeting, described the present state of the cinema as applied to propaganda and advertisement in the various countries, and expressed his admiration of the work done in Germany by the organizers of the Congress. He expressed his pleasure in accepting the invitation which gave him a further opportunity to make contact with those who, in the different countries, were devoting their efforts to the cinematograph as an instrument of education and uplift of the people. The International Institute had greatly at heart all forms of international cooperation in this domain. Few of the conquests of science have such a universal value as the cinema, this language of the eyes, which neither knows nor tolerates frontiers, which acquaints the mind and soul directly with all that human nature and the mind of man can devise to recreate, to educate, and to elevate.

The International Institute would always welcome any opportunity to take part in such gatherings and would bring to them all the force of an enthusiasm based on its deep faith in the future of the Cinematograph. What are thirty years to a rising industry? what is such a period in the life of a people? Yet, in this brief lapse of time the Cinema had established its sway; it had become one of the greatest world industries; had claimed the attention of Governments, of men of intellect, of the financial world, and lastly of that body which is the official expression of international cooperation: the League of Nations. Conscious of the immense moral force accruing to the Institute from the fact that it had been created by the League and was under the supreme guidance of the League's Council, the speaker had not the least doubt that everything possible would be done to cement ever more firmly, through the universal language of the film, mutual understanding and collaboration between the peoples of the earth.

The Institute was interested in all the educational aspects of the film.

What does advertisement represent to-day in the life of the peoples? asked the speaker. What are its ends? What are the outer and visible characteristics which it manifests more and more clearly? We may say that, at the present day, the word «private» has come to be synonymous with another word, «knowledge». With the progress of general culture, the development of all those social forces which tend towards the general welfare of the working masses, and the needs which are constantly arising in daily life and the daily battle for life, the necessity for knowledge is increasingly felt. A knowledge of our environment, of what is likely to benefit ourselves and those dear to us, and to bring strength, well-being and civil progress to society and the community at
large and improve the conditions of labour. A knowledge of what is
being done and produced, of what the hand of man and the strength of
his intellect are able to create and to hand down to mankind and civil-
ization. Here indeed, is a formidable task of popular education!

Advertisement no longer wears the same countenance as in the past.
It, too, has had to rise to the new exigencies of life, and the new require-
ments of the public. It is called upon to interest, to amuse, to elevate,
and to illustrate intelligently. Only through the medium of a constant
process of persuasion, founded on a knowledge of facts, can a new ma-
chine or a new system now hope to attract and hold general interest.

What position can the Cinema claim in this complex system of know-
ledge and propaganda? The very highest! The cinema alone achieves
what other means fail to accomplish. It alone can give us real life and
movement in their realistic form, their suggestive and persuasive form,
in a form such as to justify the use of the word «knowledge». Real prop-
aganda and the highest form of publicity are attainable only through its
medium and the knowledge of actual things.

The public has little use nowadays for stationary images. Attempts
have been made to animate these by inserting expressions of artificial
life: light, especially colour, luminous sky signs. But all efforts have
come up against the same obstacle: lack of public interest. These means
of advertisement are insufficient to satisfy the universal thirst for know-
ledge. The cinema meets this need by combining a general work of
education with this big task of persuasion. For it is indeed an educa-
tional mission to acquaint the masses, in the live manner of the cinema,
with all that the hand and the mind of man, wealth and scientific mana-
gement can produce!

Competition in the modern world is no longer the empirical business
it was in the past. At the present day, only those who can give proof
of sound organization and first-rate production can hope to win and to
hold their own on the world markets.

A wide application of the cinema to advertisement can achieve
vast and valuable results. It can lead indirectly to a more and more
perfect form of cooperation between different countries; it can make the
public acquainted with the industrial movement, and the machinery and
working of big enterprises, demonstrate the conquests of human labour
and the advances rendered possible by scientific management. And all
this spells knowledge and education!

The Director of the Institute proceeded to describe the several ways
in which the cinema could serve the purposes of advertisement; the tech-
nical methods, such as animated drawings, and those super-modern ex-
pressions of the cinema: colour films, word and sound films, all of which
give the widest scope to imagination, cleverness, taste, and the artistic
sense. By such means real little works of art were created, though used for publicity pure and simple. Such advertisements not only do not irritate the public, they interest and amuse it and arouse admiration for the new technical achievements and the new expressions of cinematography and art.

This double mission of spreading knowledge, on the one hand, and of artistic publicity on the other, ensures the fullest development of the cinema. Already in many countries enterprises organizing cinematographic publicity are thriving and multiplying and are managed on the most thorough and serious lines. Other centres will no doubt follow. Just as commerce is intrinsically international, so also this new development of the cinema tends to become international.

In closing his speech, Dr. De Feo expressed his hope and confidence in the most cordial collaboration between the International Institute in Rome and the several Nations interested in advertisement and propaganda films.

Dr. De Feo, whose speech was warmly applauded, was followed by several speakers who expressed the hope that the Institute would become a centre for the study of this aspect of the cinema and promote cooperation between the different countries. Dr. Curlis took the opportunity to give a public welcome to the International Review of Educational Cinematography, which he described as a splendid expression of will and enterprise. He proposed to the Assembly that the report of the Congress should be published in the Review, which should be considered as the official organ of all producers and users of educational films in all countries. The Assembly adhered unanimously to this proposal.

Dr. Pinshewer, a renowned veteran in the camp of the educational cinematograph in Germany, and the Director of the Pinshewer Film Co., spoke next:

"Advertisement is an outstanding feature of the economic life of to-day" said the speaker. Advertisement opens up markets to production, an essential condition to the rationalization of all business enterprises.

The time-worn methods of propaganda, by copy and posters, have now to make room for the advertisement film, which assumes therewith a politico-social importance.

"Advertisement films count barely twenty years of life in Germany. She preceded all the other countries of Europe in the use of this type of film.

"Indeed, when the speaker went to London in 1913 to exhibit some of the earliest advertisement films (which Germany had been making since 1911) to British manufacturers, he discovered that the latter were still unacquainted with this means of publicity.

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«Since that date, advertisement films have found their way into all civilized countries. Germany ranks first among European countries in this field; she has, moreover, developed the technical and artistic character of these films, along special and original lines.

«For the first time, this Congress offered Germans an opportunity to form a correct idea of the progress of advertisement films in other countries and to study the best means of launching them, while bearing in mind the fact that publicity films, no less than dramatic ones, often serve the purpose of diffusing a knowledge of national production beyond the national frontiers. This makes it most important for all publicity agents to be well informed as to the tastes of cinema audiences in other countries so as to study the best means of diffusing their films.

«An important point would be achieved in the interest of film advertisers in all countries if this Congress were instrumental in determining and making known the standard length of reels suited for projection in all countries. There are two types of advertisement film in use to-day in the German public cinemas: the standard film measuring about 100 metres and the sub-standard film measuring 25 metres. The former is nearly always projected by itself; the latter in groups of four films, as a prelude to the regular program of the halls.

«The artistic development of advertisement films has been retarded of recent years and is still being retarded by the tendency of the big cinemas — and more especially the big consortia — to screen such films and make money by them regardless of their artistic quality.

«The international competition opened, on the proposal of the German League of Educational and Cultural Film Producers (Bund deutscher Lehr- und Kultur-Filmhersteller), aims at promoting interest in artistic advertisement films, not only among those directing cinematographic studies, but among the proprietors of cinema halls and all other persons concerned. The competition, moreover, aims at calling the attention of the public to this special branch of film activity, so as to promote its development. The competition had taken place under the auspices of the Reich Kunstwart, in Berlin, contemporaneously with the sessions of the Congress.

«According to information published in the Film-Kurier, there are at the present time in Germany 86 firms that devote themselves to the production and distribution of advertisement films and last year they made 365 films, having a total length of 68 thousand metres. If we compare the yearly expenditure in Germany for the production and distribution of advertisement films with the total cost of publicity which German trade and industry has to meet every year, which, according to the computations made by the Institut für Konjunkturforschung together with the Leipzig Fair Company, amounts to one thousand million gold marks, this
may be regarded as modest. The speaker reckoned that the amount devoted to advertisement films does not exceed ten million marks annually, i. e. 1% of the total German expenditure on publicity.

« But we must not look to figures alone and rely on such comparisons in estimating the value and importance of the advertisement film.

« In Germany some two thousand cinematograph halls, that is to say about half the total number, had declared their willingness to project systematically advertisement films. This number includes the most important cinemas, judged by the number of seats. Assuming that the average number of seats in these halls is five hundred and that each seat is occupied ten times in the course of a week it would follow that, having one million seats available, publicity films can be systematically exhibited week by week to ten million spectators.

« Taking into account the deep impression which the screen spectacle makes on spectators, there could be no doubt as to the ever increasing importance of industrial advertisement films for commerce, communications, and Government services, an importance proportionate to the ever increasing use made of them.

« In addition to the strictly advertisement film, there has been an increasing demand during the last ten years in Germany for the industrial and cultural film having a special publicity tendency; films which are projected often with the accompaniment of explanatory lectures, to school and association audiences, outside the normal cinema programs.

« The producers of patented articles have been prominent among trade and industrial groups in the use of advertisement films; among these first and foremost come the big firms providing for everyday household requirements, the pneumatic industries and the manufacturers of labour-saving apparatus, such as vacuum cleaners, central heating plant, etc., as well as the big shipping lines, cooperative supply societies, gas and electricity companies, health and climatic resorts, fertilizer manufacturers and manufacturers of artificial silk.

« German industries have recourse to advertisement films also as a means of promoting their foreign trade.

« Propaganda in all matters of social interest is another branch in which Germany makes use of the cinema; that is to say, in such matters as savings banks, the organization of the Reich railways, and the postal and wireless telegraphy services ».

At the close of Mr. Pinshewer’s speech, which was greeted with prolonged applause Mr. George E. Turner addressed the Congress. Mr. Turner is a renowned organizer and expert, who is responsible for the creation of an important film publicity enterprise in England, that serves as a model of sound organization and business principles.
Film Publicity, said the speaker, has been in operation in Great Britain for about 10 years but I believe that so far we have only touched the fringe of its possibilities. By Film Publicity I of course mean commercial propaganda by specially prepared films exhibited in public kinemas.

Its development has to some extent been retarded by the personal attitude of the advertiser toward films in general. We must remember that the kinema in the early years of its existence was mainly supported by the working and lower middle classes. It gave them an entertainment, which they understood and appreciated, at very much less cost than the established forms of amusement, the theatre and the music hall, could do. But it was some time before the cultured and the comparatively well-to-do took much interest in the pictures except to condemn them. It was a common thing in the past when approaching an advertiser in an endeavour to interest him in Film Publicity to meet with an utter lack of sympathy and understanding because he himself had never attended a kinema and had no desire to do so. Today the position is different; the film is a recognised form of dramatic art as well as being one of the great businesses of the world and there are few people indeed of any class who do not patronise and enjoy the kinema.

The kinematograph film was too great a force to be ignored. When we consider that practically over-night film artistes have achieved a fame and popularity scarcely equalled by the great political figures and soldiers of our time its tremendous potentialities for propaganda must be admitted.

In my own experience I have found that those advertisers who were among the first to use Film Publicity have generally employed it consistently year after year and in most cases have steadily increased their expenditure. As more and more publicity films have been exhibited the interest of other advertisers has been awakened and today in Great Britain Film Publicity has almost become a fashionable advertising medium.

Let me tell you briefly how we operate Film Publicity in Great Britain. As you no doubt know, we have in all about 4,000 kinemas which are attended by over 25 million people each week. Of these 4,000 kinemas approximately 75% are prepared to include a publicity film in their programmes. Effective national coverage can however be obtained by a campaign of, say, 1,500 bookings — by that I mean a week's exhibition in 1,500 kinemas. This provides a circulation-value of about 12 million — 12 million actual viewers of the film. The bookings are usually spread over six months but the period of the campaign is naturally determined by the selling policy of the advertiser. It is usual to charge an inclusive price for the campaign covering the production of the film, the necessary film-copies and exhibition. We have adopted a standard length for publicity films of 400 feet, that is, about 125 metres. Allowing five minutes'
screening-time, it is worth noting that in a 1500-booking campaign 60
million minutes of attention are given to the product featured in the film. Speaking for the firm that I represent, there is one important point in
our service which cannot be stressed too much — every publicity Film
we distribute is a solus advertisement, that is, it is the only publicity film
included in the cinema programme during the period of exhibition. The cost of Film Publicity in Great Britain is roughly £1000 for each million-
and-a-half of circulation. I have given you these elementary facts con-
cerning the manner in which we conduct Film Publicity as quite possibly
other methods are employed in other countries.

«I believe that Lenin, the great Russian leader, placed the film first
as a medium for propaganda in Russia, and whether it is to advance a
political creed or to sell goods, which latter is our business, I believe that
the film can express the desired appeal more effectively than any other
medium. The words of the press advertisement must be converted into
mental images by the intelligence and imagination of the reader which
are often inferior to those of the copy-writer whereas in the film the pictures
already exist and live.

«But although the film has unequalled power of expression it demands
a good deal of care and thought to use these powers to the best advantage.
We must assume in the first place that the only justification of the film-
story is the product itself. I believe that it is bad selling first to originate
a film-story and then to introduce the product as a secondary considera-
tion. The film should be dependent on the product so that without the
product the film could not exist. If that point be conceded then to my
mind the two great essentials in creating a successful publicity film are
the right atmosphere and actual demonstration of the product in use,
that is, if it lends itself to attractive demonstration. Let me explain
what I mean by the right atmosphere. We must consider who are likely
to be the buyers of our product and we must see that the characters in
the film are what these potential buyers would like to be or imagine them-
selves to be. We must lift the setting of the story a little above the social
grade of the people to whom we intend to sell the product. If, for exam-
ple, our film is designed to sell artificial pearls we must show that they
are delighted in by fastidious, elegant people who, from their surround-
ings, we judge to be in a position to afford the real variety. If the
product is to be sold to men, then our film-story must strike the right
masculine note to interest the type of man who is likely to be our custom-
er. For a household appliance such as a cooking stove, it would obvi-
ously be demonstrated in a home radiating cheerfulness and efficiency,
the kind of home that every woman would like to possess — which brings
me to the second point, that of demonstrating the product. Actual per-
sonal demonstration of the uses of a product by a salesman is often
too costly to be widely employed. But the film can be the most efficient salesman-demonstrator of a product. It can give the ideal demonstration with the right human appeal to millions of people at a comparatively small cost.

«As well as demonstrating the product we like if possible to show it actually being bought. The viewer of the film naturally imagines himself in the position of the film artiste who in using the product and there is a definite urge to buy created in his mind.

«We are using today mainly two types of publicity films — the story film and the industrial. The industrial film depicting the manufacture of the product is still popular. We find that kinema-goers like to know the way things are made — they are still interested in clever machinery. Films of this character are valuable for demonstrating the quality and general goodness of food products and add to the prestige of the manufacturer. At the same time, the film must not be a bald procession of manufacturing processes — it is desirable to lead up to the factory scenes through some external interest relevant to the product. And again it is desirable to include in the film a demonstration of the product under the conditions in which it is used.

«I have stated briefly the principles we endeavour to employ in designing a Publicity Film. We know from the results we are obtaining that we are making good and effective films, but to my mind there is plenty of scope for development and improvement. It of course goes without saying that the photographic quality of a Publicity Film must be above reproach.

«So far I have not attempted to say one word concerning talking films. At the present time they are only being operated to a limited extent in Great Britain and it is impossible to obtain anything approaching national coverage. More and more kinemas are however being equipped with talking film projectors and when it is possible to ascertain what process will be generally used throughout the country there will be a bigger opportunity for talking publicity films.

«I would like to summarise what I consider to be the advantages of film publicity:

«1. It is possible to present every type of selling appeal in the publicity film in a way readily understood and appreciated by people of all classes.

«2. In Great Britain today there is available to the advertiser the huge circulation of at least 18 million.

«3. By careful selection of kinemas the Publicity Film can be directed to reach potential buyers of every class.

«4. A campaign can be national or localised to any extent desired without wastage.
"5. The Publicity Film compels attention for a definite space of time.

"6. The Publicity Film is always a solus advertisement.

"In conclusion I would like to make a suggestion. I believe that it would be valuable to have some means of interchange of Publicity Films among all countries. Apart from the purpose of the film to sell the product it features, I believe that within its limits it gives a better idea of the life of its country than most of the big films that are produced for entertainment only. I know that so many entertainment films sent to us in Great Britain deal with the abnormal life of the countries in which they are produced and I believe that if we received more publicity films from abroad it would help us to a better conception of the real life — the normal life of other nations and by a general interchange of Publicity Films we could make some small contribution to international goodwill. But apart from this consideration, I believe that Film Publicity organised on an international scale can become a tremendous weapon for the furtherance of trade ».

Mr. Turner was followed by several other speakers. The Inventor of the Bioscope exhibited, amid the keenest attention, a film taken in Berlin in the year 1895. This projection, of truly historic interest, was followed by the projection of several films that had been awarded prizes. Lastly, a representative of one of the foremost German manufacturers of talking film apparatus, the Klangfilm Co., delivered an address, which we summarise herewith.

"Publicity is always ready to avail itself of any new technical contrivances and improvements that may serve its purposes. This is especially true of the most recent of all technical creations — the talking film — which already ranks as the modern medium of publicity par excellence.

"By adding sound to vision, it opens up new possibilities of enjoyment and a wider scope for publicity.

"Advertisements, posters, the cinematographic film itself, in its most perfected and artistic form, are all addressed to the eye; lecturers, loud speakers, all the agents of commerce who deal with the public, make their appeal through the ear; but the talking film carries all before it, for it addresses itself to both organs at once, and by combining sound and vision creates a perfect whole.

"A whole new world of possibilities is opened up to the cinema by this conquest of sound, and advertisement — ever on the look-out for
something new — has here a novelty full of undreamed of promise. Truly a boundless horizon!

« All the forms and devices of the silent advertisement film: dramatised action, animated drawings, documentary films, can now be recreated in a completer form by the new method of utilizing the two essential features of the talking film — words and music — and synchronising these with natural sounds (the all-talker).

« I will mention a few only of the possibilities thus opened up. To even hint at them all would be impossible.

« First we have Lecture Films.

« In these films, either the image or the verbal message can have priority, as seems most fitting. The words impart life to the image, and the image enforces the eloquence of the words!

« This type of film lends itself to all forms of publicity; it can serve business by replacing the personal calls of touts and agents; it is at the service of political propaganda, since it can reproduce the words and gestures, the living semblance of the candidates; while it serves the purposes of hygiene, sport, and all forms of propaganda and technical demonstration, no less than the serious purposes of scientific instruction.

« Then we have what are known as Transformation Films, synchronising music, words and sounds.

« All that is comic or grotesque can be exaggerated by sound, any difficulties which present themselves in the captions or descriptions can be got over by the spoken word — tho' it is true this presents new difficulties in the international sphere — mute things are endowed with voice, all manner of transformations become possible, and the interest of the audience is held and redoubled.

« There are no bounds to the possibilities of development of this type of film. It can penetrate all fields of activity. Just as the transformation of images has allowed the most impossible things to be represented in the past, so the sound film now offers possibilities of development which musicians have yet to elaborate.

« The artistic and serious value of these films depends on the combination of words, images, music and sound.

« Documentary talking films can likewise be utilized for the purposes of publicity.

« The characteristic of this film consists in the natural combination of the sound with the image. What the transformation film achieves by means of artifice and the exaggeration of detail is here rendered by the accuracy and perfection of the reproduction.

« These films lend themselves more particularly to industrial propaganda. The working of machines, traffic, the rhythm of labour, all those processes which cannot be rendered fully by the image alone, are
reproduced and made to live by the talking film with a force and vitality of the highest propaganda value.

These films do not show us men offering goods for sale; they do not give us fanciful images, created or adapted in a grotesque or unreal guise to imitate nature; they show us real things in all their persuasive reality.

The mind of the spectator is reached by this double appeal through the eye and the ear in a manner that no other means of publicity can effect, and he becomes more than usually susceptible to the attractions of the offer.

The talking film opens up new paths to advertisement for the conquest of customers, whose resistance falters before this double attack. And this discovers fresh paths and possibilities for industry».

The next Congress will be held in Brussels in 1930.

In quitting the subject of the Berlin Conference the Editor of the International Review wishes to express the satisfaction with which he has thus responded to the resolution of the Congress and reported its proceedings, which deal with so important an aspect of the modern cinema. This admirably organized Congress may be regarded as an initial opportunity of contact between those who represent the vital force of this branch of cinema activity in the several countries.

We shall be happy to open our columns to new ideas, new initiatives, new suggestion in this domain. This should help to prepare the way for the discussion of the questions to be threshed out at the next Congress to be held in Brussels.
In the first number of the Review we published a short article on «Fire and Film». The letter which we publish herewith has just reached us from an important authority in the American Cinema world.

We had in fact ourselves cast doubt on what the daily press had generally affirmed as certain with respect to the causes of the Cleveland fire disaster. We have pleasure in now placing before our readers a letter which deals with this point in a precise and substantiated manner, and is such as to remove all shadow of responsibility for the appalling disaster from the moving picture industry.

We shall return to this question in a later issue so as to set forth the instructions referred to in this letter.

Dear Dr. de Feo,

With reference to the article in the July issue of the «International Review of Educational Cinematography» on «Fire and Film», I am sorry that owing to the lack of accurate information the blame for the Cleveland Hospital Fire is attributed to the motion picture industry.

Cinematograph films did not cause this accident. It was caused as a result of a fire originating in nitrocellulose X-ray films. As you probably know, these are large films used in hospitals by the surgeons. These films were stored in the basement of one of the Cleveland Clinic Foundation buildings, quite evidently in violation of the precautions for keeping this material. Instead of being stored in a vault, protected by automatic sprinklers and provided with a vent to carry off fumes in case of fire, this X-ray film was stored in an old coal bin exposed to several potential sources of ignition, without automatic sprinkler protection, and with direct opening to a pipe tunnel and shafts that furnished a natural path of travel for the fumes to every room in the building.

This coal room which had been converted for storage, was a brick enclosure 19 x 24 and a half feet, a little over 9 feet high, and without windows. The X-ray film, which runs usually 14 x 17 inches, was stored in paper envelopes in this room, mostly on wooden shelves, but some in steel filing cases. It is evident that there was present between three and four tons of this material at the time of the fire. The lighting in this room was by an ordinary electric bulb on a pendant cord. A four inch steam line brought steam at a reported pressure of 45 to 65 pounds per
square inch from the nearby hospital, through the top of this room. This pipe was only about a foot above the film storage shelves and a vertical section passed within a few inches of the shelves.

It is obvious that the fire came from the decomposition of the nitrocellulose film. Pyroxylin compounds like nitrocellulose film are chemically unstable at elevated temperatures and decompose at temperatures as low as 300°F. This decomposition generates further heat and liberates carbon monoxide, various oxides of nitrogen and other gases which are both poisonous and highly explosive.

There are many different fire regulations in the different states throughout this Country, but, in order to obtain satisfactory insurance, any place storing films must meet the regulations as published by the National Board of Fire Underwriters, copy of which I am enclosing. In addition to the regular inspections of all motion picture exchanges or storage places several men from this office are constantly in the field inspecting these same storage places and making full reports on them. There are some thirty-two key cities in the United States which serve as centers or storage places, and from which the motion pictures are shipped to the different theatres in that particular district. Under separate cover I am sending you copies of instructions which were placed in every one of these storage places. These instructions are required to be carried out to the last detail under pain of the dismissal of any employee found violating them.

Also, I am sending you a copy of an inspection questionnaire which is filled in every month and filed in this office.

As a result of this very thorough work, there has not been one single fire in any of the storage centers for a period of over two years. Fire laws are very rigid in regard to theatres, also dealing with motion pictures.

If schools, institutions, etc., are storing films, they are required by fire regulations to take care of this material by the most approved and up-to-date methods. A great many of the schools and institutions in this country are using a cellulose acetate film entirely, which has, as you know, no more fire hazard than paper or cardboard. Unfortunately, however, this type of stock will not stand up under the hard treatment that a commercial motion picture has to go through.

The Eastman Kodak Company has spent many millions of dollars in their experimental laboratories trying to find a substitute for the nitrocellulose film, but so far have been unsuccessful in obtaining results which will stand up as well as the nitrocellulose film does under the necessities required of it.

The recommendations relative to storing films put forward in the article are very splendid. Certainly if all motion pictures were stored under such conditions we would not have any fires of a serious nature.
INSTITUTE TOPICS

THE AGREEMENT BETWEEN THE INTERNATIONAL LABOUR BUREAU AND THE INTERNATIONAL EDUCATIONAL CINEMATOGRAPHIC INSTITUTE

The International Educational Cinematographic Institute, in Rome, and the International Labour Bureau, in Geneva, have drawn up the terms of an Agreement for the purpose of regulating the friendly cooperation between the two organizations in all matters pertaining to the Cinematograph, and establishing these on a firm basis.

The International Institute is happy to make known the terms of this convention which gives concrete form to that intimate understanding, essential to the spirit of the Pact, between the several organizations under the League of Nations: an understanding the sole object of which is social progress and improvement.

The Institute is particularly gratified by this Agreement, inasmuch as it is entered into with the International Office whose aim and endeavour is to solve the most arduous problems of the social life of our times, those affecting Human Labour in its manifold activities and innate nobility.

We give herewith the text of the Agreement:

AGREEMENT

1. - Considering:
That the International Educational Cinematographic Institute in Rome is an international technical body set up to deal with problems relating to educational cinematography;

2. - that among its principal tasks is that of assembling complete documentary evidence respecting:
   a) legislation affecting the Cinematograph;
   b) firms engaged in manufacturing the material (blank films and apparatus) used for educational cinematography, and in producing printed films for the purposes of all forms of instruction; and
   c) all other matters appertaining thereto;

3. - And establishing Collections of educational films (Cinémathèques) and compiling international catalogues of such films.

4. - Considering, on the other hand, that the International Labour Bureau, in Geneva, deals with all the problems of labour;
5. That, more particularly, it collects a complete documentation whether legislative, statistical, or otherwise, on:
   a) labour conditions in all industries, trades, agriculture and shipping, and all other forms of human activity;
   b) the several aspects of the question of the employment of the workers’ leisure, including occupational instruction;
6. That it is, moreover, vitally interested in cinematographic films dealing with industrial hygiene, the prevention of accidents, occupational training, the cooperative movement, and all subjects within the compass of its activities;
7. Considering:
   that there are therefore a certain number of questions of common interest to both of the above mentioned institutions:
   They have agreed as follows:

I. — A COMMISSION ON LABOUR FILMS.

8. - Considering the importance attaching to the compilation of an international Catalogue of films concerning Labour:
9. - That this task must be carried out in a practical spirit and with technical competence;
10. - That films which are officially recognized as important by the institutions of the League of Nations must be of unquestionable educative and scientific value;
11. - That it is consequently necessary for competent persons to make the choice of such films;
12. - Considering:
   that it is equally necessary to form a collection of films on the prevention of accidents, industrial hygiene, occupational training and other practical problems connected with labour education;
13. - And that such a task can be carried out only by experts;
   Therefore:
14. - A) A Commission on Labour Films is hereby set up, in accordance with the terms of Article 12 of the organic Statute of the International Educational Cinematographic Institute and of Articles 33 and 34 of the General Rules of the said Institute;
15. - B) The members of the Commission are appointed in accordance with Article 33 of the Rules of the International Educational Cinematographic Institute, by the President of the Institute’s Administrative Council, on the proposal of its Director, after consulting the Director of the International Labour Bureau. The Director and the Secretary of the
Administrative Council of the International Educational Cinematographic Institute are ex officio members of the Commission, as laid down in the above cited Article of the Rules.

16. - The Commission deals with:
   a) the compilation of international catalogues of films concerning labour problems;
   b) the formation of a Film Archive relating to the prevention of accidents, industrial hygiene, occupational training and other practical labour problems;

17. - The Commission shall, when it deems it necessary, appoint one or more experts to advise on the choice of films to be included in the Archive.

18. - In accordance with the terms of Articles 34 and 12 of the General Rules of the International Educational Cinematographic Institute, a special Agreement between the International Labour Bureau and the Institute will provide for the expenditure entailed by the Commission.

19. - Further agreements will determine the number of members forming the Commission and all details connected with its functioning.

II. — EXCHANGE OF DOCUMENTS

A.) Regarding Legislation.

20. - The Educational Cinematographic Institute shall form a general collection of documentary matter concerning the laws affecting Cinematography and shall communicate to the International Labour Bureau all texts and documents likely to be of interest to it.

21. - On its side, the International Labour Bureau, pursuing its methodical collection of all the texts of laws dealing with the problems of labour in all branches of industry and trade, shall communicate to the International Educational Cinematographic Institute all those documents which concern the cinematographic industry.

B.) General Documentation.

22. - While the International Educational Cinematographic Institute, on the one hand, assembles information of all kinds on the firms manufacturing films and cameras and in general on all the technical problems of the cinema;

23. - And the International Bureau, on the other hand, assembles statistics and information on the conditions of work in the several indus-
tries and trades, regarding wages and profits, hours of work, hygiene, safety, etc.;

24. - Both Institutions, working in close collaboration, shall exchange all items of information likely to interest the other.

25. - In particular, the International Labour Bureau, when compiling its card index respecting films on labour questions, shall supply the International Educational Cinematographic Institute with a copy of all cards thus filed and, in exchange, the latter Institute shall communicate to the International Labour Bureau a like documentation on all questions of interest to the latter, as specified by it.

III. — INTERNATIONAL LABOUR PROBLEMS IN THE CINEMATOGRAPHIC INDUSTRY.

26. - The International Educational Cinematographic Institute shall hand over to the International Labour Bureau the study of all questions touching on international Labour problems in the cinematographic industry with which it may have been entrusted and shall place at the disposal of the Bureau all the documentary evidence collected by it on the subject, together with the results of any preliminary studies it may have carried out.

27. - In like manner, whenever the International Educational Cinematographic Institute has to deal with questions certain aspects of which only come within the province of the International Labour Bureau, it shall transmit to the latter the study of such particular aspects in the manner above stated.

LUCIANO DE FEO

ALBERT THOMAS

NATURAL COLOUR CINEMATOGRAPHY AND STEREOSCOPY

The conflict of opposing views and interests still raging around the talking cinema has for the time being swamped public interest in two other most important innovations, which no less, and perhaps more, surely then synchronism itself are destined to play a big part in the future of the cinematograph.

We refer to colour cinematography and stereoscopic effect.
After years of research and study, the naturally coloured film seems to have attained to perfection. While it is debatable how far some systems are really practical, others seem to be perfect from all points of view. In any case, we are justified in regarding this problem as now definitely solved, and the public will soon be called upon to pronounce on its industrial possibilities.

Natural colour photography has always been an engrossing problem and interest in it increased with the advent of the cinematograph. After succeeding in reproducing movement, it was only natural that men should try to reproduce sound, colour and relief; the selfsame ambition which had led to the invention of the cinematograph urged inventors to seek to capture these other three essential elements of Nature.

It would be difficult to decide who is the inventor of colour cinematography; indeed at the present time France herself it still debating which of her two renowned citizens can claim to be the inventor of the cinematograph. The new conquest, though based on a single principle, may be considered, no less than sound reproduction, as the result of the working out and perfecting of a whole series of studies and ideas.

We do not propose here to go into the technical details of all the different systems whereby a practical solution of the natural colour problem has at last been achieved. This aspect of the question is being dealt with comprehensively from the scientific standpoint in a series of articles by Prof. Namias and further articles will be contributed to the Review by that eminent authority, Prof. Seyewers of Lyons.

So far but few systems have become known and practically applied, to however small an extent; none of these systems has attained to perfection. The first system to make a public appearance was the English «Kinemacolour», which aroused great interest in all who had an opportunity to watch it some twenty years ago. This was based on the two-colour principle and the images were successively projected, through a rotating red and violet filter, at twice the normal velocity, with results then hailed as satisfactory.

The French inventors Keller-Dorian have for the last ten years or so worked on a very ingenious three-colour system consisting of a lenticular surface impressed on the film; the colour is obtained by means of a tri-chromatic filter with parallel stripes, placed in the objective. This system, while reproducing colour very successfully, has not so far been applied because of the impossibility of reproducing the positives; this difficulty has now at last been overcome, and the Kodak Company is placing 16-milimeter films on the market, while a British Company has been formed to float the Keller-Dorian patent.

In America the Technicolour system is still in practice and though
it does not allow of the exact reproduction of colours it has, nevertheless, proved the most practical system up to the present.

It is founded on the two-colour principle and consists of two equal images, superposed accurately one on the other, and colored by chemical process, one red and the other violet; this superposition produces a coloured positive that can be projected without the addition of any special optical means. But apart from the fact that it does not reproduce colour faithfully, there is the disadvantage that the printing of the positives is very difficult, and consequently very costly. Notwithstanding this drawback it has been the most widely applied system up to the present.

Signor Gualtierotti has recently given some highly interesting demonstrations, which have led to notable results. His system is also based on the two-colour principle and on two equal images, placed side by side, on a film of twice the standard width. The images are projected simultaneously through two filters, one red and the other violet, and are superposed on the screen by means of two objectives with converging and adjustable axes.

A system very similar to this of Signor Gualtierotti's has been worked out in Germany by the Busch Company and is specially adapted to filming surgical operations.

So much, at a summary glance, for the systems that have been best known, though never widely applied, up to the present; but now from France, Germany, England and America new and more perfect inventions are being heralded, and we may hope soon to enjoy the practical application of these marvellous achievements of man's genius.

Third dimension cinematography, or stereoscopy, seems now to be an accomplished fact. Trustworthy information from America states that the Norwegian engineer, Berggren, and Mr. Spoor, of Chicago, after ten years of study, have succeeded in solving what has hitherto been regarded by most people as an insoluble problem. Great success attended a demonstration held in the presence of the foremost authorities of the American cinema-world. It is not stated by what means the inventors have succeeded in achieving this long desired result, and we are anxiously awaiting detailed particulars of the new conquest. As soon as further information reaches us, we shall publish a note on the subject; meanwhile let us take a glance at some of the new possibilities opened up to the cinema by colour and relief.

Nature is a harmonious synthesis of form, colour and sound; life consists in movement. In the past the cinematograph has been able to reproduce form and movement — movement more successfully than complete form, for the monocoloured image is imperfect, as lacking relief and the relation between distances. Then came synchronism, which allowed of the more or less faithful reproduction of sound, but two of the principal qualities, colour and plastic form, were still lacking.
The lack was grievous, for a scene may be silent and stationary, but nothing in nature is devoid of form and of colour. These two qualities are the essentials of all visible things. Photography gave us a part of the form, and the cinematograph gave us movement also; but the representation was incomplete. Form depends on the harmony of three dimensions, height, width and depth; monochrome pictures reproduced two of these dimensions, height and width. The conquest of the third dimension will give us an exact reproduction of things in their form and mutual relationship; colour will clothe the image in all its native beauty.

The theatrical cinema can dispense with relief and colour, for it depends on other features of interest; but we who look to the film as a means of teaching and an instrument of science, cannot fail to feel the lack of these two essential factors. We need only consider in the light of teaching any one phase of the knowable (and the «knowable» is all «graphable» to the cinema) to realize at once the importance of colour and relief. A landscape appeals to us through the harmony of its colour and form; a monocular and monochrome vision of it can give but an imperfect impression, and we are driven back to our imagination and our habits of direct vision to clothe the scene with all the qualities it lacks. We can reproduce a bird of the tropics in its bodily form, its movement and the notes of its song, but what of the dazzling colours of its feathers? Lovely as is the song of the nightingale, the orgy of colour in the feathers of the humming-bird is perhaps lovelier still.

The vision of a caravan of camels in the desert, against the setting sun, will be far more suggestive when we can render all the contrast between the caravan and the burning and unbounded desert waste; its appeal does not depend on sound or on movement, but on colour and plastic form.

We shall feel something of the real thrill of real mountain heights when watching a stereoscopic film of Alpine scenery with its peaks and its dread precipices, while a monocular vision of it does not move us.

Thus we await impatiently the industrial phase of these two great achievements of the cinematograph, not as a means of speculation or of mere enjoyment, but as a most potent instrument of teaching and of culture. As soon as the cinema is endowed with the third dimension, and with colour and voice, we shall be able to grasp this world, with its things and its living creatures, its infinite beauties and its horrors, and confine it within the narrow limits of a room or hall. Our eyes will be able to behold things so far only dreamed of, and our imagination will have to take refuge in the abstract alone, for there will be no more distances in this world and nature will no longer have so many mysteries.
THE CINEMA AS AN AUXILIARY TO THE SCIENTIFIC ORGANIZATION OF LABOUR

The part played by the cinema in the domain of labour as an auxiliary in the propaganda of scientific management, in its manifold aspects, grows in importance from day to day.

The announcement that this Institute intended to take up the question and study it with attention was welcomed cordially by a number of Organizations and Institutions interested in it; many of these, indeed, have organized special offices for the sole purpose of getting out films dealing with occupational training and guidance and scientific management systems.

Only by stirring up active interest and the discussion of this subject in the spheres of labour can any concrete results be achieved, results which will demonstrate the soundest criteria to follow in the use of the film, without losing sight of the peculiar characteristics of the various doctrines on the science of labour which are successfully applied in different countries.

In the United States, for instance, certain methods are in use which give excellent results in the environment and under the conditions prevailing in that Country, but which would not lend themselves without considerable modification to a different environment, where general and particular conditions are so different.

The screen shows up most efficaciously the conditions requisite for improved output and increased yield, the several factors of occupational training and guidance in the selection of a trade, and the surest methods for preventing accidents in factories.

We note with pleasure that ever since the International Cinematographic Congress held in Paris in 1926, in which the importance of the cinema for illustrating labour problems was stressed, to the Congress held last June in Paris on the Scientific organization of Labour (Scientific Management), there has been a steadily growing understanding of the necessity of applying the moving picture to industry.

How to use to the best purpose this most typical product of modern progress, that is the question. It is question with which this Institute is vitally concerned.

In the course of its work of enquiry and documentation, the Institute has made contact not only with the industrial and syndical organ-
izations mentioned in our last number, but also with the Rumanian Institute of Scientific Management of Bukarest, with the Polish Institute of Scientific Management and the Federation of British Industries in London. We wish here to call attention to the active and varied cinematographic activities of this latter organization, which has set up a special cinema department to deal with the production of films concerning biology, industry, labour, botany, geography, natural history, etc.

This Department has organized also a Film Collection which includes a vast number of educational films and has recently brought out a most interesting Film Catalogue. We have pleasure here in giving a list of some of these, which claim attention in connection with some special branches of study.

**Films illustrating Industries and Domestic Work.**

1. *Baby's Birthright.* — A propaganda film against bottlefeeding babies, showing how cotton-seed prepared in a scientific manner can help the nursing mother.

2. *Making a Bed.* — The workmanship and material that go into the making of a comfortable mattress are shown, including the treatment of horsehair and wool and box spring mattresses.

3. *Making Cane Furniture.* — The weaving of cane into household goods is a very old craft and is done by hand. A picturesque industry.

**Films illustrating Mining and Metallurgy.**

4. *Cable making.* — The subject deals with submarine cable, and shows in an interesting manner, supplemented by diagrammatic cartoons, how a cable is built up, much ingenious machinery being shown.

5. *Coal and its Products.* — In this visit to one of the largest gasworks, the methods of obtaining the various by-products are shown. Ammonia, tar, fertilizers, etc., are dealt with in turn in an arresting manner.

6. *Iron Manufacture.* — From the quarrying of the iron stone to the finished pig iron, this fascinating subject is convincingly dealt with in detail, and contains views of blast furnaces in operation.

7. *The Magic of Nitrate of Soda.* — The production of Nitrate of Soda in South America precedes some interesting views showing the application to and results on British crops of this well-known fertilizer.

8. *Reinforced Concrete.* — Road-building on this principle is on the increase, and this shows a road being made from the foundation to the finished surface.
9. Steel Manufacture. — Surely one of the most interesting of British national industries. In this the open hearth furnace is portrayed and takes the subject past the ingot stage to the rolling mills.

10. Steel Products. — Showing the manufacture from the ingot stage of steel rails, joists, bars, wire, galvanized and corrugated sheets, barbed wire, etc. Wonderful handling plant portrayed.

11. The Manufacture of Tin Plate. — The South Wales industry is shown in detail from the raw material (scrap iron) through the furnace and ingot stage to the cogging and rolling mills and its final picking and tinning.

12. A Money Making Industry. — A film showing how Canada mints coinage. This film is of educational type, and has been in great demand, both in theatrical and non-theatrical circles.

13. Welland Electric Smelting. — Shows the up-to-date processes of this industry.

Films illustrating the textile trade.

14. The Story of Cotton. — The arrival of the bales of cotton in Lancashire is followed by the various processes in the cotton spinning, i.e., opening, scutching, carding, etc.

15. Underwear and Hosiery. — Showing the manufacture of woollen underwear and hosiery. Many of the machines shown at work are a triumph of inventive skill.

Films illustrating the electrical industry.

16. History of Electricity. — Showing the evolution since electricity was discovered by Thales nearly 3000 years ago, and showing in detail how it is now produced for everyday use. The most modern plant is shown.

17. How the Money Goes. — Dealing with the advantages of Electricity over other methods of house-lighting and heating.

18. Modern lighting. — Dealing with the manufacture of an electric light bulb, both by diagrams and by pictures of the machinery utilized.

19. Telegraphic Transmission. — Shows the actual transmission of messages. Creed machines and other marvels of scientific invention are incorporated. A series of films illustrating the powerful electric and hydraulic plants of Montreal, Vancouver, Eastern and Western Canada and Winnipeg.
Films illustrating the chemical industry.

20. Heavy Chemicals. — Great Britain has always been foremost in the production of Heavy Chemicals: processes in the manufacture of Sulphuric Acid, chlorine, chloride of lime etc., are shown.

21. The Romance of Oil. — The magnitude of the operations involved in the manufacture of Oil in British North Borneo is graphically portrayed, and concludes with the arrival and refining in this Country.

22. Making the Wheels Go Round. — Is a continuation of the «Romance of Oil» and is a survey of the many different means of distributing the oil from the refinery, and includes interesting views of can-making.

Films illustrating Agriculture.

23. Malt and Hops. — Starting in the barley fields and the Kent hop fields, the film follows every process in the brewing of beer in a modern London brewery, and concludes with an interesting section showing the bottling.

24. Apple Time in Evangeline’s Land. — An industrial film dealing with the Apple Industry. This film has historic and picturesque settings, and the story of the great apple industry in this romantic section of old Acadya is interesting and educational.

25. Where Nature Smiles. — This film shows the great Niagara fruit district. We see the trees from the time they are in blossom until the fruit is picked and distributed by means of special refrigerator cars, electric trolley lines, etc.

Films illustrating the shipping and fishing industries.

26. Manchester Ship Canal. — One of the finest engineering achievements of Great Britain. A most interesting journey, showing the unique transporter and other bridges and the activities in the docks and warehouses.

27. Building Wooden Ships in Canada. — An industrial film depicting lumbering operations on Vancouver Island and shipbuilding in British Columbia.

28. Fresh from the Deep. — One of the series of films dealing with the great fisheries of Canada, showing the methods of catching halibut, and how the fish are prepared for shipment to the consumer.

A series of films illustrate up-to-date methods of salmon fishing in British Columbia and the Thurlow fish hatchery at Belleville, Ontario. Canadian tuna trapping and the processes of fish canning are also shown.
Films illustrating various subjects.

29. Building Aeroplanes in Canada. — An industrial and educational film, showing every process in the manufacture of aeroplanes in Canada.


31. The Oxford University Press. — A tour round the most famous printing press in the world. Composing, monotype, stereoplate casting, printing, bookbinding, etc., make an instructive subject.

THE LEGISLATIVE ASPECTS OF THE CINEMA

THE TARIFF QUESTION

(Continuation)

In this number we bring to a close our study of the Customs regime applying to films, with particular reference to the educational films with which this Institute is concerned.

This survey leads to certain logical and necessary conclusions — conclusions which, moreover, had already been reached and formulated by the Paris Congress of 1926 and which were reaffirmed by the C. I. E. in 1928 at its yearly assembly.

During its forthcoming October session, the Administrative Council of the International Educational Cinematographic Institute will discuss in the light of the data collected and the comparisons made and illustrated in the pages this Review, the official proposals put forward on this subject and submit all suggestions approved by it to the competent organs of the League of Nations.

3. Cultural and scientific Films. — Following on the Questionnaire addressed to the several Governments by the International Educational Cinematographic Institute and the large number of answers which have already reached us, we are able to give the following particulars based on the official data received, or on data culled from other sources.

13 Countries (Austria, Esthonia, France, Guatemala, India, Italy, Morocco, the Principality of Monaco, Rumania, Russia, Sweden, Turkey and Venezuela) make no difference in their tariff rates between theatrical and cultural films.

Among these Countries, Russia (U. R. S. S.), while granting exemp-
tion from duty to scholastic material and equipment, makes an exception of cinematograph films.

As regards 18 Countries (Argentine Republic, Canada, Chile, Columbia, Costarica, Cuba, Honduras, Yugoslavia, Mexico, Nicaragua, Panama, Poland, Portugal, Dominican Republic, Salvador, Union of S. Africa, Hungary and Uruguay) — all countries for which we lack properly checked official data on tariffs — it is not certain whether any differentiation is made between theatrical and cultural film.

Respecting the other 30 Countries, we have the following particulars:

a) **Australia**. Exemption is extended not only to films, but to equipment and all material serving the purposes of Schools, Institutes and other educational or cultural organizations. This exemption is granted also in the case of films which are partially of a theatrical character.

b) **Brazil**. Par. 35 of Article 2 of the preliminary provisions of the Customs Tariff provides complete exemption for films as for all other scholastic and educational material intended for Museums, public and cultural institutes, Schools, Public Institutions, etc.

c) **Ecuador**. Entirely exempted.

d) **Japan**. Films intended for educational, cultural and scientific institutes, and those for which licences have been granted by the Ministry of Finance, are entirely exempted from duty.

e) **Greece**. Films intended for schools, Universities, educational associations, etc., are entirely exempted.

f) **Ireland**. All films of a cultural, scientific, and educational character are exempted, subject to certain conditions laid down by the Commissary of Customs. The conditions in question are concerned mainly with ascertaining the *bona fide* character of the film, and are so lenient as to amount practically to complete exemption.

g) **Latvia**. Complete exemption on condition of a certificate being obtained from the Ministry of Public Education attesting the cultural or scientific character of the film.

h) **Norway**. Universities and Higher Technical Schools can import films without paying any duty. Similar exemption is granted to these institutions in the case of gifts from abroad of didactic or scientific material.

i) **New Zealand**. Complete exemption is granted to cultural and scientific films provided they are accompanied by declarations or certificates substantiating their character.

j) **Tunis**. Entirely exempted, not because of any specific provision, but because all printed films are granted exemption.
**Partial Exemption:**

a) *Egypt*. Educational and scientific instruments and material directed to schools, Universities and other educational institutes, are granted exemption from Customs duties, but are not exempted from accessory duties (unloading dues at Alexandria, Suez or Port Said)

b) *England*. Section 8 of the Finance Act of 1928 exempts from Customs duty the importation of certain scientific films required for lectures, study, and educational purposes, provided they are accompanied by a certificate of the Royal Society.

Beside this very small group of Countries which grant partial exemption for cultural films, we have a more numerous group of Countries which grant:

**Exemption within more or less strict limitations:**

a) *Belgium* and *Luxemburg* (Customs Union), under Art. 1119 of the Tariff, grant exemption from Customs duty to cultural and scientific films, conditional to the approval of the Brussels and Antwerp Customs Inspectorate or of the Customs Inspectorates of other districts concerned.

The Offices in question are required to ascertain the indisputable *bona fides* of scientific or cultural films. For this purpose they require a declaration from the Directors of the public or private educational institutes concerned, attesting that, on their personal responsibility, the films will be used solely for educational purposes.

This system of control is so strict that, for instance, the Belgian Cinematographic University, not being counted as a cultural institute, but as an institute of a popular character, has to pay duty on the films imported by it, even when these are destined solely to educational or scientific shows.

b) *Chekoslovakia*. Paragraphs 123 and 125 of the Supplementary Decree on the Customs Tariff grant only the temporary introduction of films directed to congresses, fairs, exhibitions, etc.

By the terms of Paragraphs 87, Nos. 18 and 20, and par. 163 of the Customs Tariff, cinematographic films, cameras, and other material intended for the use of schools, institutes, educational and cultural organizations, for purely educational and non-commercial purposes are, on the other hand, exempted from duty. All such material must remain the property of the school, institute, or other organization concerned, and the directors thereof are required, when drawing up their applications for exemption, to specify the use to which the objects — which must in any case, be included at once in their inventories — will be put.

The above concession is allowed only in the case of imports from Countries with which reciprocity agreements are in force.
c) Finland. The Act of 29 November 1921 grants exemption from Customs duty to imports of cultural and scientific films, provided these are intended for agricultural lectures or expositions or are shown only to audiences by invitation.

d) Germany. The 2 : 1 quota is in force. As no difference is made in the treatment accorded to theatrical and cultural films, a special privileged certificate may be granted for the introduction of the latter when the importer is able to show that two films or equivalent length have been exported against each single film thus imported during the year.

e) Irak. Customs exemption is granted for films which, as attested by the Health or Educational authorities, aim at hygienic or educative ends and for those intended for free exhibition. Otherwise, when intended for public exhibition, they are subject to a reduced duty, at the rate of 2.8 Rupees per Kg., equivalent to Gold Francs 5.27.

f) Lithuania. Exemption from Customs duty is granted to imports of films, apparatus and material of a cultural, educational, or scientific character, in special cases, to be ascertained in each instance, and when these are required for strictly instructional purposes.

g) Palestine, Syria and Lebanon grant the free importation of cultural and scientific films so long as these are required for free exhibition for educational or propaganda purposes.

h) Spain. Importation free of Customs duty is granted only in respect of scientific material, cinematographic films included, intended for State-supported educational institutes, provided the purchase of the said educational or scientific material comes within the means and is included among the items scheduled in the Budget.

i) United States. Cultural, educational and scientific films imported for public exhibition are exempted from Customs duty. Those imported for public exhibition or in general for paid shows are subject to the same tariff rates as theatrical films.

j) Switzerland. According to Art. 19 of the Customs regulations all films acquired by schools and institutes for non-commercial purposes are exempted from duty. Applications for exemption must be supported by certificates issued by the scholastic authorities.

Another group of Countries grants only:

The temporary introduction of cultural films. In this connection it is proper to point out that this time limit to importation constitutes per se an embargo on the spread of universal culture and education by means of the cinematograph.

On the other hand, this principle of temporary introduction, although
it does not amount to a stated rule, prevails also in that group of Countries which do not recognize any difference between cultural and theatrical films.

Let me here point out that the failure to distinguish between educational and theatrical film resolves itself in fact into an advantage for the latter. Thus a provision which might have some justification if applied to a «means» of education, is on the contrary utilized almost exclusively for commercial ends.

Some explanation is requisite here.

The custom of forwarding negatives for copies to be printed is constantly on the increase where subjects of an ordinary theatrical character are concerned. This, at least, is true of Countries which count a very great number of cinema theatres and consequently require a large number of positive copies for the service of the halls and the more rapid exploitation of the film.

With this object in view, producing companies are already providing for making an increasingly large number of negatives. The most recent processes, moreover, of special negatives for duplicates or countypes make it possible to prepare a considerable number of negatives from which copies can be printed later on.

In the above instances, the negatives are forwarded by the principal office or its agencies, application being made for «temporary importation». During this «temporary» period, the negatives are introduced into the Country, steps are taken to have a sufficient number of positive copies printed, and the negatives are then returned. Thus the traders, hirers, and heads or representatives of enterprises manage to save entrance duties which would in any case be minimum, when compared with the purchase value of the film and the possibilities of its exploitation in the Country.

This is true of a certain number of Countries and more especially of the most important which offer the best chances of exploitation and for which the purchase value is high and would be enormous if compared with the entrance duties. Negatives are not, in fact, despatched to those Countries where only a few copies are required.

The above is true of theatrical films.

The same does not apply to the branch with which we are interested, that of the cultural film.

As a rule, when educational films are purchased by foreign countries, the purchase is restricted to one or two, or at most a few positive copies. Cession of the rights for exclusive exhibition is not the general rule. It may take place sometimes where there are powerful concerns of a national character which purchase the reproduction rights of a particular educational, scientific, or scholastic film, relying on their own strength to diffuse it throughout the country. But even in these circumstances, the
purchasing institution, organization, or Company, are likely to encounter serious difficulties. In fact, while the number of positive copies of a theatrical film requisite for its normal exploitation is well known and established by the knowledge of local tastes and habits, and, moreover, the cost of the positives represents only a fraction of the general cost of releasing the film (to it must be added the cost of poster advertisements, press publicity, the series of photographs, the credit to be granted to sub-concessionairs, etc.), how do matters stand with the institute or company which purchases the exclusive rights for a cultural or scientific film? What number of positive copies will have to be printed? What are the chances of sale?

In our case, it is not a matter of normal exploitation, but of the uncertain and complex chances of special exploitation. Thus if only a few copies are printed, one runs the risk of having to ask again for the negative, which may by then be in another country and not easy to obtain. If a large number of copies are printed, the Institute or Company finds itself with a lot of money tied up and this (partly owing to the accumulation of interests) ends in a further charge on the cost of the film and therefore on the chances of its complete and rapid diffusion for educational purposes.

We can here very properly speak of dead capital, since the institutes or companies which interest themselves in educational films cannot carry on in the absence of a lively movement of their business and usually dispose only of very limited capital.

The above, as we have said, is true of organisms purchasing the exclusive rights for the projection of educational films. But where do we find such organizations, if not scattered here and there, and in a few countries at best? In the great majority of cases, educational films are acquired direct by scholastic committees, scholastic or educational institutions, Universities, Schools, cultural clubs, propaganda institutions, and such like. In such cases the purchase of a positive is akin to the purchase of a book. The film, indeed, has to serve precisely the same purpose, but in a broader, more complex and convincing form. Now, while this may be possible within the frontiers of a Country, it becomes impossible when the burden of the cost of forwarding the film from abroad is further charged with the far from negligible burden of entrance duties. In some cases this cost amounts to 50% of the cost of the film itself! The percentage of the normal entrance duties of a theatrical film, on the contrary, represents only 1 to 2% at the maximum, given the highest tariffs and films of average value.

There is no doubt that this handicap is very serious and calls for the earliest possible rectification, especially in view of the importance of the policy of intensifying the exchange of educational films between different Countries in the higher interests of international culture.
In any case, as we stated above, temporary introduction is not the same thing as exemption and it merely stresses the conception of equality in the fiscal treatment of the two kinds of films considered.

a) Austria. The importation of cinematographic films belonging to the category under consideration is allowed, provided it be for one month only after obtaining the approval of the Ministry of Public Education for which application must be made through the Ministry of Finance (Note 15703 III-13, dated 10th September 1924 of the Ministry of Public Education and Note 26601-24-16, dated 16th June 1924, of the Ministry of Finance).

b) Denmark. The importation, free of Customs duties, of cinematographic films and apparatus intended for Schools, cultural and educational institutes and congresses, under obligation to re-export, is allowed. Otherwise the normal tariff applies.

It seems opportune to point out in this connection that this does not constitute a privilege accorded to cultural or scientific cinematographic production, since the same rules apply to ordinary theatrical films.

Holland. Only the temporary importation for six months of cinema films required to illustrate lectures is allowed.

A fifth and very small group of Countries grants to cultural cinematographic material:

*Special Customs treatment:*

First comes Irak, (already mentioned in the third group) by reason of the double concession — however restricted it may be — to films of an educational and scientific character.

*Next come:*

a) Siam which imposes a duty on the basis of 5% *ad valorem* of the market price on all films for the entertainment of children, provided they are sold.

On the basis of an average value of 93.15 gold francs per Kg. of negative and 40.75 gold francs per Kg. of positive, the tax on cultural films amounts respectively to 4.66 gold francs for *negatives* and 2.04 gold francs for *positives*.

b) Hungary, which under the present fiscal system allows a customs relief of 10% for films of a cultural and educational character until the 30th. September 1930.

Bulgaria is in a different position to all the other Countries considered, inasmuch as she raises instead of diminishing the duty on
recreational films for children; this amounts to gold francs 7.50 per Kg., as against the normal tariff of 6 gold francs.

To sum up, seventeen nations, including those of the fifth group and Bulgaria, out of the forty-three for which we have been able to obtain precise particulars, make no difference in the tariffs as between theatrical and educational films (when indeed they do not increase the duty on films intended for children) and merely grant their introduction, restricted both as regards time and quantity, in particular instances, either in accordance with regular rules or according to the decision and prudent judgment of the competent authorities.

Thirteen countries grant importation with exemption from duty in the case of certain institutes and organizations, albeit within the limitations of a fixed contingent, as in the case of Germany.

Three Countries limit the import duty or, as in the case of Egypt, restrict it to accessory dues only.

Only ten Nations grant full rights of citizenship to culture and science as represented by the film.

These facts are all the more striking when we remember that six Countries grant special privileged treatment to films of sub-standard size, which possess merely potential possibilities for culture and science, but which in reality (if only within the narrow circle of a family or an institute) may represent the dramatic and passionate aspects of life; such concession not being due, however, to their presumptive character of lesser diffusion, but because the weight of the film itself and its economic value constitute the fiscal reason for its more lenient treatment as compared with normal films.

Thus Belgium and Luxemburg tax films 20% ad valorem.

Brazil imposes a duty of 5000 Reis, equivalent to gold Francs 8.14 per Kg.

Australia taxes it at the rate of one halfpenny per foot.

England taxes cultural films according to width at the same rate as the normal rate on theatrical films.

The duty in Siam is 5% ad valorem.

But the noble mission of the film of an indisputable scientific and cultural character, as a propagator of discovery, of the beauties of human thought and of Nature is not yet understood, and the battle that is being waged around it and for it, for its wider diffusion in schools, educational institutes, public places and the sun-baked fields where men labour, has not yet achieved any but the most paltry concrete results.

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The universal value of the cinema is a fact now beyond and above discussion. The efficacy of the luminous screen is not restricted to the
narrow circle circumscribed by frontiers or to that of any one audience watching a film here or there. The film outsoars mountains and oceans with greater ease than the written or the spoken word. It improves on these, and what may remain unknown in a written work owing to lack of knowledge of the language or to the shortcomings of translation in rendering thought and form, all that which, in oratory, is necessarily restricted to a particular audience, makes a universal appeal through the film.

The film does not even impose the technical difficulty of linguistic transposition. The luminous vision is uncircumscribed in its character, and the caption is not a central factor of the vision itself, nor is it even an indispensable corollary, because cinegraphy, in its broadest and noblest artistic expression, has a visual emotive sensory language that speaks for itself and is above all the possibilities of comment, which is frequently superfluous, and all too often futile or distorting to the simple beauty of the scheme.

In the scientific film alone comment may be useful or necessary: but oral explanations must come from the lips of scientists or masters, who as such will themselves speak everywhere a universal language.

The worldwide character of this magnificent instrument of science and knowledge ought surely to appeal to all countries and to all forms of activity which centralize, coordinate and direct the action and life of nations, and claim from them the widest protection and the fullest chances of expansion.

The essentially liberal conception that human thought should not be subject to frontiers and that the barriers raised by the fears and egoisms of nations cannot and must not prevail against the manifestations of art, science, and culture in general — against that which is the tangible expression of the beautiful and of our aspiration towards the divine, ought to ensure to the cultural film the fullest freedom unrestricted by frontiers.

Limitations are inadmissible in a domain such as this. The harm that may be done by the theatrical film, in its multifarious aspects, as a false or standardized representation of life, or of the life of a given set of people; as a force for spreading ideas which for political, religious or social reasons may perturb the life of other peoples; as a medium of customs, habits and ways of thinking and living that are contrary to conventional morals, and which deny ideal values, does not apply to the film of science and culture. The cultural and scientific film cannot be a source of perversion or contribute to raise barriers of contempt and hatred rather than love and cooperation among the peoples.

The mission of this is to represent the phenomena of Nature or of some particular aspect of actual life. It serves the essential purposes of knowledge for those who lack other or fuller opportunities of embracing science and learning. It speaks a universal language wherever shown and cannot fail to raise the moral and intellectual level of spectators.
All this, simple and elementary as it is, has not yet been understood. The cultural and scientific film still counts as «goods» in the mercantile meaning of the word, like «Grand Guignol» stuff, advertisement «goods»; like the merchandise in its raw state of celluloid, gelatine and sugar.

For this reason it behoves an Institute of purely international character, an institute created by the League of Nations to carry out one of the highest and noblest forms of cooperation between the peoples of the world, to set forth the facts lucidly and well supported by numerical data. The study bristles with numbers, to be sure, but for this very reason it is a document, a warning, and an aspiration for a future in which culture and science shall be accorded greater consideration — a different and a better future, a future that will satisfy the legitimate hope of all men of culture that fiscal regimes may regard in a totally different light from the ordinary «movies» the cinema designed for the education and uplift of the peoples.

From the remote past to our own time educators and teachers the world over have aimed at directing oral instruction towards visual instruction, as being the best adapted to meet the requirements of the young, and the most readily perceived and assimilated by all.

No kind of scholastic equipment or means of education — and least of all the film — should be excluded. It is international in its very essence. The subject matter itself, from geography to natural sciences, geology, the history of art, and so forth, demand the constant, intelligent, documentary and didactic effort of all nations, so that each and all of them may place at the service of humanity whatever local contribution may be produced and shown on the screen. On this account the free movement of films from one country to another is essential, unhampered by fiscal handicaps which impede the fullest expansion of science and culture.

AGRICULTURAL CINEMATOGRAPHY IN ITALY

The interest shown by the Italian Government ever since 1924 in the progress of agricultural propaganda and instruction by means of the cinematograph deserves special mention.

Before 1924 a first experiment in this direction was made by the «Cerere» Company, thanks largely to the exceptional interest shown by Dr. Mario Casalini and the generous support of the Montecatini Company.
The «Cerere» Company was legally incorporated, and in the course of a few years was responsible for the production of a considerable number of technical films for propaganda and teaching and got together some thousands of slides.

But in 1924 the movement in agrarian propaganda by the cinema made great advances, thanks to the policy of the Government and the initiative of the «Luce» National Institute.

«La Battaglia del grano» («The Wheat Campaign») was the first example, and indeed a unique one of its kind. On the initiative of its Head, the Italian Government started a vast campaign for the national revival of agriculture, to bring it technically up to date, to obtain a better yield from the soil and an increment of wheat production. Immediately afterwards the «Luce» Co. followed in the footsteps of the Government by releasing a film entitled «The Wheat Campaign». Unaided by any government subsidy, the «Luce» did not hesitate to have printed one hundred and twenty positive copies of this film, which measured over two thousand metres in length. And the film was projected the same day, at the same hour, in one hundred Italian cities and in the twenty other most thickly populated communes. With whirlwind speed the film was shown in the course of barely 40 days in the open squares, the piazzas of 2,500 communes. It is estimated that between 5 and 6 million persons watched the pictures. The whole Italian press followed the enterprise with keen interest. The first part of the film extolled in a series of historical pictures the beauty, strength, and moral and social power of agriculture. The pictures were accompanied by popular songs and local music.

The great success obtained by this propaganda induced the Permanent Wheat Committee, of which Benito Mussolini is the President, to issue orders of three different kinds:

1). That the Permanent Wheat Committee should earmark an annual appropriation of 500,000 lire for the purposes of propaganda by means of the cinema, the films shown to be partly devoted to technical farm training;

2). All activity in this direction to be centralized in the «Luce» Company, as being the technical cinematographic organ of the Italian State;

3). That a Film Collection (Cinematheque) dealing with agricultural instruction and propaganda should be organized in connection with the Luce Company for the guidance of the vast movement in question; this Collection being placed under the direction of seven of the most eminent Italian authorities on the science and practice of agriculture. The said Committee was appointed by a Decree of the Head of the Government on the proposal of the Minister of National Economy.
In execution of the terms of the decision above mentioned the « Cerere » was merged with the « Luce » and the whole of its assets placed at the disposal of the said executive Committee.

Elaborate working programs were drawn up. Before long the Opera Nazionale per i combattenti (Soldiers' National Organization), which had done such splendid work for land reform and land reclamation all over the country, joined efforts with the « Luce », and a fund was earmarked of six hundred thousand lire for the first year and of nearly one million for following years. The same Organization despatched travelling cinemas from one extremity of the peninsula to the other, with the sole object of projecting agricultural films, produced in concert with the « Luce », and illustrated by lectures by university professors or recognized experts of national and international reputation.

The union of the « Opera Nazionale Combattenti » and the « Luce » produced admirable results.

In the first place numerous films of a technical order were published, dealing with vine cultivation, olive cultivation, market gardening, fruit growing, beet culture, wheat cultivation, etc.

Later on special aspects of agriculture were taken up. In respect of wheat cultivation, for instance, several films were made dealing separately with cultivation in plains, on hills or mountains. Thus for fruit cultivation separate films were released dealing with peach growing, pear growing, apple growing, etc.

But we did not stop here. The vast difference in the possibilities of farming and in farming systems as between North, Central and South Italy, called for further differentiation. Thus the first films directed to propaganda in a given group of districts were released: e.g. wheat cultivation in South Italy, a film which, in its turn, was divided into three sections, according as the cultivation of flat, hilly, or mountainous land was considered.

Lastly, a further and most important step was taken: the production of regional films, those aiming at illustrating in the completest manner and by numerous examples the practical possibilities of each region; showing all that can be done for the increment of agricultural revenue in the several regions and for the improvement of their general economy; all that can serve to throw light on local conditions so as to produce films of a kind to convince the mass of agricultural workers.

Meanwhile the Opera Combattenti added a fresh initiative to this magnificent technical effort of the « Luce » by publishing a series of small technical booklets on farm instruction, to serve as text books to the films and lectures.

This work has been carried on without interruption since 1924. It is estimated that six hundred thousand metres of positives and over
120,000 metres of negatives have been printed and distributed throughout the Kingdom during the years 1925-26-27 and 1928.

The Agricultural Film Collections organized by the «Luce» are operating steadily and with growing energy and enthusiasm.

Side by side with the travelling cinemas of the Opera Combattenti, the «Luce» despatched all over Italy, during the first half of 1927, a further 25 autocars specially equipped for luminous projections in the open air; these are furnished with special accumulators so as to render them independent of electric supplies.

At the same time the Ministry of National Economy has speeded up as far as possible the supply of cinematographic cameras to all agricultural schools, practical courses, Chairs of agriculture, etc.

The above gives but a summary notion of the work done by Italy for teaching and propaganda in the domain of agricultural cinematography.

THE CINEMA IN THE SERVICE OF HYGIENE AND SOCIAL WELFARE PROPAGANDA

_Germany._

We have received the following reply from the President of the «Reichsgesundheits-Amtes» (the German Public Health Department).

There are no special offices attached to the several Ministries having for their object hygiene and social welfare propaganda by means of the film nor is there any one office in which propaganda of this kind is centralized.

The Hygiene Instruction Committee, attached to the Ministry of the Interior — in connection with which a film office has been organized — does not carry on propaganda, but it is at the service of producers and collaborates with them in drawing up the schemes of films suitable for the purposes of such propaganda.

Legal enactments dealing with propaganda of this kind provide for reducing or exempting from certain taxes those cinemas which include in their programs films which have been duly approved in advance as appropriate to the purpose by the Berlin Central Institute of Education and Teaching (Prof. Lampe) or by the Bavarian Film Office at Munich (Dr. Amman).

The School curriculums, and more especially those of the elementary
schools, provide for the use of films, more particularly for teaching natural history.

Many industrial enterprises have had films dealing with hygiene and social welfare made for the instruction of their employees.

These films are subject to the censorship like all other films. But the approval of the offices above mentioned is requisite in order to obtain a certificate «recognizing the educational value» of a film.

The producers themselves are usually responsible for both production and hire, but many quasi public bodies dealing with preventive medicine and social welfare, workers' organizations, sickness and life insurance companies, undertake direct the production and intelligent exhibition of such films accompanied by lectures.

The «Bildwart Verlags Genossenschaft» (Film Publishers' Society) of Berlin has a general Catalogue of all educational and cultural films.

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The initiative for propaganda by means of the film in matters of hygiene, preventive medicine, and social welfare, is for the most part left to semi-official and private organizations.

Thus the Central Committees for the Campaign against Tuberculosis and against Cancer, the German Society for combating Venereal Diseases, the big Temperance organizations, eugenic associations, the Central Institute for the Campaign against Infant Mortality, the German Red Cross, and many other organizations, have had films brought out on their own behalf. These films are often produced in a theatrical form and exhibited in cinema halls; the organizations concerned make wide use of them, showing them in private and public halls, associations, clubs, schools, etc., accompanying the films by instructive lectures.

But all these films produced for specific social purposes are also shown in the ordinary cinemas, in accordance with the «Beiprogramm» (supplementary program), whereby cinema theatres benefit by a reduction of taxes for these particular films, which must not measure more than 200 metres in length and must be authenticated by the requisite certificates issued by the Berlin and Munich offices.

In addition to this systematic popular propaganda there are, of course the academic University courses. There does not exist a single higher education institute in Germany that is not furnished with projectors and cinema material. Films play a leading role, especially in the teaching of medicine: the university clinics are themselves responsible for the production of this scientific material and they own special cameras for recording operations (Dr. V. Rothe's system). The University Cinematographic Institute of Berlin and other institutes and firms also undertake the production of such films.
But hygiene and social welfare propaganda is also carried on on a big scale under the auspices and on the direct initiative of the competent authorities, acting in concert with the several official, semi-official and private organisms. Every year a whole week is dedicated to the propaganda of some particular question throughout all the centres of the Republic, even to the remotest country districts, by every possible means, including the film. Thus this year we had the «Reich Week» for the prevention of labor accidents in workshops, etc., during recent years we had a Public Health Week, an Anti-Fly Pest Week, a Sports Week, and so forth.

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The above gives an idea of certain aspects of what Germany is doing in the way of propaganda in this domain and shows how clearly she recognizes the importance of the film for the purpose.

An article on this subject by Dr. Curt Thomalla, a most active agent in all work of this kind, which we shall have the pleasure of publishing in a forthcoming number of the Review, goes into the requisite details and gives information on the production of all the cinema material connected therewith.
NOTES TAKEN FROM REVIEWS AND PAPERS

SOCIAL ASPECTS OF THE FILM.

After observing and studying the several aspects of various forms of entertainment, M. Jean Marguet is convinced that the cinema offers the most powerful means of attracting and influencing the masses. (Comœdua - Paris. F. 2/75).

M. Sarlat points to the cinema as the most practical and convincing means of mutual understanding between different peoples. (Paris Soir - Paris. 2/76).

Jean Merionval considers the question of the cinema topical program, and concludes that in time the cinematographic news budget will become as indispensable to the public as the newspaper. (Cinéopse - Paris. F. 6/95).

A crusade has been started in Albany for a more rigorous enforcement of the law prohibiting minors under 16 years of age to attend cinemas unaccompanied. (Exhibitors' Herald World - Chicago. F. 15/45).

The Governor of the State of Kansas has issued orders for the more rigorous application of the law on film censorship. (The Film Daily - New York. F. 18/99).

In connection with the publication of the statistics concerning film censorship in Holland and Dutch films, it is stated that the natives of the Dutch Colonies are most interested in documentary films, while films dealing with love, adventure, etc. are not appreciated, possibly because their subjects are too far removed from local habits and customs. (Cinéopse - Paris. F. 19/292).

Herbert G. Marshurtz contributes a paper on the question of the cinema's influence on sight. After a series of considerations of a physiological and physical order, he concludes that no blame can be imputed to the cinema for the degeneration of eyesight. (The Motion Picture Projectionist - New York F. 33/133).

A question was asked in the House of Commons as to the measures taken in England to guarantee the interchange of talking films and for the protection of the English language. (Daily Telegraph - London. F. 23/121).

Only one Australian State, Victoria, and New Zealand have been favourable to the laws passed in England for the protection of British films. Daily Film Renter - London. F. 23/122).

In a very interesting article Herr Thun, of Berlin, maintains that there is no limit to the possibilities of the film, especially as, scientifically, the film sees more than the eye can see. (Der Werksleiter - Stuttgart. F. 36/141).

Prof. William Bristol maintains that the time is approaching when the talking film can render excellent service to medicine, no less than to education, business, and other countless branches of activity. (Exhibitors' Herald World - Chicago. F. 10/159).

The possibilities of utilizing talking films for political purposes is dealt with in a long article. (La Tarde - Bilbao. F. 12/248).

Prof. José Holmes, a renowned psychologist of the Columbia University, puts forward some most interesting conclusions as a result of two years study of the cinema in its influence on children. (Popular Film - Barcellona. F. 15/48).
The London County Council states that, in view of present educational tendencies, it seems vain to think of excluding minors under 16 years of age from cinemas. (*The Daily Film Renter* - F. 15/49).

The « Poor Childrens' Open Air Life Association » will shortly release a propaganda film showing the beneficial effects of open-air life on the Paris children sent by the Association into the country. (*La Pantalla* - Madrid. F. 13/10).

Col. Jason Jof, in addressing the San Francisco policewomen, declared that the cinema, which always enforces the moral of the punishment attending crime, is one of the most powerful anti-crime weapons of modern society. (*Exhibitors' Herald World* - Chicago. F. 33/42).

A new Cinema section has been opened in connection with the Bureau of Foreign and Domestic Commerce attached to the Washington Department of Commerce. This decision of the U.S. Government is evidence of the fact that the film at the present time is assuming the same commercial importance as steel, food and coal. (*The Film Daily* - New York. F. 34/153).

Sir John Gilbert deals comprehensively with the question of the admission or exclusion of minors from the cinema. He expresses the view that this is a matter for the parents, with due regard to the individual temperaments of their children, to decide on in each particular instance. Sir John further points to the necessity for the character of films to be clearly indicated in announcements so as to enable parents to decide whether particular shows are suitable or otherwise for their children. (*Daily Telegraph* - London. F. 18/122).

The Radio Section of the German Police has started to transmit telephonographically the portraits of criminals wanted by the police. (*Lavoro Fascista* - Rome. F. 30/32).

New general rules have been introduced respecting films for public exhibition in England. Class « A » films are for adults; Class « U » Films for everybody, and Class « C » are specially suitable for children. (*Daily Film Renter* - London. F. 18/122).

An interesting criticism deals with the UFA Film « Pitiless ». It appears that this film is a document of incontestible social value. The film depicts the horror of the war that disseminated death and destruction on the fields of battle. (*Arte y Cinematografia* - Barcellona. F. 2/104).

Mr. Edmond H. Bonson, of the Associated Artists, who lived for many years in China and Japan, states that the speaking and musical film has met with immense favour among the people of the Far East. (*Rivista Cinematografica* - Turin. F. 10/197).

In an important article Dr. Helwig deals with embargos on shows and local prohibition in the new German police laws on the cinematograph. (*Kine-matograph* - Berlin. F. 25/81).

**CULTURAL FILMS**

M. George Dillot contributes a paper on the scientific film and its uses; he explains how it is technically possible, for instance, to show a flower in the process of opening from the bud. (*Mon Ciné* - Paris. F. 19/32).

Dr. E. Lowe, of Leicester, addressing the 40th. Conference of the Museum Association on the subject of the « Cinematograph », set forth all the practical importance of the film for the purposes of teaching and showed that it could advantageously be used to make up for the shortage of natural history museums, being able to show children the several phases and details of animal life. (*The Times Educational* - London. F. 37/27).

A. Collette contributes a lively and interesting article on the use of cinema images for vocabulary purposes. (*Cinéops* - Paris. F. 37/28).
M. Walfrid Jungham took some interesting films on the life of serpents in the UFA studios, which were converted for the occasion into an aquarium. (Courier du Cinéma Educateur - F. 6/96).

The first talking film for medical purposes has been shown in England; this illustrates an operation with verbal explanations by the Doctor. (Basler Nachrichten - Bâle. F. 19/39).

The F. B. O. has released a film of exceptional interest, showing the remarkable feats of the explorer, Pen Burridge, who conducted a caravan into the heart of the Belgian Congo on a gorilla hunt. (Vita Cinematografica - Turin. F. 6/100).

The Great Russian Film Co. has produced a film «The Tartar Insurrection» illustrating one of the most interesting pages in Russian history. (La Película - Buenos Ayres. F. 6/102).

At a big meeting of authorities on popular education to be held in Manchester 300 films of high scholastic value will be shown. These will deal with geography, natural history, history, medicine, natural sciences and art subjects. Silent, talking and musical films will be shown. (Daily Film Renter - London. F. 3/108).

Much apprehension is being expressed in Germany on account of the decrease in the production of cultural and scientific films. (Lichtbildbühne - Berlin. F. 19/254).

Much interesting information is given in an article dealing with scientific films on biology and medicine with the help of micro-cinematography. (Zehlendorfer Anzeiger - Berlin F. 36/149).

Film producing companies in several countries are coming to an understanding for the production of a highly interesting documentary and scientific film illustrating different aspects of life in northern countries. (The Cinematograph Times - London. F. 6/104).

An article on «Cultural Film producers considered as Publishers» deals with the question of how the publishers of scholastic and scientific films should be classed. Should they be classed with the editors of scientific and cultural books or how? (Filmkurier - Berlin. F. 3/111).

Particulars of the African Tambi film are given. This is the film illustrating the expedition made by Mr. M. E. Kearton and his wife. The film shows all the vicissitudes of a native family travelling from an almost unexplored zone fraught with danger on account of volcanic irruptions to a centre of advanced civilization. (Manchester Guardian - Manchester. F. 6/107).

Following on an understanding between the Exposition Nationale du Travail and the Cinematographic Association presided over by Jourdain, the finest works shown in the Brussels 1930 exhibition will be filmed so as to keep a perfect record of the achievements of craftsmanship in 1930. (Etoile Belge - Brussels. F. 6/108).

A technical report gives precise details as to the systems which should be followed by scientists and educators in taking microscopic cinema films. (Der Berliner Wzstern - Berlin. F. 13/94).

Emile Fabre, the Manager of the Comédie Française, in an interview respecting the cinematograph, declared that the proper domain of the film was educational. In M. Fabre's opinion, the documentary film is the most important branch of all and one that ought to receive every encouragement. In the end it was bound to hold the field. (Cinéoscope - Paris. 34/149).

An interesting report has been published on the progress of the official organization of the educational film in Saxony. (Dresider Anzeiger - Dresden. F 3/115).

Great success has attended the projection of cultural and scientific films by the Luce Co. in Spain. (Popular Film - Barcellona. F. 3/111).

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A talking film has recently been completed in Nice « The Forest and the Screen », in which the sounds emitted by different animals are reproduced. (El Cine - Barcelona. F. 6/115).

A scientific expedition has set out in Russia for the shores of the Caspian Sea in order to take a great documentary film entitled « The Life of Fishes ». (El Ciné - 6/116).

The Apollo Co, is about to produce a series of documentary films showing the several regions of France. The first of the series will show the Bourbonnais district, and later ones will show the Vosges, Burgundy, Savoy and Medoc. (Filma - Paris. F. 6/117).

The Sowkino Co, is about to undertake the production of 8 documentary films illustrating the scientific and industrial activities of the Soviet Regime. (Comoedia - F. 6/118).

A scientific Film entitled « Twixt Life and Death » has been screened. It shows many surgical scenes of real scientific value. Clara Nox, in criticising this film, declares that the general public will not attend such spectacles, which ought, on the other hand, to find their place in the University Faculties, Schools of Medicine, and Medical Associations. (El Debate - Madrid. F. 13/36).

During last winter 25,000 children attended a regular course of cinematographic shows held during 5 consecutive months every Sunday morning in one of the principal Athens Cinemas. This met with such a big success that several schools in Athens and the Province have come to an understanding with the organizing office for them to arrange regular shows at fixed intervals for their pupils. (Bureau du Film Educateur - F. 97/30).

A careful study examines what is being done in the field of the scholastic film in France, Germany, Austria, Holland, Italy, etc. The British Board of Education has done nothing so far in favour of films in schools. Special mention is made of the splendid and enthusiastic work that is being done by Sir James Marchant in this connection. (The Spectator - London. F. 37/31).

Harvard University has formally pronounced that the art of the film is one of the fine arts. (Kinematograph - Berlin. F. 2/97).

Sir James Marchant contributes a long and interesting paper on the National Council for the movement in favour of education by means of the cinematograph. He mentions the International Institute and the big task entrusted to it, and points out the need for close international cooperation. (The Times - London. F. 3/123).

In a long article Monalque analyses the decisions taken by the French Minister of Agriculture Hennessy in regard to cinematographic propaganda and instruction and the need of expanding this branch. (Neues Filmnen - Bucharest. F. 1/19).

An article on the educational film in England speaks of the formation of an advisory Council composed of the Vice Chancellors of the principal Universities and the Directors of Higher Schools. It deals with the position the cinema should have in popular education. Signor Mussolini’s work in this direction is referred to together with the important task ahead of the International Educational Cinematographic Institute. (Daily Telegraph - London. F. 3/126).

Dr. Granver Belst has produced a film of a purely scientific kind on human tears. (Regime Fascista - 13/37).

The Kaiser Wilhelm Institute and Dr. Winse, Director of the German National Fisheries Institute, are giving their patronage and help for the production of a new series of biological films to be taken by Dr. Ulrich Schultz of the « UFA » Co. (Comoedia - Paris. 19/38).

The Austrian Union of Film Amateurs is bringing out sporting films and
is about to undertake the production of cultural and instructional films. *(Kinematograph* - Berlin. 3/159).

An interesting film showing Vesuvius during an eruption has been screened at the New Gallery. The realistic effect was all the more impressive, being accompanied by the reproduction of the terrifying booming and roaring sounds of the eruption. *(Daily Telegraph* - London. 4/128).

Instructional films are being regularly used in England as a means for training recruits. *(Kinematograph* - Berlin. 7/17).

Dr. Kimmins describes recent progress in education by means of the film and the experiments carried out on 600 pupils by the Institute of Industrial Psychology. *(Daily Telegraph* - London. F. 8/48).

The Sovkino has founded a school for scenario writers. Young writers who wish to devote themselves to the cinema can attend special courses lasting several months to learn the fundamentals of film authorship. *(La Puntalla* - Madrid. F. 8/49).

At the International Surgical Congress at Warsaw the Italian Delegation showed some films of surgical operations taken by the LUCE Co. These films were considered perfect. *(Messaggero* - Rome. F. 13/39).

Miss Mary Field writes on the film dealing with venereal disease ordered by the British Social Hygiene Council. The film is said to be most successful, but it will not be placed on sale and will only be shown to adults. *(The Yorkshire Post* - Leeds. F. 14/31).

The best English educational films have been sent to the Bi-annual Conference of the World Federation of Educational Associations held in Geneva. *(The Yorkshire Post* - Leeds. F. 22/172).

An interesting article deals with the Cinema Museum and Film Archives. *(Berliner Borsen Zeitung* - Berlin. F. 34/177).

The proper pronunciation of the word *Cinematograph* is discussed. This word is derived from the Greek kinema (movement) and should properly be spelt with a « K » instead of « C ». Kinema is the correct form. *(Daily Telegraph* - London. F. 34/180).

A Film dealing with Embryology has been presented to the Academy of Sciences by Messrs. Jean Painlevé, P. Wintrebert, and Yeng Ko Ching. The film shows the development of the human foetus from the first moment of its conception until the formation of the circulation of the blood. *(Morning Post* - London. F. 13/42).

A Film entitled « Fettered Sex » dealing with the sexual problem in prisons has been shown in Berlin under the auspices of the Human Rights League. *(Le Cinema d'Aisace et de Lorraine* - Strassburg. F. 14/32).

**TECHNICAL ASPECTS OF THE FILM.**

A fully equipped School of Photography has been created in France, which will give young people the chance to become technically expert in photography. *(La Cinématographie Française* - F 8/404).

Talking films produce a considerable loss of light in films and also of quality; in many cases projection is impaired. Some theatres have noted a 60 % loss. *(The Film Daily* - New York. F. 12/227).

Mr. Lorentz, technical expert in the Laboratories of the Paramount-Famous Lasky Corporation forecasts a screen for three dimension colour films constructed in a concave form in imitation of the Greek and Roman amphitheatres. *(The Motion Picture Projectionist* - New York. F. 36/133).

A new system of natural colour films on the basis of special prismatic lenses to be applied to ordinary cameras has been invented. This new system is
known as the Raycol Patent and has been purchased by a Company formed with a capital of 300,000 pounds sterling, trading as the British Raycol Corporation. (II Cinema Italiano - Rome. F. 36/148).

New York has succeeded in transmitting colour films by telegraph. (Film Kurier - Berlin. F. 30/24).

Experiments have been made in Paris with an incandescent Philipps lamp which allows projections to be effected onto a screen 26 metres square at a distance of 45 metres. (Le Cinéoscope - Paris. F. 36/139).

William S. Payley, President of the Columbia Broadcasting Co., states that in a short time it will be possible to project whole films (talking films included) at a distance of thousands of kilometres. (Contoedia - Paris. F. 30/25).

Nicola Grifone, in an article on the radio transmission of images, explains how the image is transmitted and how the exploration by means of the Photo-electric cell is accomplished. (La Stirpe - Rome. F. 36/146).

The British « Educational Co. » announces a three dimension film which can be projected by ordinary apparatus. (Lichtbildbunde - 36/148).

Technical film courses will be started in Germany in a special school now in course of building. (The Film Daily - New York. F. 8/42).

An article on the latest cinematographic inventions deals with talking films which show relief, on the perfection of television, family cinemas and the steady advance of photography. (Osabrucker Zeitung - Osnabrück. F. 36/135).

An interesting article on film technique deals with the systems used for filming in the North Pole and at the Equator. (D. Z. Mittag - Berlin. 36/160).

An interesting technical article refers to the effects to be obtained by using ultra violet rays in the lighting of theatres. (Exhibitors' Herald World - Chicago. F. 35/164).

In financial circles the activity of the Eastman Kodak is attributed to a new process for the production of cheap films. (The Film Daily - New York. F. 34/154).

An article on the scientific progress of the Cinema deals with the new method invented by Mr. John Michelus, head of the M. G. M. Laboratories, for photographing the movement of the planets. It also deals with the processes perfected by Dr. Herbert T. Kalmas, head of the Technical Colour Laboratories, thanks to which it has been found possible to reproduce celours on the screen with absolute faithfulness. (Vanguardia - Barcellona. F. 36/166).

Dr. Coughaud's invention of the curved screen for obtaining the third dimension is here dealt with. Mr. Bergren's invention which achieves the effect of objects in relief on a flat screen by means of lenses and optical calculations is likewise described. (Science et la Vie - Paris. F. 38/3).

In the projection hall of the LUCE Institute experiments have been made with the Kinephone. The Kinephene, invented by Messrs. Müllner, Kiliani and Liguori, consists in the practical application of the discovery made by the physisist Poulsen of the registration of sound on metallic wires and ribbons by means of a magnetic process. Il Popolo di Roma - Rome. F. 13/286).

An article entitled « The History of the Talking Film » deals with the progress made by these films from 1919 to the present time. (Berliner Tageblatt - Berlin. F. 12/310).

A remarkable technical article deals at length with talking films in Germany. (Frankfort General Anzeiger - Frankfort. F. 12/312).

It appears that a talking film in Esperanto is about to be produced in America. Kinematograph - Berlin. F. 12/312).
Lotte Reiniger who has made many magnificent films in silhouette, writes an article on the Art and Technique of Silhouette Films. (Dresdner Anzeiger - F 36/181).

Projection lamps are much more used in America and Germany than in England, where electric arc lamps are mostly used. These lamps however soon lose their power by reason of the deposits which form on the inside. By introducing Tungsten powder during manufacture, however, the lamp cleans itself automatically. (The Cinematograph Times - London. 36/184).

An article on the cinematograph and radioscope states that it has been found possible to produce very clear films by the use of extra sensitive supplementary lenses. (Il Temps - 36/185).

The use that could he made of the cinema for the purposes of the optical determination of internal tension is stressed by Henri Fauvre. (Revue Optique - Paris).

An interesting article deals with the refrangent properties of quartz. (Revue Optique - Paris. 36/187).

A further article deals with the problem of the penetration of radiations in water. (Revue Optique - Paris. 36/188).

An article on technical rationalization deals with this problem also in its bearing on the cinema industry. The rationalization of work in factories by the substitution of old fashioned machinery by up-to-date plant is described, as well as other improvements aiming at economy and increment of output. (Organisation Büro - Berlin. F. 36/211).

Prof. Karl Grantz and Herr Hubert Schardin, respectively of the Polytechnic Institute and the Institute of Technical Physics of Berlin, contribute an interesting article on « Cinematography with stationary films and by rapid sequence of images ». (Forschungen und Fortschritte - Berlin. F. 36/173).

Dr. Richard Graff of Düsseldorf contributes an article on the determination of the technical capacity of cinematograph employees. (Jugend und Beruf - Berlin. 36/212).

Dr. Paul Hatschek contributes a paper on optical equivalence in filming and projection. He describes the several systems and their advantages and drawbacks. (Die Kinotechnik - Berlin 36/213).

Messrs. K. Tschibissoff and W. Tschelzoff, of Moscow, contribute an article on the influence of the dilution of developing solutions on the photographic quality of images. (Die Kinotechnik - Berlin. F. 36/214).

The light effects obtainable in filming by means of ultra violet rays are described in an interesting article by Douglas Fox. (Exhibitors' Herald World - New York. F. 36/164).

A technical paper describes the functions and purpose of the filter in filming and the manner of its use. (The Movie Makers - New York. F. 36/142).

Hugh Lyttleton contributes an article on the principles of projection lenses. (The Motion Picture Projectionist - New York. 36/130).

In a very interesting paper, Charles F. Hynes deals with the problem of the preservation of talking films. (The Film Daily - New York. F. 36/167).

T. Rauburn contributes a series of articles dealing exhaustively with the question of synchronism by the disc system. (The Film Daily - New York. F. 36/167).

An article contributed by Messrs. Loebel and Dubois deals with the gradation of warm colour slides. (Science et industries Photographiques - Paris. F. 36/216).

Under the title « A model establishment » M. Paul Souillac gives an interesting account of the French cinema industry. (Cinéopse - Paris 34/204).

O. Blemmer devotes a technical paper to the system of spark photography. (Cinéopse - Paris 36/219).

The current issue contains an article dealing exhaustively with the continuous movement projector patented by Contin-souza and Comber and shows the advantages of this apparatus in the projection of talking films. (La Cinématographie Française - Paris 36/218).

More space will be allotted to these Notes in forthcoming issues of the Review.

Dr. LUCIANO De FEO — Editor and Responsible Manager.

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THE CINEMATOGRAPH AND COPYRIGHT

(From the French)

Whereas property in material things is one of the most ancient concepts of Law, and has always been protected against all attempts at unlawful encroachment, only modern legislation has attempted to define and protect intellectual property.

This protection, which is still incomplete at the present time, is the result of the efforts of jurists and of the force of circumstances; more particularly of economic conditions which tend more and more to force the intellectual worker to seek a livelihood by exploiting the wealth and means of service he has created by his own brain work.

The recognition of copyright was no easy victory. It has often been contended that an author — whether artist, writer, or student — works solely to augment the intellectual wealth of mankind and that the creations engendered by his brain should be regarded as a splendid gift to the community for its advancement and delight.

This concept still holds its own to-day, as evidenced by the fact that strict time limits are placed on artistic and literary property.

Man's material possessions are transmitted ad infinitum to his descendants by the right of succession, whereas the rights of an author's heirs die out either in fifty years or 30 years after the author's death.

Many eminent jurists have been struck by this crying inequality and are doing their best to get it removed. In any case, it is a matter for rejoicing that artistic property is nowadays recognized as an incontestable right.

When the cinematograph was first invented no one imagined that it constituted a new form of artistic expression and that in
time it would actually come to rank as a new art. And yet, at the present time, only a few blind or disingenuous opponents contest the cinema's claim to be raised to the honour of a new and distinct art. Nearly all countries, moreover, that is to say all those which recognize and protect artistic property, have extended their legislation so as to embrace cinematographic productions among artistic works.

For the first time, the Convention of the Union, drawn up in Berlin in 1908 for the purpose of revising the Berne Convention, affirmed the principle that cinematograph productions should be granted the same protection as other works of art. Thus cinematographic works were included in terminis.

It should be noted that none of the texts defines the meaning of «cinematograph production».

While such an omission might be allowable in relation to literary and musical works and works of plastic art, since every one knows what these terms cover by the usages of common language, it is regrettable in connection with cinematographic production.

Cinematographic production, in fact, assumes various forms and it is necessary for us carefully to consider exactly what the term really covers.

Roughly speaking, cinematographic production is a product of the imagination expressed in a form proper to the cinematograph. The positive, the ribbon, or the film gives material form to the idea, just as a book or a manuscript does to a literary work. The author's idea is here expressed in a specific form, namely the animated image. Thus it is not correct to assume that the scenario writer is the author of a cinematographic work, whether the said scenario be the work of one individual or whether it be founded on a work belonging to a different domain, such as a novel or the theatre. The «author of a cinematographic work» means the person or persons who have contributed to give cinematographic expression to an intellectual production.

Now, the principal agent of this expression is, in point of fact, the person generally known by the somewhat inappropriate
name of "producer" (metteur en scène). This confusion is attributable to the fact that, properly speaking, there is no one cinematographic author in the full meaning of the term; that is to say, no single person who conceives the idea on which the work is built, composes the scenario, and produces it on the screen.

It is obvious, however, that in the near future — especially in view of the horizons opened up by the "talking" film — artists will acquaint themselves with cinematographic technique, that is to say the "mise en scène"; so as to be able to express their original ideas directly on the screen.

The protection ensured by the text of the Union Convention is far from perfect. This fact needs to be made known, for it is incumbent on the defenders of the cinema to give an ever wider scope to the legal protection of this new category of intellectual production.

Paragraph 2 of Article 14 of the Berlin text reads as follows:

"Cinematograph productions shall be protected as literary or artistic works if, by the arrangement of the acting form and the combinations of the incidents represented, the author has given the work a personal and original character."

It would have been better simply to affirm that all cinematograph productions without distinction are granted protection as artistic works, for it is obvious that if they constitute an original production they will be protected as such.

In order to ensure the efficacious protection of cinematographic production it ought not to have been left to the judge to decide on the artistic, personal and original character of a work, of each particular species.

Legal experience has amply proved that, however enlightened a judge may be, he always has a tendency to confuse the originality of a work — that is to say its originality within the meaning of the law — with its aesthetic value; and yet there can be no question that the poorest of drawings has no less claim to legal protection than a masterpiece of painting.

But we must not be over optimistic. It will be extremely difficult to get Article 14 amended in this sense by later interna-
tional conventions. And yet, as in the case of photography, all cinematographic productions necessarily display original work on the part of their author.

We may here aptly cite Pouillet’s pronouncement in *La propriété littéraire et artistique*, p. 105:

« Whether good or bad, whether they do or do not conform to aesthetic principles, all paintings, all drawings, all sculpture are artistic works, as the Imperial Advocate Thomas pointed out in the conclusions above cited.

« We cannot get away from this alternative: either we must refuse to admit any photograph to be a work of art, or we must recognize them all as such; otherwise we are thrown back on arbitrary judgment, which entails as much danger for the judge as for the plaintiff.

« The opponents of our thesis are impressed by the fact that the camera plays an important, indeed a predominant, part in photography.

« What does this prove?

« If a painter, after conceiving a picture, discovered some means of producing it on his canvas at one stroke, just as he had conceived it, should we challenge his right to regard his work as a product of his mind? What matters the more or less rapid, or the greater or lesser easiness, of execution? The conception, however it may be realized, forms part of an artistic work.

« The photographer thinks out a work, he gets ready his accessories, he arranges the play of light, he approaches and backs his camera so that the image may be clearer or take in more of the scene, as he sees fit, so as to obtain such or such an effect of perspective. This being so, why should we concern ourselves with the speed, the perfection, or the faithfulness of the instrument by means of which he executes that which he has conceived, arranged, created?

« Is it not a fact that two photographers, each reproducing the same view or the same model, will obtain two distinct and recognizably different effects? This is tantamount to creation in the legal meaning of the word.
«The argument which we put forward earlier in an analogous connection is equally applicable here:

«Let us suppose that the discovery of photography had remained a secret and that the inventor offered the pictures obtained by his process without revealing its mysteries, leaving people to believe that his copies are the product of some improvement in the ordinary processes of printing or engraving.

«Would anyone dream of challenging his right?

«Would not his pictures be placed in the same rank as others, and should we hesitate to grant them the protection of the law? Why should we change our mind because we know the process of photography? Is not his product the same thing that it was? Has it lost any part of its personal character?»

When we reflect that, at the time Pouillet was writing, photography was very far from having achieved the perfection to which it has now attained, we cannot but admire the soundness of his reasoning. And can we compare the artistic efforts of a photographer with those displayed by film producers, by such men as Griffith, Marcel Herbier, Wiene, Abel Gance and others, whose claims to be regarded as artists nobody any longer disputes?

The limitations implicit in the drafting of Article 14 are all the more regrettable inasmuch as they are an obstacle to the protection of such films, for instance, as street scenes, processions, landscapes, ceremonies, in short of all works in which the events represented have not been conceived with a view to cinematographic reproduction, since Art. 14 contemplates solely scenes arranged for the cinematograph.

If we refuse to recognize that all films representing the events of real life have necessarily a personal character, due to the placing of the camera and the adjustment of the finder, the mise en page, the light effects, the captions, etc., films of this kind will never be granted protection, and it would really be regrettable that scenes such as African hunts and Polar expeditions, the filming of which demands the most remarkable gifts on the part of the author, gifts translated by the films into scenes of most strik-
ing beauty, often surpassing the most beautiful fictitious ones, should be excluded from protection.

This implies that there would be no check on piracy and that profits which should be the author’s by right may be made out of his work by outsiders.

A like artistic effort characterises certain documentary films, views of sub-marine fauna and flora or of insect life, for instance, and certain scientific and medical films. A case in point arose some years back in connection with documentary films reproducing operations by the famous Doctor Doyen. The judgment of the Seine Tribunal of 10 February 1905, recorded in Dalloz’s periodical survey of 1905, recognized Dr. Doyen’s claim to protection because he appeared to have conceived and executed the film or because he had directed its taking.

The verdict was worded as follows:

«Considering that it is clear that the negative films in question have been executed by Parnaland in accordance with the instructions and under the direction of Dr. Doyen, that the latter previously prepared his subject, his assistants and instruments, that is to say that he assured himself of the mise en plaque (the plate setting) and that the point which it was important to reproduce was properly in the centre of the opaque plate, that he was, in short, the principal author of this film, etc... ».

This judgment bears out what we have already stated, namely that the making of a film is always the result of intellectual combinations and that consequently the author of these intellectual combinations ought to be considered as the author of the film and to enjoy protection. This justifies us in the hope that on the strength of these decisions of jurisprudence in the past and of future jurisprudence, which cannot fail to grow more solid and more precise, later congresses will see fit to extend the scope of article 14 of the Union Convention, so that it may ensure complete protection, in which arbitrary judgment can have no part, to cinematograph production in all its infinite variety.

At the present stage of cinematography — which is after all but a new-born art — the greater number of its products take
the form of cinematographic adaptations of literary, scientific or artistic works. For this reason paragraph 1 of art. 14 of the Union Convention specifies that copyright in the works which formed the basis of the film adaptation shall be protected against all infringement.

«Authors of literary, scientific or artistic works shall have the exclusive right of authorizing the reproduction and public representation of their works by cinematography ».

Furthermore, when the cinematographic adaptation has been made, it constitutes itself an original work which is protected by the terms of paragraph 3 of the same article, which reads as follows:

«Without prejudice to the rights of the author of the original work, the cinematographic reproduction of a literary, scientific or artistic work shall be protected as an original work ».

This is tantamount to the application to cinematography of the general principle set forth in paragraph 2 of article 2.

«Translations, adaptations, musical arrangements and other reproductions in an altered form of literary or artistic works shall be protected as original works without prejudice to the rights of the author of the original work ».

There can be no question that cinematographic adaptation, which is becoming the most general mode of reproduction of a work in an altered form, comes within the general meaning of this enumeration.

Although it is not expressly stated in the Convention, it must be assumed that cinematographic productions are similarly protected against being reproduced by any process other than cinematography.

Par. 2 of article 14, in fact, assimilates cinematographic productions to artistic works in general, and consequently they are entitled to the protection provided by article 2. This view, however, has been contested by a German writer, Herr Dungs (1),

(1) *Die Berner uebereinkunst ueber internationales urheberrecht*, 1910, pp. 55-56.
but Monsieur Potu, in his remarkable treatise on the international protection of cinematograph production under the Berne Convention as amended in Berlin in 1908 (1) demonstrates the error of the thesis of the German writer.

It is impossible here to go into the details of these discussions, which may be sought in the writer's book on the Cinema and Copyright, published in collaboration with the late M. Charles Havermans (2).

This volume also contains all particulars relating to the suppression of the conditions and formalities required for establishing a claim to be the author or publisher of a work; the principle of retroactive application of the Convention, and processes analogous to cinematography, the Convention having endeavoured to foresee all the improvements which were likely to be realized in the cinema industry, which has, however, since given further evidence of the amazing range of its possibilities.

The Union Convention further lays down the duration of protection of cinematographic works and the extension of the territory to which it applies; these are subject to the same conditions as those applying to other artistic works, in such respects, for instance, as the assimilation to nationals of foreigners belonging to countries acceding to the Union, their admission to the benefits of the special provisions established by the Convention, the principle of the minimum of protection, etc.

The international protection accorded to cinematographic works is the same as that applying to all other forms of artistic work. In view of the fact that such protection, no less than that provided for by the Berne Convention revised at Berlin, differs essentially according to the publication or non-publication of the work, it is necessary to define what is meant by the expression "publication of a cinematographic production ".

(1) Paris, Gauthier Villars, 1912.

(2) Le cinéma et le droit d'auteur by Charles Havermans and Maurice Van der Moesen, barristers at the Brussels Court of Appeal - Jacques Godenne, Namur, 1926.
The meaning of «publication» in reference to the cinematograph is an extremely subtle point. Monsieur Potu has observed that the Convention had accepted a hybrid system, ill adapted to the specific character of cinematographic work.

By the terms of the Convention (last paragraph of Art. 4) the expression «publication» in respect of any work means the issue of copies of the work to the public.

Article 4 further lays down:

«The representation of a dramatic or dramatico-musical work, the performance of a musical work, the exhibition of a work of art and the construction of a work of architecture shall not constitute a publication». Thus the word «publication», as used in the Convention, does not mean giving a work publicity in any form whatsoever; it implies, on the contrary, the diffusion of a considerable number of copies of the work, in such manner that the work may become known not to any one category or several categories of persons, but to the general public.

In the case of a literary work, it means its placing on sale or at the disposal of the public by a person who undertakes the business or responsibility of publication.

It is clear from the foregoing that the issuing of a cinematographic work to the public alone constitutes its publication; and this, according to our view, consists in the fact of the printing of the positive ribbons and their being placed in circulation.

The first publication, on which protection is based, the first issuing to the public, is therefore done by the firms publishing cinematographic films. Mere projection on the screen, on the contrary, even in the presence of a considerable number of spectators, of a work that has not been published in the traditional meaning of the word, does not constitute publication within the meaning of the Berne Convention, just as the representation in public of a dramatic work does not necessarily imply its publication. This definition of the matter is, moreover, a practical one, as pointed out by M. Wauvermans (1).

(1) La convention de Berne revisitée, N. 60-B.
M. Wauvermans writes:

«It is sometimes difficult to furnish convincing proof that a work has been represented or performed; the fact of its being issued to the public is clear.»

It follows that, in order to be able to determine the country or place where a work was first issued, we must consider solely the place where the headquarters and business centre of the publishing house are established. The place where the material copies were actually manufactured is of no consequence.

This observation is important in view of the manufacturing clause laid down by the United States for the protection of literary works in their territory. This is not the same thing as the first publication, upon which protection under the Union Convention depends.

The question has been raised as to whether the fact of reproducing in a review, newspaper, or book a film that has not been published within the meaning of the Convention would constitute its publication. Does the publication of a work rest solely on the issuing to the public of a number of copies by the same process that has served for its creation (the film in this case) — or is it equally proved by its reproduction by means of any sort of process (printing in a book or review in this case)? This is an interesting point, especially in regard to scientific films, more particularly those intended for the study of movement.

Writers are not agreed on the answer to be given to this question. But here we may observe that, in point of fact, the whole question of the process of reproduction of a work is beside the point. Why should the nature of the process be a matter of any importance? And, above all, what connection can there be between the nature of this process and the concept of publication? It is to be regretted that the Convention was not more explicit on this point. But whatever the merits of the question may be, it seems clear to us that the one essential point in respect of publication is to adhere to the traditional and normal concept of publication according to the nature of the work.

Legal hair-splitting can only jeopardize authors' rights. Now,
the Convention refuses to recognise as «publication» the representation of a piece in a theatre, the performance of a musical work, the public reading of a literary work, or the exhibition of a picture. We must admit by analogy that no public issue, and therefore no publication, has taken place by the fact of a cinematographic film being projected, even in public, on the screen. The grounds for opining that the fact of reproducing a film or part of a film in a review, newspaper, or book does not imply its publication are still stronger.

Such reproduction no doubt ensures a certain, though usually limited, publicity to a cinematographic work, but it cannot be regarded as publication within the meaning of the Convention. Any contrary interpretation would involve a real risk to authors, for it would compel them, under pains of forfeiting all right to protection, to make sure that the review or book reproducing their work was published in a country acceding to the Union — a point almost impossible to prove.

II.

INFRINGEMENT OF COPYRIGHT

There is not much difference between piracy in relation to a cinematographic work and an artistic or literary work. Piracy covers all forms of infringement of the prerogatives, pecuniary and moral, which together constitute an author’s rights. It occurs in all cases in which the personal and original idea that distinguishes a work is reproduced, and whenever there is reproduced the same general composition — similarity of place and social milieu (where these are essential to the work), the same concatenation of pictures, arrangement and combination of episodes; in short in all cases where the characteristic elements of the original work are reproduced.

In practical experience, instances of infringement in the form of more or less servile imitation of a cinematographic work are.
rare. And the Courts are not often called upon to decide in cases of this sort.

The title of a work is more frequently the object of infringement. This, in fact, as being an accessory but essential part of a work, is protected together with it, always on condition that it is not a commonplace title consisting in some ordinary word in the vocabulary, but an original title that reveals a certain intellectual or artistic effort on the part of its author. This discrimination between a commonplace title and an original title is always a delicate and sometimes a very difficult point. Certain judgments — more particularly a verdict of the Brussels Tribunal — go so far as to refuse protection to the title, on the pretext that it does not belong to the body of the work and that the work alone is protected. This is nothing more nor less than juridical heresy. Generally speaking, however, the law considers the title, as summarizing properly the meaning and purpose of the work, as forming a part of it and being entitled to proper protection. The question is of the greatest importance, for many cinema managers have the deplorable habit of continually dechristening films in order to adapt them to the tastes of their public or bring them down to the level of their understanding. Some unscrupulous managers are only too willing to make use of the title of a popular work to attract audiences, thus injuring both the public whom they deceive and the authors of the original title, whom they rob.

Actions at law over titles are consequently of frequent occurrence.

Disputes arising out of what is known as the hire contracts of cinematographic films are still more numerous. This expression «hire contract» is most misleading.

Considered from the legal standpoint, the person who hires out the film to a cinema manager for projection effects a cession of the right of representation, which is one of the elements of copyright, and which the author granted in the first instance to the publishing firm which, in its turn, alienated it, upon certain conditions, to the hirer.
In the course of these disputes questions are constantly arising which are settled daily by the Courts in contradictory ways.

The following is a typical example. When a manager is about to arrange his programme for a given period of time, he generally makes the mistake of trying to wrest from his competitors those films which, in his opinion, are likely to be paying concerns and to have a long run.

With this object, he acquires the lease of a whole series of films from different hirers. The hirer, on his part, fixes the price of hire and a term generally of three months within which the films must be taken up and paid for; but it usually happens that the manager does not dispose during the season of a sufficient number of matinées and evenings to show all the films he has rented. This has a double consequence: he acquires from each hirer the best films, that it to say the best payers, with the result that he is sometimes able to execute his contract only in part and sometimes is unable to carry it out at all vis-à-vis of some of the hirers. This leads to actions on the part of hirers to compel him to carry out his contract.

The hirer has the alternative of taking action in either of the two following forms.

He may claim that the contract be declared null and void together with the payment of damages and interest. There are objections to this course of action, however, because, while it is generally a simple matter to have the contract cancelled, it is on the other hand extremely difficult to appraise the damage incurred. This involves lengthy and costly expert evidence, and the matter is further complicated by the fact that the films in dispute have been rented together with other films which are not the subject of litigation. The most practical course is therefore to claim the carrying out of the contract and the payment of the full price of hire. The hirer, in fact, has on his side fulfilled his obligations by holding the hired films, during the stipulated period of time, at the disposal of the manager, and it is up to the latter to fulfil his by paying up the price of hire, without being able to claim the delivery of the films.
Let us here call attention to certain of the common and unlawful forms of infringement.

First of all, there is what in trade cant is colloquially known as *la navette* (shuttle) or "doubling".

It goes without saying that when a hire contract is entered into between a hirer and a user, the manager of some cinema hall, the latter, in the absence of any special clause to the contrary, acquires the right to show the film only in the hall or theatre under his management. Hire contracts, moreover, are usually drawn up in such terms as to leave no doubt regarding the film rented and the dates when the right to exhibit the film start and come to a close. But negligence or inertia on the part of renters has given rise to a practice which is distinctly prejudicial to the cinema industry, known as "doubling" "trebling" and "quadrupling". This consists in showing a film or a programme in two, three, or four theatres, the films either being shown once or several times on the same day in different halls, or the programmes being performed in different theatres during a part only of the total duration of the hire.

It is of course possible for such "doubling" to be sanctioned by the hirer and provided for in the contract. It is obvious that the hirer might find such an arrangement to his advantage, as he would thus be able to distribute a smaller number of copies and to make a larger profit from his films. This would in fact amount to hiring out the films and granting the right to sub-let them, subject to certain conditions. But while this practice may not be prejudicial to the hirer's interests, it is obviously prejudicial to the manufacturer, and to the publisher whose production is hit thereby. It is, however, open to him to safeguard his interests by prohibiting the hirers with whom he deals to authorize managers to "double" the films he hires out to them.

But illicit or clandestine "doubling" is not only an actionable offence involving a claim to damages, it is also an abuse of trust and an illegal infringement of right.

We cannot overstress the unlawfulness of such practices which, unfortunately, are all too common, especially in villages.
and small towns, in which hirers and their agents are unable to ensure proper supervision. It is a veritable curse to the cinematograph business.

Smuggling films is another form of infringement. This consists in introducing into a territory in which a third party has exclusive rights films which form the object of the said rights, which the latter has in many cases acquired at very great expense, or in hiring out or sub-hiring, outside the area of the monopoly, films which ought not to be exhibited unless within it.

The special forms of infringement above described, as well as counterfeit prints, ought to be prosecuted without fail in all countries and under all forms of law. Counterfeiting consists in making a fresh negative from a positive obtained from the original negative and in then printing, from this new negative, a certain number of positive copies, which are then distributed. Counterfeiting, whether on the part of the renter or of any other person, is a form of illicit reproduction, and amounts to forgery. Counterprints, moreover, are of inferior photographic quality. The practice of counter-printing damages the publisher, by depriving him of the legitimate proceeds due to him from his publishing rights, while, at the same time, the inferiority of the films shown discredit his production. And, lastly, counterfeit prints are prejudicial to the interests of managers who act in good faith, since the defects in the film create the impression of faulty projection, which the audience are apt to attribute to shortcomings in the apparatus.

CONCLUSIONS

This rapid survey, in which we have endeavoured to deduce the principles, and to point out the most common forms of infringement, of cinematographic copyright, will have served to show how complicated the question is and to what an extent jurisprudence — though by no means wanting in volume — lacks decisiveness.

It is earnestly to be hoped that the first care of the jurists
to whose task it will fall to amend international conventions will be to make the texts clear, so that cinematographic works may be protected more consistently and be less subject to the often arbitrary discrimination of judges.

Authors and their grantees should not hesitate to make some sacrifice in order to ensure that all infringement — however slight — of their rights be put down. They should not suffer any plagiary of their works with a view to illicit gain by others, or that the titles they have thought out and to which they have imparted an original cachet should be used by others, or that their films should be marred by cuts, alterations, and mutilations of all kinds that upset their balance and deform their meaning or beauty. Publishers and hirers should take proper care to see that their rights are respected.

And, lastly, cinematograph business, which unfortunately at present is sometimes carried on by persons whose commercial honesty is not above reproach, needs to be purged, and the standard of commercial morality in this branch of business, which grows and expands from day to day, should be firmly grounded on concepts of right and equity.

Modern law has consecrated the principle of artistic and literary property. We look to the present, and more especially to the future, to show us the rights of authors protected not only on paper and in the texts of laws, but in actual life.

We have to thank artists for procuring us the finest emotions of our lives; it is only fair that we should see that their rights are safeguarded.

Maurice Van Der Moesen
Barrister at the Brussels Court of Appeal
CONDITIONS AND LABOUR CONTRACTS IN THE GERMAN CINEMATOGRAPH INDUSTRY.

(from the German)

I.

The Film Business.

There are fully 45,000 persons employed in the German cinema industry, without counting those employed in the manufacture of blank films (chemical industries), cinematograph apparatus (optical and electro-technical industries) and in other branches of trade connected with the cinema industry. It is estimated that 16,000 of these are engaged in actual film production (in factories, studios, and film-copying studios) including the regularly employed film actors and supernumeraries, and 2,500 in the film-hiring business. The other 26,500 employees are distributed among the 5,267 cinema theatres throughout Germany.

(Ed. Note). The Editor has much pleasure in publishing Dr. Roeber's article on a subject which the active part he has taken in organizing the German film industry enables him to approach with singular authority. The I. E. C. I., though not, of course, concerned with the direct study of labour problems, which are within the competence of the International Labour Office, welcomes this opportunity of showing how close and sympathetic is the collaboration between the two institutes. Our readers will no doubt recall the agreement entered into between the I. L. O. and the I. E. C. I., published in our third issue; herewith we are happy to make a start in placing at the disposal of the I. L. O. information and technical particulars connected with cinematography that may serve the purposes of the Genevan Institute in the execution of this important mission on behalf of labour.

In our next issue, the Review will publish a paper of exceptional interest, « The Cinematograph and the Workers » from the pen of M. Fernand Maurette, the eminent historian and geographer, who devotes so much enthusiasm and talent to directing the Research Section of the International Labour Office.
Ninety per cent of the remaining theatrical film industry, which manufactures a yearly average of 220 films, of an aggregate length of 450,000 metres, is located in Berlin, while the remaining ten per cent is established in Munich.

Short films, of an instructional, cultural, topical or publicity character, including weekly news reels, are also produced mostly in Berlin and Munich. It is here that the big firms, such as the Ufa and the Emelka, undertake the production of such films in close conncetion with theatrical film production. The Ufa alone produces from seventy to eighty cultural films yearly.

The hiring out of films is not confined to Berlin to the same extent as film production. The principal reason for this is that the big hiring establishments have agencies in many of the smaller towns (1) whence they distribute the films to the cinema theatres.

There are cinema theatres in all parts of Germany. Berlin, with its fine cinema halls, absorbs 20% of the big cinema theatres of Germany, that is so say theatres comprising over 1000 seats and employing big staffs; but it accounts for only 8% of the total number of German cinema theatres and 10% of the 1,876,000 seats thereof.

The labour regulations applying to the German cinema industry in the Berlin district — including unorganized employers and workers — affect the most important part of the producing industry, a considerable part of the hiring business, but only a small fraction of the cinema theatres.

II.

*How Labour Conditions are regulated.*

Labour conditions are regulated by contract according to certain tariffs. The Federation of German Film Industries (*Spitzenorganisation der Deutschen Filmindustrie*). The Federation of

(1) These towns are: Königsberg, Hamburg, Hanover, Düsseldorf, Cologne, Frankfort, Munich, Leipzig, Dresden and Breslau.
German Film Industries comprises the following organizations: The Association of Film Manufacturers, the Association of German Positive Copy Manufactures, the Association of German Film Studios. These organizations form together the German Film Industry Employers' Syndicate, which regulates collective labour and tariff conditions. The headquarters of the Syndicate are in Berlin and it is under the general direction of Dr. Plugge, Director of the Spitzenorganisation.

The Employers' Syndicate, acting in concert with the Union of Employees in the Cinematograph Industry (to which the principal associations of technical workers employed in the film producing and film hiring industry) in the Berlin and Potsdam (Greater Berlin) districts are federated) regulate all questions pertaining to work and wages in the trade. The regulation of these matters in respect of office employees in the said district is settled between the Employers' Syndicate and the employees' unions.

Contracts have been made to regulate the daily wages and monthly salaries of the two categories of workers (manual workers and business staff). The Ministry of Labour of the Reich has pronounced these contracts to be binding on both parties, thus recognizing them as defining labour conditions throughout the profession as a whole.

In virtue of this official recognition, all employers and employees in the Greater Berlin District who belong to the contracting organizations and syndicates are required to observe the terms of these contracts.

In the Munich district conditions of work and pay are regulated in respect of five positive printing establishments only. (2)

(1) The following associations belong to the Union of Employees in the Cinematograph Industry: The Metallurgical Workers' Union, the German Wood Workers' Union, the Saddle-makers' and Upholsterors' Union, the Painters' Union, the Union of Workers in Lithography and similar Processes, the Engine-drivers' and Firemen's Union.

(2) According to German law, wages agreements and labour contracts may be recognized not only between unions of employers and unions of workers, but also between the latter and private employers. This is exemplified in the written contracts drawn up between the workers' union (Deutscher Verkehrsbund) and five separate firms.
The regulations in question are practically identical with those drawn up by the Berlin organizations, save for certain slight differences in the scale of salaries.

As regards theatre staffs, including the managing staff, no uniform scale of salaries has yet been fixed. Agreements on salaries have at times been entered into with the delegates of the different categories of employees, but these agreements are only valid locally. There are no agreements of the kind in Berlin for the cinema theatres.

There are some 15,000 musicians employed by cinema theatres throughout Germany; they are remunerated according to the general scale of salaries established for all the musicians of the Reich. Negotiations have been under way for some time past for a revision of these tariffs, but so far no definite basis of agreement has been reached.

Besides the labour contracts respecting the different categories of manual and business employees, there are special contracts, known as service contracts, which concern actors, scene setters, operators, architects and specialized wig-makers and hairdressers, and all the technical and artistic staff engaged in film production.

There are no fixed tariffs in Germany binding all these categories of participants in the cinema industry. The Actors’ Union has nevertheless made efforts to get these tariffs regulated on a contractual basis for all persons occupied, even temporarily, by the cinema industry; it has succeeded in obtaining a favourable decision on this point from the Government Arbitration Institute.

According to the regulations for the application of German labour laws, no award of this kind is reciprocally binding unless accepted by both parties. In the case of one party refusing to accept it, however, the Government Arbiter has the power to intervene with a compulsory award, when the decision in question is judged to be fair to the interests of both parties and when reasons of an economic or social order render its acceptance necessary.

Unfortunately these provisions do not apply to cinematograph
actors; so that if the Employers’ Syndicate refuses to accept the arbitral award, no compulsory award can be pronounced by the Board. (1).

The labour conditions of cinema actors, scene setters, operators and architects are subject to labour contracts which afford them a certain guarantee.

The general labour conditions established by the Cinema Industry Employers’ Syndicate contain regulations of a general character bearing on the rights and obligations of the contracting parties. They define the form of contracts, the order of recruitment, all questions of cinematographic rights, the different kinds of work, the payment of salaries, the motives for rescinding contracts and the causes for arbitration.

An application for arbitration was made by the Employers’ Syndicate with a view to the stipulation of a special labour contract with specialized wig-makers and hair-dressers. It is worth noting that in this instance it was not the employers, but the employees, i.e. the hair-dressers, who were contrary to the regulation of their labour conditions. This is accounted for by the fact that the hair-dressers attached to the film industry are in a privileged position, which they endeavour to maintain by keeping up a limited supply. They are unwilling that other categories of the profession should intervene in the matter. The fees demanded and obtained by these specialized hair-dressers are very high; suffice it to state that they are on the average on a par with those paid to Judges of the Court of Appeal!

(1) The regulation adopted on the 1st. May 1924 by the Syndicate of Employers in the Cinematograph Industry and the Actors’ Union in which conditions of work and wages for cinema actors were fixed, comprised also an arbitration clause. This contract was rescinded on the 1st. January 1929, as a consequence of the split that took place in the Actors’ Syndicate, from which the Association of Scene Setters and the German Cinematographic Syndicate seceded. This split reduced the groups signatory to the Agreement of the 1st. May 1924 to two only: namely, the « International Actors’ Society » and the « Federation of Chorus and Ballet Actors ». Hence the rescission of the Contract.
In defence of their claims and justification of their refusal to accept tariff regulations, the cinematographic hair-dressers adduce the high artistic quality of their work; they refuse to be placed in the same rank as ordinary hair-dressers and insist on their right to special remuneration consonant with their artistic merits. They have themselves established, and their delegates support, their own conditions of work and pay, which they claim as an irreducible minimum.

In this case, it would be proper and necessary to endeavour to fix special conditions for the class of workers in question, who, however artistic their work may be, are not extraneous to the category of workers.

Should the negotiations for the stipulation of a labour contract fail, the employers' organizations are in favour of instituting special courses for training a sufficient number of specialized hair-dressers; this would result automatically in increasing the labour offer and would thus compel this class of workers to accept reasonable rates of pay.

The collaboration of scenario writers and composers of musical accompaniments to the films is not subject to any special labour contract. It is remunerated in accordance with the terms agreed upon between the interested parties (Par. 631 of the German Labour Law).

The Employers' Syndicate has fixed special forms for contracts between film publishers and scenario writers, whereby the authors cede their rights to the publishers: the application of this form of contract has recently been extended to sound films. From the legal standpoint, this does not amount to a publishing contract but, to a contract of cession, it being explicitly stipulated that the film publisher has the right to use the scenario, but is not bound to do so.

The idea of regulating disputes relative to the execution of labour contracts by recourse to arbitration has been widely applied in the German cinema industry. Thus joint commissions have been set up for actors, scene setters, operators, etc., in which all interested parties, both employers and employed, are equally re-
presented, and which act on the request of one or other of the parties. For some time past, commissions of a like nature have been set up for those categories of persons who cede their copyright to publishers — scenario writers for instance — for the original work they place at the latters’ disposal.

III.
Separate Tariff Contracts.

The primary purpose of the standard contracts for the manual employees and office staff in the different branches of the cinema industry is to determine the hours of work. These generally amount to 48 hours per week. Overtime service may be demanded of the staff to meet the exigencies of business, but always within the limits laid down in the labour laws. For manual workers, overtime must be paid at the rate of 25% above the normal tariff for the first hour, and 30% above it for each further hour worked during the day. For the office staff, overtime pay is reckoned at the rate of 1/200 of the monthly salary, plus an extra 25%. Sunday and holiday work is remunerated at double the usual rate.

The contracts between the employers’ syndicates and the unions of workers of the different categories comprise also clauses with respect to paid holidays. Such clauses are now a feature of all labour contracts; this confers a special value on them, since no other legal obligation in this regard is binding on employers.

The manual workers in the cinematographic industry are entitled to a yearly holiday of from 3 to 14 days, according to length of service; the term of the holiday varies in the case of office employees, in like manner, from 6 to 18 days.

The German Civil Code provides that workers are entitled, in the event of illness or other causes of inability independent of their will, to draw their wages during the period of their absence, provided this it not unduly prolonged. Special regulations have
been made in the case of commercial employees, which fix the length of legitimate and properly substantiated absence during which wages are due at a maximum of six weeks. The labour contracts in the cinema industry have fixed much more favourable conditions for this class of employee, the period of paid absence under the circumstances set forth above being increased from 7-10 weeks, according to the length of service.

The salaries of office employees are fixed according to the category to which they belong (first-class, second-class and minor staff), and according to the length of service.

The salaries paid to female employees are 10% lower than those due to the men; the salaries of married employees is increased by 15%; this increase is likewise due to married women when they are the bread-winners for the family.

As regards manual workers, a distinction is made between skilled workers and unskilled workers or apprentices (1). The tariffs applicable to these two groups vary according to age and length of service. Salaries vary between film producing firms and the studios for printing positives and distribution agencies. Specialized workers are entitled to considerably higher salaries than those generally current in their category, or, in any case, are paid according to the most favourable scale; this is the case for instance, with masons and carpenters, who are paid the highest rates fixed for their respective categories.

IV.
Staff Recruitment.

There are no paid agencies for the recruitment of staff. No matter whether manual workers, experts, or administrative staff are concerned, the employees are engaged either personally

(1) This category comprises apprentice workers and lower office staff who are entitled to wages from the first year of their service onward. Apprenticeship lasts three years for workmen. During this period the apprentice is entitled to yearly holidays.
or through the medium of advertisements in the daily papers or trade publications; in all cases, however, it must be done in accordance with the laws on employment, centralized in public offices.

In view of the fact that Berlin is the centre of the German film industry and the employees required are recruited from a very varied group of vocations, a special section has been set up in connection with the Berlin Public Employment Bureau. This section, which centralizes offers and applications for work, keeps in constant touch with the cinematographic firms and the employment agencies of each vocational group concerned; in this way it is able to meet rapidly and efficiently the requirements of both employers and employed.

Not long ago a «Cinema Agency» existed in Berlin; this was a private office authorized to recruit actors; its activities originated in the clauses of a labour contract drawn up between the Employers' Syndicate and the Actors' Union (Vide Note I, page 391). But this agreement having been rescinded, the service in question has been absorbed by the Public Employment Agency of Berlin.

V.

The Social-Economic Value of the Regulation of Labour Conditions and the System of fixed Rates of Salaries in the German Cinema Industry.

When it is remembered that German industries, considered as a whole, occupy 10,970,120 persons, (1) distributed between 807,300 establishments (2), and engaged under 7,490 con-

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(1) Official returns for 1st January, 1927.
(2) According to the returns of the Statistical Bureau of the Reich, the number of wages agreements has declined by about one third from pre-war times to the present time. On the other hand, the number of industrial firms bound by such agreements has multiplied five-fold, and the number of employees affected thereby is seven times as great as before the war. These facts prove that there is a progressive tendency to substitute national tariffs for local tariffs.
tracts it will be seen that the 45,000 persons employed by the cinematograph industry represent a modest figure. These 45,000 persons, moreover, are not all comprised in the tariff regime applying to the producing and distributing enterprises in the Greater Berlin District; a number of them live outside, or above the tariffs, and receive considerably higher salaries.

In any case, we are not so much concerned with the actual number of the persons employed in the German cinematograph industry, as with the adherence they have given to the great social concept of modern economic life of the rights of labour. These principles, as expressed by minimum wage rates and the institution of arbitration, have proved the best means of regulating work and solving labour problems; they are also the surest means of achieving any general understanding and agreement on these questions.

Dr. A. Roeber
Scientific Partner in the Spitzenorganisation der Deutschen Filmin industrie.
THE VALUE OF THE EDUCATIONAL FILM

ITS DANGERS AND HOW THEY MAY BE OBVIATED

(from the Spanish)

The dangers which menace the educational film are in proportion to its importance, unless those who use it for instructional purposes know how to avoid them.

The efficacy of the screen is apparent from the keen interest taken in it by children and by the millions of young souls that all the world over are under its spell. This should be a lesson to those responsible to try and protect the young from the dangers inherent in the cinematograph.

Children remember better what they see than what they hear. But they remember best what they see and hear simultaneously. This explains the great recent triumph of the «talkies» and the «movietone», which are contemporaneously visual, oral, pictorial, literary and musical.

(Ed. Note). We have great pleasure in publishing this article by an eminent scholastic authority of the Cuban Republic, who has for years past devoted himself with great success to the study of new forms of teaching consonant with the spirit of our times and with the necessity of not tiring the child mind. The question of the scholastic film will be dealt with more comprehensively in later numbers. Our November issue, for instance, will contain a highly interesting study by Prof. De Madaysu on a scholastic film experiment that has been made in certain of the Swiss Cantons. The question of the film as a method of teaching is at the present day on the agenda of all civilized Nations and this Institute is carefully examining its many aspects. The International Review will therefore be open to the fullest discussion of the question and more especially record the practical and technical results achieved, results based on actual experience rather than on abstract principles and theories.

Prof. Baralt's article is of particular interest as illustrating the advantages to be anticipated from the synchronized film. This question will claim further attention in later numbers.
The lesson of the cinema should insinuate itself by as many different means as possible. Because, besides those we have already enumerated, other senses are stimulated by it: the muscular sensibility, the moral, aesthetic and spiritual sensibilities. All these may be cultivated by means of the screen, if it is accurately and carefully directed. It would be a deplorable error to despise this magnificent instrument for imparting a complete and harmonious education to our children.

One of the causes fostering the great demand for films is the malady of our age, the modern passion for everything that can give pleasure without the necessity of work, concentration, or effort; for everything that is rapid and superficial, that arrives by the shortest route, by what the Anglo-Saxon peoples call time and labor-saving machinery, without any understanding of the great value of time and labour.

This danger should be watched by film producers and educators if they wish to avoid checking the child in its mental ascent and creating difficulties for its future life by making it believe that progress and evolution are rapid processes and education a mere game.

Works of art are not entirely free from this failing, but a comparison between them and cinematographic production is sufficient to show that the former are different, inasmuch as they are more creative and show more character and a higher sense of the effort of the author, than the latter. This is a question worthy of study and consideration, all the more as it concerns education, a serious matter demanding patience and perseverance and which is slow in its evolution.

Educational cinematography is concerned with two diverse aspects of education: instruction and general culture. But though the latter is more important and more fundamental than the former, its development has scarcely commenced. To educate is not to fill the mind, but to form and develop it.

What is the indispensible requisite of every educational film? It is not enough to answer: that it should educate; we must attach a definite meaning to the term. To be educational a film
must arouse the mental activity of the onlooker, that is to say it must cause him to think, feel and will. It should not be forgotten that to bestow a pleasure and to satisfy a desire without demanding effort or attention produces a retrogressive effect on the mind of the young, making it go back to a primitive form of life and weakening the character.

We have it in our power to make the cinematographic film an asset or a stumbling block, a stimulus to personal effort or an excuse for laxity and laziness.

In order that an exhibition of works of art or the performance of a musical composition should produce the desired effect on the mind of the spectator, their form of expression must be clear, which will augment their social, pedagogical and moral value. I consider that the commentary of a competent critic is indispensable for the attainment of this effect.

Elucidation is the body and soul of instruction. The possibilities of the cinema as a means and instrument of artistic, aesthetic, and physico-aesthetic culture are infinite, if the actors and speakers perform their parts according to standards of real beauty. This today is only possible in the talking film, which produces simultaneously the image, the movement, the voice, the music, and even the technique of voice production.

What a grand instrument for the great work of education, at once aesthetic, moral, and emotional! It is so, because the mere contemplation of beauty elevates the soul, predisposing it to nobler impulses and more generous sentiments.

Much might be said of the other advantages which cinematography, at its present stage of development, presents over all other known methods. Among them is the possibility of enforcing impressions by reiteration, an excellent thing for any elementary form of instruction and for which reason it is often preferable to view an educational film several times than a great artist once in real life.

The subjects best suited for cinematographic instruction are oratory and recitation, acting, languages, and phonetics, which is the scientific basis for the study of languages, most necessary for
the acquisition of a correct pronunciation, both in one's own and in foreign languages.

It affords a splendid method of study for pupils who can watch the position of the lips and contemporaneously hear the sounds produced by them; and its usefulness is heightened when it is a question of teaching the single articulations and the pronunciation of mute and aspirated consonants, which present great difficulties to students of phonetics. What object lesson could be more useful than a « close up » of the face of the master of phonetics, demonstrating on the screen the various positions of the mouth according to the pronunciation?

The cinema has a great psychological value when showing pathetic, tender or moving scenes. I believe that there is no better method of instruction and moral culture. The International Institute for Educational Cinematography deserves approbation and patronage in every respect. This organ of the League of Nations, established in Rome, deserves the gratitude of all those who have at heart the improvement of the race by means of educating mens' minds and developing their faculties, which, as the Director of the Institute put it, is « a progressive and systematic advance towards the good ».

One of the reasons of the superiority of the cinema over the theatre is the fact that the actor's work dies with him, while that of the cinema lasts indefinitely. Just as the Cid won a battle after he was dead, the film actor may still be admired years after his death, and may have disciples.

In a word, if the educational film is to be appreciated, and is really to give the results that we have a right to expect from it, it should be pure, beautiful, if possible poetic, and above all convey instruction and moral teaching.

Among the social, pedagogical and moral problems of our time, none is more deserving of serious attention and conscientious study.

No more efficacious process than that of the talking film has yet been discovered for the purposes of objective methods of study. If wisely used, it is a marvellous instrument. There is
no objective method equal to it for showing the student form, colour, movement, voice and sound, both articulated and musical. One might almost say that the inventor of the cinema was inspired by the guardian angel of teachers!

Today with the perfection of visual and oral cinematography diffused by the marvellous invention of the radio, the efficacy which education may derive from it, especially as regards dramatic art in its three branches of voice, diction and action, is incalculable. The same applies to pantomime, to phonetics, singing, artistic dancing and recitation.

The educational film achieves its finest effects when it succeeds in awakening the interest of the pupils, and by touching their hearts makes them experience the most noble and moral of sentiments, compassion. This is the most efficacious of all the means by which to avoid war and ensure peace among peoples. Much can be done in this direction by the international spirit of the so-called documentary films, which, by making us acquainted with foreign countries, their character, life and customs, awaken our sympathies in their regard by that touch of nature that makes the whole world kin.

From all this it is evident that educational cinematography may become one of the greatest supports and benefactors of science, art, study and teaching, in a word, of mankind. Everything that raises us above the purely human to the divine, which is at once the source and the ultimate destination of man, and arouses the religious spirit which elevates and ennobles all, is worthy to be called a sublime work.

Luis A. Baralt
Professor of Pedagogy
at the Cuba University.
THE PRESENT POSITION OF COLOUR CINEMATOGRAPHY

(From the French)

Students have for a long time past been engrossed by the problem of colour cinematography, and when, in 1907, the Brothers Lumière succeeded in obtaining a colour photograph on a single plate by means of an autochrome process, the idea immediately arose of applying this splendid discovery to the cinematograph.

Unfortunately there were a great number of obstacles in the way of any immediate achievement. First of all, one had to contend with the defect of sensitivity in the emulsion of the autochrome plates, necessitating lengthy exposure, lasting nearly 60 times as long as normal exposure. In the second place, the difficulty of adapting to the film delicate technical processes requiring the use of special varnishes to fix the strata of coloured grains of starch on to a flexible support and to spread the emulsion over this layer.

All these difficulties, which are certainly not unsurmountable, appear to be on the way to a solution, and we may look forward in the not distant future to this progress being actually real-

(Ed. Note) We take a particular interest in the problem of colour cinematography, being convinced that the solution of this problem will be of the greatest advantage to educational and scholastic cinematography and that its effects will be such as to dissipate once and for all any doubts and deficiencies now prevailing.

Dr. Seyewetz is a true scientist, and we trust that he will not fail to keep our readers informed in later issues of the Review of the technical progress made in this domain.

Our readers will recall the important paper by Prof. Namias which appeared in the second issue of the Review; we are happy to announce that our forthcoming issue will contain the continuation and conclusion of the study by Prof. Namias, who has devoted more than thirty years of enthusiastic work and effort to the question of colour photography and cinematography.
ized, thanks to the efforts of the Brothers Lumière; we may ex-
pect the ordinary autochrome film, the manufacture of which offers
much fewer difficulties than that of the cinematographic film, to
precede it.

Meanwhile a number of inventors are devoting their efforts
to solving the problem in a variety of different ways, some of
which have led to very interesting and practical results.

Nearly all the cinematograph colour processes which have
so far been attempted have been on the three-colour system, one
mono-coloured image being superposed on another. These are
either coloured artificially or by interposing transparent screens
of the right tint selected from among the rays of light prior to
the images being superposed on the screen. Three objectives are
used in all these processes; each being supplied with a separate
coloured screen, through which only a part of the spectrum is
filtred, the other colours being absorbed. An orange coloured
screen is used to obtain the green negative, a green screen to
obtain the negative reproduction of red, and a violet screen for
the yellow negative.

The three images thus analyzed are received on a pan-
chromatized cinematographic ribbon, which is sensitive to all
colours, but in varying degrees. Since the three images must be
formed simultaneously, it is necessary, in order to compensate
the differences in sensitivity in the preparation of each one of them,
to vary the amount of light received by each objective by means of
diaphragms with different degrees of opening. Thus the diaphragm
of the objective supplied with the violet screen is considerably
smaller than those of the two other objectives.

At the present time highly perfected cameras are being made
to obtain the three impressions simultaneously.

Thus the negative receives three impressions of each poly-
chromatic object; after development these give three black ne-
gatives. These correspond respectively, the first to blue rays
or to rays containing blue (green and violet), the second to red
rays or rays containing red (orange or violet), and the third to
yellow rays, or rays containing yellow (orange or green).
The positive reproduction, by contact with another sensitive ribbon of these three negative images, gives an accurately superposable black and white reproduction of the images of the elementary colours of the polychromatic object.

An exact polychromatic effect of a scene may be obtained if, prior to placing these black images one above the other, they are coloured respectively blue, yellow and red with well selected dyes, or else lit up by transparency, fasces of luminous rays which have passed through the positive by means of screens coloured with the same colours as those used for dyeing being directed on to them.

This principle has been applied to the several processes which we are about to describe. We will point out the drawbacks attaching to each one of them and their practical possibilities.


This process, which is based on the phenomenon of the persistence of images on the retina, makes use of a panchromatic film upon which each polychrome image is represented by three successive elementary images obtained by means of three selective screens, one green, one orange and one violet.

These three images must be obtained in a space of time practically equivalent to that normally devoted to obtaining a single image in black and white. Thus the film must be turned at about three times the normal speed, or at the rate of 50 images per second. Upon development, a negative three times the standard length is obtained. This is printed as a positive in the usual way, by contact, with a positive emulsion ribbon. By colouring each of these elementary images in blue, yellow and red, with suitably selected dyes, a succession of images of respectively the same colours is obtained on the positive ribbon.

By turning this ribbon at three times the normal speed and projecting it on the screen, the persistence of the retinal impression will allow the three elementary images to be superposed in our eyes, producing the illusion of the reconstituted polychrom-
atic image on the screen. This process, which Héraut has taken up anew, has the following disadvantages:

1. Negative and positive films of three times the length of black and white films must be used;
2. The ribbon, being turned at three times the normal speed, is soon worn out;
3. The most serious drawback consists in the impossibility of obtaining a perfect superposition of the images whenever a moving object moves perpendicularly in relation to the axis of the objective. Indeed, notwithstanding the great speed with which the images succeed one another, a moving object cannot when photographed be precisely in the same position in each of the three images. Thus the superposition is not absolutely perfect and coloured rims appear on the screen.


Notwithstanding any imperfections in this process, it is being exploited industrially on account of its relative simplicity. It consists in taking two simultaneous images, each with the aid of a complementary screen — one green and one red. To obtain the positive, a film prepared with emulsion on both sides — one serving for the printing of the red and the other of the green image — is used, care being taken to insensitize the gelatine layer which is not being used at the moment, between each operation, and to see that the two images are placed accurately one over the other.

These two positive images are coloured respectively green and red, by successively isolating the two surfaces of the film.

The most serious drawback to this system is the use of only two colours; the hues are consequently not accurate; blue cannot be reproduced and the remaining colours, in which blue is lacking, are not faithful to nature.

The impression on the eye is generally somewhat disagreeable, when the colours which predominate in the scene are not green and red. In printing, moreover, the precise coincidence of
the two surfaces of the film is a difficult matter, and when this is imperfect the images appear encircled with red and green rims.

Then again, the film, which is coated with emulsion on both sides, gets easily scratched and the dyes rapidly alter under the influence of the electric arc. Lastly, the cost price of such films is about double the ordinary cost.

3. THE GAUMONT PROCESS WITH MULTIPLE OBJECTIVES.

This process is based on three positives obtained from three selected negatives made through three corresponding coloured screens, the superposition of these three images producing a polychromatic reproduction. This system, while reproducing inanimate objects most faithfully, leaves much to be desired in cinematography. The distance between the three objectives, in fact, however slight this may be, impedes the accurate superposition of the three images, and one is further compelled to use objectives mounted on rollers for the purposes of projection so as to correct this defect, which tends to produce coloured rims to the images.

As this correction has constantly to be made, it has been found necessary to install in front of the screen a cabin from which an operator regulates the objectives electrically by means of a series of levers, thus correcting discrepancies in superposition.

Wider use has not been made of this process up to the present on account of these defects.

4. AUDIBERT AND THOVERT PROCESS, BASED ON MULTIPLE OBJECTIVES AND WITH REDUCED STEREOSCOPIC EFFECT.

These inventors have done much to reduce the defects of the Gaumont system by sensibly diminishing the effect of parallax through the use of a divergent lens in front of the multiple objective, in such wise that one practically obtains a photograph of the virtual image corresponding to the anterior system.

The depth of this first image not being very pronounced,
the stereoscopic effect can be considerably diminished, thus eliminating the coloured rims almost completely.

The objectives were at first placed side by side and produced three horizontal images (fig. 1), which entailed the use of special ribbons of more than standard width. The inventors have obviated this inconvenience by disposing the three images triangular-wise (fig. 2). The images consequently come smaller, which makes it possible to use the whole of the ordinary cinematographic material and renders the process highly practical. All that is needed is to replace the ordinary objective by a triple objective equipped with three coloured screens.

The screens for projection are simply made of gelatinized glass, coloured green, orange and violet. Projection may be effected in all dimensions; it is limited only by the amount of light available and by the thickness of the silver grain of the image.

In order to simplify the projection of the film and to utilize it as an ordinary film, Audibert has succeeded in printing the three elementary photographs on the same film by utilizing the negative wherein, as above said, the three elementary images are disposed in a triangular arrangement.

The negative images are then projected one after the other, increasing them to the dimensions of an ordinary cinematographic image, on a positive film spread with emulsion on both sides.
The blue negative is first printed on one side; then the red one is printed on the other by means of an apparatus ensuring the most perfect accuracy. The two images are then developed, they are mordanted and coloured by the process devised by Messrs. Lumière and Seyewetz (mordanting by sulphocyanide of copper and colouring by methylene blue or Rhodamine red).

The two sides are mordanted simultaneously. So as to isolate one side during the dyeing process, the film is applied on to a rubber band rolled round a drum which prevents the dye from penetrating onto the side in contact with the rubber.

Thus the printed positive image is dyed first on one side and then on the other. After it has been dried, one of the sides is varnished with a transparent varnish so as to render it impermeable and an emulsion for positives is applied upon which the enlarged third negative image is printed; this being accurately superposed on the other two. This third image is developed, fixed, mordanted and coloured with the third dye, the colour of one stratum not being allowed to penetrate in any degree into the others, thanks to the rubber band upon which the film has been fixed.

There are no coloured rims owing to the absolutely accurate superposition of the images.

When carried out by experts, this process gives very satisfactory results. The task of obtaining the three well adjusted positives is, however, very delicate, for once the images have been coloured it is impossible or extremely difficult to retouch them. It is therefore expedient to make tests with mordants and dyes on experimental ribbons, so as to make sure of obtaining sufficiently accurate images and to avoid one of them predominating over the other after they have been superposed. Once this film is completed, it is projected like any ordinary cinematographic ribbon.

5. The Keller-Dorian and Berthon Process.

In this extremely ingenious system, devised by two French inventors, Messrs. Keller-Dorian and Berthon, the violet, green
and red tinted films are placed side by side on longitudinal ribbons and paralleled in the diaphragm passage. It is well known that the diaphragm always appears as a luminous surface of uniform brilliancy in relation to the several points of the clear image.

A film spread over with panchromatic emulsion and "craped" on the emulsionised side is used for the sensitive surface. This "craping" is done by an indented roller by means of which an enormous number of little hexagonal bulges (500 to 1000 per square milimetre) are impressed on the film. The film is then placed in the camera so that the "craped" surface faces the objective. Each of the tiny "craped" protuberances produces on the sensitive stratum a tiny image of the ensemble of the view embraced by the objective through the coloured screen. Thus the same result is obtained as if one placed a network of violet, green and red elements in contact with the emulsion, as in the autochrome plate.

Fig. 3 shows the passage of the rays of light both inside the view finder and the projector. The same phenomena occur in both cases. The same objective furnished with its tri-coloured diaphragm is placed in position for projecting the positive
film and for taking the photograph. Thus the original image is
reconstituted by means of the inverse return of the rays of light
which served the purposes of registering the view.

It is well known how essential the regularity of the action
exercised by each of the coloured sections of the tri-coloured screen
is in obtaining a successful result and how greatly this regularity
depends on the sensitivity of the emulsion.

Now there are slight differences in sensitivity between one
manufacture and another, but it has been found possible to correct

these variations perfectly by obturating a fraction of one section
or of both sections of the screen.

With this object, the Kodak Pathé Co. has devised adjustment
diaphragms (fig. 4). These diaphragms are adjusted for each film,
after testing the sensitivity of the emulsion used, so as to make
sure that the action of the dyes and the receptivity of the emul-
sion correspond perfectly one to the other.

Each film should therefore be accompanied by its adjustment
diaphragm, which is fixed at the moment of taking the photograph.
The sensitive surface covered with the mosaic of the images of
the tri-colour screen is printed as it would be through those of
the autochrome plate, that is to say that only those rays of the same
colour as the screen can filter through these and become impressed
on the sensitive surface. These, on being immersed in a develop-
ment bath, darken at all points that have been printed and black
opaque screens will form at these points and intercept the projection of the colour.

Thus a black image is obtained which, upon being projected through the tri-colour screens, produces a negative image, the colours of which are complementary to those of the object.

There are many difficulties in the way of the use of these negatives for printing the positives; these depend partly on the fact that the «craped» surface of the film on which the copies are printed requires a slightly different focus to that of the negative film.

A correct positive is obtained, moreover, only by the direct inversion of the negative. Thus the process can be used only where a single copy is required, as in the case of amateur films. For this reason the Keller-Dorian Berthon process has so far only been used for such purposes, great perfection being attained in this line by the Kodak Pathé Company in its Kodak Colour Film. But the research which is now being actively pursued with a view to perfecting this process justifies the hope that it may lend itself to a wider industrial application in the more or less near future.

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THE USE OF THE FILM IN THE STUDY OF NERVOUS DISEASES

(from the Portuguese)

The use of the cinematograph in connection with the study of biology may be said to date back to the earliest improvements achieved in the technique of this wonderful invention.

Most people are acquainted with the demonstrations of the intimate mechanism of the circulation of the blood and of many other micro-biological phenomena which have been made possible by the new method of combining the use of the cinematograph with that of the ultra-microscope. More recent experiments have enabled us to combine cinematographic methods with radiographic processes (kineradiography), and this is responsible for the advances made in the study of the physiological and pathological movements of the heart, stomach, and other organs, which have cast so much light on their motor functions.

It is, however, in the field of nervous disease that the film has made its most valuable contribution to medical science. In this domain it is applied in a multitude of different ways, both for the more perfect analysis of clinical phenomena, from the standpoint of their scientific interpretation, and for the purposes of demonstration in medical teaching.

In the sphere of all motor manifestations, the cinematograph offers the surest means of investigating psychological and pathological movement, for it enables us to decompose movement into its component parts and to become acquainted with its several phases.

The results obtained many years ago in this particular field by the experiments of Marey, who applied chronophotography to the study of locomotion in men and animals, and especially to the flight of birds, gave rise to further technical innovations (1);

(1) Cf. R. Ohm, Ein Apparat für photographische Registrierung von Bewegungsvorgangen (Münchener Medizin. Wochenschau, 191c, p. 1498)
but the cinematograph, so simple in its technique and so complete in its achievement, swept all other methods from the field.

The analysis of serial images makes it possible to examine the intermediary stages or aspects of movement; these aspects which pass unobserved by the naked eye, that grasps only the movement as a whole, even when it is slow, are seized and recorded by this means; and it is thanks to such analysis that the peculiarities of certain pathological movements have been described, particularly in disturbances of the gait due to nervous disease. The writer has himself had occasion to describe in the light of cinematographic analysis certain particulars connected with the manner of walking in the disease known as «beri-beri» and in cases of double athetosis and hemiplegia (1).

In these studies, we have followed in the footsteps of Marinesco, who did such fine pioneer work in the use of the film for the purposes of research of this nature (2).

The great advantages deriving from the use of the film in lessons on neurology and psychiatry are obvious and experiments which were first made in this field some 20 years ago have now become quite a common thing, especially in the United States (3). I remember admiring some ten years ago certain films illustrating nervous diseases exhibited under the direction of the late lamented illustrious Professor Camillo Negro in his Clinic at the Turin

(1) Cf. A. DE CASTRO: Note sur la démarche latérale dans l'hémiplégie organique. (Nouvelle Iconographie de la Salpêtrière, 1913, n. 2) Note sur la démarche dans l'athéose, étudiée d'après la cinématographie. (Nouvelle Iconographie de la Salpêtrière, 1912, n. 3).

(2) Cf. MARINESCO: Les troubles de la marche dans l'hémiplégie organique étudiés à l'aide du cinématographe. Sem. med., 1900, p. 713; Les troubles de la marche dans l'ataxie locomotrice progressive (Sem. med., 1901, p. 113).

(3) Cf. V. P. SAINTON: Quelques considérations sur l’utilité de la cinématographie dans l’étude des maladies du système nerveux (Encéphale, 1909, p. 410); H. HENNES: Die Kinematographie in Dienste der Neurologie und Psychiatrie, nebst Beschreibung, einiger seltenen Bewegungstörungen (Medizin. Klinik, 1910, p. 2010); WESTPHAL, HUBNER und JENNES: Kine

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University. We need only reflect on the enormous series of nervous symptoms and diseases which reveal themselves by morphological changes and motor disturbances to realize the enormously wide scope which this domain offers to the cinematograph. The different types of paralysis, convulsive attacks, disturbances of muscular tonus (the latter so deeply studied from the clinical standpoint after the war) — all these are troubles in which the pedagogic efficacy of the cinematograph is unrivalled, for in most cases we have only to look at the film to gather as complete a knowledge of a case as personal examination of the patient could afford.

The peculiar value of the film is all the greater in cases of rare diseases, only occasionally met with in ordinary practice, cases which may occur at many years' interval in the experience of a doctor. The exhibition of films of such cases to students makes up for the insufficiency of clinical demonstration, so often impossible in rare diseases. In the past, theoretic teaching alone has been possible in such instances.

A special didactic interest attaches to films of nervous diseases, for they constitute permanent evidence, and lose none of their efficacy when the disease is cured and the motor symptoms, thus recorded, have disappeared. There are, for instance, cases of facial paralysis in which successive films, taken at different stages of the disease, enable us to follow, through the modification of the morphological appearance of the cheek, the gradual disappearance of paralytic immobility and the progress of the cure until complete recovery. Similarly, in the case of long illnesses, such as muscular atrophy from infantile paralysis, films taken at intervals of months and years are of inestimable evidential value, since they enable us to follow the successive stages of the progress of the disease.

Nor is it possible to exaggerate the post mortem value of the film, which enables us with the help of pathologico-anatomical specimens to reconstitute faithfully a demonstration of clinical phenomena as clearly and accurately as if the living patient were before us.

There is one obstacle to the more general use of the cinema-
tograph for the purposes of demonstration to medical students: namely the high cost of the films, a collection of which represents a considerable value. But we should not be deterred by this difficulty when we reflect that films of this kind never become out-of-date, but have a permanent value and will serve for years to come for the instruction of generations of students, not only in a given University, but in all countries where the exchange of such films is organized.

This question of exchange is of the greatest importance and ought to be studied with a view to reaching a practical solution, which would facilitate the exchange of such films not only between the countries of a particular continent, but also between those in different continents. An international convention in this regard is much to be desired, and we have no doubt that the International Educational Cinematographic Institute will include the study of this important question in its programme (1).

For years past we have noted the advantages of the cinematographic method of teaching and have introduced it into the Rio de Janeiro University, where we organized the film demonstration of nervous diseases. I have made a practice of having films taken of all clinical cases of scientific interest that lend themselves to being demonstrated by this method, as also of normal cases, a record of which would be useful for projection to students for the objective demonstration of clinical characters. Thanks to this method, I have already succeeded in organizing a numerous col-

(Ed. Note). We are happy to inform our readers that, on the occasion of the forthcoming session of the Governing Body of the International Educational Cinematographic Institute, the Director of the Institute, on the proposal of the President (who had already raised the question at the last meeting of the International Commission for Intellectual Cooperation) has drawn up a complete report for the consideration and decision of the Council on the international exchange of films, taking into account the several national Customs regulations on the subject, and putting definite proposals which might form the basis of an international convention on the subject. We will keep our readers informed on this important question.
lection of films on neuropathology at the General Hospital of Rio de Janeiro. I give a list of these films hereunder.

The creation of the International Educational Cinematographic Institute will undoubtedly be productive of concrete results of incalculable advantage to world culture. Scientists and teachers in Latin America will not be the last to appreciate at its full value and give their support to this grand initiative of a Country to whose genius and idealism civilization has owed so much throughout the ages.

Aloisio de Castro
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The Film Archive of the General Hospital of Rio de Janeiro

(Medical Clinic of Prof. Dr. Aloysio de Castro).

RECREATIONAL FILMS

«Laughter is man's characteristic» said Rabelais. We will say more simply that laughter is a necessity for the child. It is therefore our duty to provide him with every opportunity for mirth so as to counteract his natural propensity to grieve over all the big little troubles of childhood. The soul of the child should be trained in joy and serenity, the exercise of his intellectual faculties should be made as easy and as attractive as possible, so as to mitigate the effort required by reflection and the effort of will which all learning demands.

The first requisite of every film for children is that it should be diverting, and should compel effortless attention.

Even in scientific documentary films it is our endeavour to produce pictures that have a fascinating quality. We make a point of attenuating inevitable detailed explanation by simple and amusing illustrations, or by resorting to methods which exclude fatigue.

This applies to educational films to be commented on by the teacher who needs them for the illustration of some special subject. An educational film can always be made attractive; to be so is indeed an essential condition of its efficacy.

To make it so is doubtless a delicate task, for not only must the fundamental theme and didactic purpose remain unimpaired, but care must also be taken not to mar the desired effect by vulgar or irrelevant additions.

The same rule applies to recreational films, which belong to a different and particularly difficult category.

It is said that we suffer from a lack of comic films, that the public is tired of drama, of sentimental comedy and of sensational themes and intrigues which make exaggerated demands on its emotions.
The characteristic of our age, it has been said, is the absence of joy, which is also the cause of the lack of amusing inspiration and of interpreters capable of expressing it.

Our ancestors knew how to laugh although they did not dispose of the infinite means of which progress has given us the command, including the most original and universal, the cinema.

Nothing could be less true than such a statement; the genius of Chaplin alone would be enough to contradict it. The grown man has the same need of recreation as the child, who instinctively seeks amusement satisfying to its imagination.

That this is so is convincingly proved by its merry talk and naïve ideas. Despite the complicated mechanism of its modern games, despite the burden of knowledge born with its reasoning powers, as a result of atavism or environment, it always wants to enjoy itself and finds a way of doing so by its readiness to direct its natural tendencies in this direction.

It would be a great error not to provide the child with beautiful and wholesome recreational films, made especially for it, conceived as far as possible in its own spirit and executed according to its own desires.

In the same way the public, the eternal child, also feels the need of recreation and amusement. It wants to be taught by original means and easily assimilates even the more difficult principles of science when thus presented.

This demonstrates the importance of the recreational film in educational and social cinematography.

There are some truths that will not stand a brutal reproduction, but which, if skilfully treated, are well received and can convey their lesson. In this way we have been able to use successfully films on subjects which on account of the customs and prejudices of our time are considered delicate or repellent, such as those dealing with tuberculosis, cancer, syphilis, and other social scourges which it is our duty to fight energetically.

Thanks to their setting, to good taste, a little tact and an absence of boredom, some films on venereal disease have demonstrated conclusively that the best formula, even for the most serious problems, is to warn and teach by diverting methods.
The recreational film, therefore, is never out of place in the school, in educational institutes, in social education, and in public lecture halls.

It goes without saying that the methods and specializations even in technique should be as varied as the degrees of culture and the ages of the audiences for whom the film is produced.

Nothing could be less desirable than the creation of this kind of film without a keen apprehension of its effect on its environment and of the peculiar psychology of the spectators. Above all it is a mistake not to distinguish between recreational films and comic films, as is often the case.

The recreational film implies at the same time relaxation and food for the mind, while the comic film is only intended to amuse, without any concern for ideas or moral uplift.

The former may cause both laughter and also a little reflection and may leave a lasting and beneficent effect, the latter merely amuses, which is not without its peculiar social function.

The great philosopher Bergson has defined the functions of the comic, and the human value of laughter. And long before him the ancients recognised the necessity of the element of joy in life.

Why should we not use the screen for a quest of new inspirations in this domain?

Once we had to be content to limit the miraculous, the extraordinary, to the magic of words placed at the service of imagination. Today we can transmute these dreams, these fantasies in living pictures, making common property of the most fabulous stories.

But it is necessary to use discrimination and not to classify (as some catalogues do) as recreational films those which are merely outside the rut of classic or popular themes.

For instance « Aladin and his Wonderful Lamp » and « The Thief of Bagdad » are doubtless unusual films, productive of great curiosity. Their improbability captivates attention, but they do not rest the mind; we experience a sense of pleasure without relaxation by the mere satisfaction of the eye.
The same applies to "Robinson Crusoe", for which the possibility of enforcing lessons in initiative, will power and patient confidence in fate through the heroism of the struggle for life depends entirely on its mode of interpretation.

In Germany we met with four distinct versions of Hänsel and Gretel, varying from six to a thousand metres in length.

But it would be indeed excessive to qualify even one of them as recreational in our sense of the word. "Don Quixote de la Mancia" by Cervantes, filmed in a north European country, is not deficient in charm, spirit, and vis comica, but, nevertheless, it is not a recreational film. Neither the child nor the people can gain from it the lessons intended by its immortal author. The film simply provokes a smile but does not convey a complete sense of delight nor enlarge our culture.

We may mention here those "animated drawing" films, remarkable from a technical standpoint and of amazing drollery, but nothing more. These also cannot count as recreational films.

The recreational film has a character of its own and a purpose of its own. Though we cannot claim to classify it definitely in this study, it is necessary to define the recreational film, to indicate its characteristics, point out its advantages, and devise the most favourable means of its production and diffusion.

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Scholastic programs are right in their advice to avoid fatigue in instruction by variety. Moral instruction is completed by entertaining reading, hours devoted to the exact or the natural sciences are followed by those dedicated to lectures, manual exercises, and experiments.

Cinegraphic pedagogy or, if you prefer, the "school screen", furnishes in the highest degree the possibility of the combination of the useful with the pleasurable. There is, therefore, a need for recreational films for children of all ages, films eminently suited to the mental capacities and the grade of instruction of the pupil. Such films, although their essential aim is to divert, should not
be without an educational value. It is impossible to conceive of them deprived of an idea or inspired by meagre fantasy.

We have already said that the children themselves might give the inspiration to make films that really respond to their wishes and remain within their sphere of comprehension.

If we examine the psychology of the child we find that he thinks more than he believes, but that in his irresistible need for movement his thought becomes action.

Unless he is helped by pictures, the reading of his textbooks is dead. He creates his own illustrations by the drawings with which he decorates the margins of his books.

But he wants a living illustration, and so instinctively he adds something to the pictures he finds in his text-books: a pipe or a moustache to a portrait, curls of smoke to a chimney, a bird in the sky. Thus he enlivens his reading, giving himself the illusion of animating what he reads and what he sees, thereby getting ahead of his master's explanations.

He would like to make the animals walk, the vehicles move, and he tries to do this with a few strokes of his pencil. As I write, one of my children, aged four and a half, comes up to show me a picture of a hippopotamus on the bank of a river, « Papa, Papa, I want to see it go into the water! » A picture that does not move confuses the child and he manifests his sense of motion in the ingenuousness of his drawings, very much like those of cave men in their first designs on walls.

The little girl wants to make her dolls alive and the little boy his puppets. It is enough to study the world of little ones with their dolls' theatres, the forerunners of the cinema, to perceive their sense of satisfaction at everything that moves and has life. Movement is the first language of things for them. They see what they are told and they themselves tell in admirable words what they see.

Why (this seems to me the place for the parenthesis) should we not film puppet scenes for our pupils, but puppet scenes without thrashings, policemen, vulgarities; short scenes capable, on the contrary, of teaching what is good, demonstrating virtues
without eliminating humor, for a recreational film, unless it makes us laugh, is inconceivable (i).

La Fontaine, who is known as a good fellow because he lived the life of the fields and not because he was lavish in sensibility, was wrong when he said: «Childhood is merciless». We know that he did not love children, but his life and its accompanying circumstances make this pardonable. The child is sensitive to the highest degree, accessible to all emotions. The recreational film should take account of this precious quality and not overstep certain limits and should avoid all exaggeration. A child has plenty of discrimination and nothing has greater value in its eyes than a picture which in some way throws a reality on to the screen. Another danger to be avoided, as a natural consequence of this, is that of falsifying essentials, of descending to the absurd in the pure realm of imagination.

In the story of « Little Red Riding Hood » the child will always want to know how it was that the wolf was able to put on granny-mamma’s cap and talk like her. Unless the consequences of Little Red Riding Hood’s thoughtlessness are explained to him, he will always consider her a greenhorn who walked into a trap. This delightful story which, in its allegorical form, has given so much beauty and instruction to generations, should not surely be discarded; but it should be adapted to the manner of the present day, without impairing its fascination or compromising its teaching and symbolism.

Transformed with the aid of a clever expert into a recreational film, « Little Red Riding Hood » will gain in truth, while still maintaining its charm as fiction.

(i) We believe that no one has so far dared affirm that the recent reform of illustrated text books was requested and suggested by the pupils themselves. The naive drawings with which they decorated their books compelled teachers to embellish them with illustrations, which was not always an easy matter and this gradually led to instruction by the printed picture.

In like manner, the desire for the moving picture in schools was manifested by the children themselves.
It will always be advisable to resort to nature for films of this character. It is only nature that awakens children's objective interest and they are always trying to make nature talk, attributing voice to inanimate things and seeking in her the soul that Lamartine discerned, and that Dante recognized everywhere.

Films of this character should be clear and simple as regards the scenario, uncomplicated in execution and with brief captions (1). The plot should reveal itself in the course of the succession of the pictures.

A constant spirit of artistic research should distinguish these films, made for the purpose of the child's aesthetic education, the guidance of its soul towards beauty by means of images of perfect form and composition. Recreational films should not, unless in exceptional cases, exceed a medium length of two hundred and fifty to three hundred and fifty metres.

Children easily get tired, even in amusement. Two short films are preferable to one over lengthy one.

We must insist here on the necessity of not falsifying the spirit of a theme by excessively fantastic representations, and of not confusing symbols with conjury. Even in fairy stories proportion should be maintained and the picture should conform to reality. The child will be capable without effort of distinguishing between truth and invention in a carefully handled film.

In order to be amusing, a film for children must impersonate other children, because the child does not understand the actions of grown-ups except in reference to itself. This point is too important to be neglected.

Animals are of absorbing interest to the child, and this fact should be made use of to make him love them. In doing so we should be careful not to arouse his lower instincts in regard to them

(1) We should much like to see some films composed entirely without captions on the model of living pictures. Such films, even of a simple recreational character, contain enough material to feed a child's intelligence and lead it in the right direction. Great psychological advantages might be obtained from such films.
by attributing to animals our own vices and defects, even with
a view to ridiculing them and pointing out the need for correction.

The « bad » dog or cat is always a potential object of ill-treat-
ment to the child, while on the other hand it will never occur to
him to imitate the animals’ good qualities. The example leads astray;
only the adult understands it. For children a direct method of
instruction is necessary.

It is for this reason that we demur as regards the projecting
of some types of fairy tales and their being shown in schools.
A very strict selection is necessary if we wish to avoid an abusive
effect of the recreational film. We recommend films founded on
fables, on the other hand, as most useful for popular education,
for they evoke legitimate and lively criticisms and comment and
have no drawbacks. The production of such films, however, pre-
sents many difficulties, for they demand much tact and delicacy.
The author of recreational films for the masses must likewise be
guided by the necessity of adapting them to a special psychology.

Too complex or too ingenuous handling may easily shock the
spectators in their habits of thought and their prejudices. The
public has an equal dislike for the film that says nothing and the
film that preaches. For the same reason it hates the empty and
the superfluous. The public’s laughter is measured according to
its emotions and it never abuses either. The introduction of laughter
at an opportune moment enables us to convey any desired lesson,
to correct many mistakes and to give good advice. This method,
above all others, is rich in results for social education. To preach
or to complain is futile, but to point out an error, by a sense of
humour, is the way to make converts.

The recreational film does more effective propaganda, espe-
cially in the country, than the scientific film; it is more con-
vincing then the most unquestionable evidence — valuable and
necessary as this is — in urging the need for progress, hygiene,
thrift and public spirit. Jacques Bonhomme (the countryman)
must be made to laugh if you wish to modernise him. He
does not resent humour as a means of improvement, but he
will not stand any brutal attacks on his time-honoured habits
and what he regards as his praiseworthy traditions.

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But we do not make a dogma of laughter in the recreational film; it opens up a wider domain. It suffices for a picture to be amusing without erring on the side of the banal or the grotesque. A pleasing form and wholesome content, spiced with wit and satire, are sufficient for achieving the desired end.

These general concepts will suffice to outline the character, the value, and the remarkable and varied applications of this class of picture, adapted to the needs of the child from the kindergarten to advanced classes and the ordinary cinema.

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The cinema made its debut with documentary and recreational films which would still be acceptable today. But what we wrongly define as the comic film of that period was simply amusing stories pressed into service to put a pleasing interpretation on some idea or teaching. Shorty after, the fairy tales of Georges Méliès, the first to create such films, thereby transferring illusionism to the screen, were presented. Nothing better than the memorable programs of Robert Houdin has yet been produced in this genre.

These Méliès films are indeed recreational films in the best sense of the word; they are model films, a return to which would be very opportune. In order to break the monotony of the shows films in the manner of this prince of inventors, who was the originator of the devices still used today, but whose imitators are without his charm and imaginative qualities, are sometimes inserted in the picture programs of our time.

It has been proposed to film the fables of Aesop and La Fontaine for educational purposes, more especially for children. In France, Germany, and Italy, and later in America, publishers have devoted themselves to these subjects, but have not been successful in finding a public because they failed to meet the childrens' needs.

No catalogue of instructional or educational films fails to
mention such fables (1). Fine efforts have been made to reproduce exquisite fables, as, for instance, «The Frogs in Search of a King», Starevitch's masterpiece of patience, ingenuity and humor, «The Grasshopper and the Ant», of the Ufa Co., and also a German film «The Town Mouse and the Country Mouse», in which tame animals are the interpreters.

Numerous other films have been composed with the collaboration of animals, but some of them, although really good, are above the understanding of children and young people.

This source of fables from our classics has remained almost unexplored, notwithstanding some good attempts and a few really first class productions (2).

First-class films for the school and for the public may be made from these fables, given a proper understanding of the subject and of the environment in which the films will be shown.

Animated drawings, already much in use for advertisement, should not, in our opinion, find a place in the recreational film; although they have great qualities, they require experts such as are rarely to be found and scenario writers and inventors who are still rarer.

The educational section of the Ufa in Berlin possesses a collection of fables and tales in animated drawings.

(1) It would be necessary to institute a nomenclature of recreational films, after a strict process of examination.

To judge from the lists in the catalogues of the principal Film producers such films are not very numerous. It would first of all be necessary to eliminate before their projection numerous captions that clash with the concept of the recreational film. Turning over European and American catalogues, we have come across five hundred films of this character.

(2) As an illustration of the above I would like to point out that among the hundred films listed under recreational films in the «Verzeichnis Deutscher Film» (Lehr und Kulturfilme of Walther Gunther, Berlin, 1927 and 1928 supplement, there is only one single fable, «The Wolf and the Swan». The Pathé Enseignement list has also only one fable, «The Hen and the Golden Eggs». The Gaumont Enseignement has three fables. We are aware that several other producers have filmed fables, but most of their negatives, made some time ago, are now useless.
We, too, have made use of this method for our graphical and technical demonstrations, with the double aim of imparting variety to the films and of augmenting their demonstrative efficacy.

Besides this, we have been completely successful in creating pictures dealing with exceedingly delicate subjects, presenting them by means of accurately studied drawings the artistic value of which makes them acceptable.

In Germany two artists have achieved distinction far above mere virtuosity by the application of animated silhouettes to the cinema. Everyone was thrilled by the charming scenes executed with talent and wit by Frau Lotte Reiniger and her collaborator M. B. Barotsch, of Berlin.

« The Adventures of Prince Achmed » have delighted children and adults. These films contain silhouettes admirably drawn and full of life.

The cut out silhouettes of Frau Lore Bierling of Munich are also admirable in their own way. In America the original but overdone series of « Felix the Cat » mixes animated drawings and silhouettes with photographs from nature: despite their cleveress and humour, these films do not, however, respond to our conception of the recreational film.

The acting dolls of Starevitch, their fantastic stories and prowess, may be classified among the good educational films, evidencing as they do remarkable technical ability and a keen sense of observation and psychological insight. Men and animals, decorations and accessories, give accurate expression to life. These ingenious scenes and original inventions do not fail to interest and amuse.

This entirely personal genre, which is difficult and expensive to screen, cannot for the moment be recommended to producers. But it deserves to be encouraged and supported.

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We hope that recreational films, while preserving their original impress, may serve the international cause and be diffused in all countries.
We should like them, above all, to serve as an education in humanity for children, and thereby as an effective agent in the cause of peace; and we wish that this means of recreation might become an instrument of propaganda for the diffusion of ideas that would benefit all the inhabitants of our globe.

Education, even in moments of recreation, is becoming the rule of every civilization, and is the best means of uniting hearts and spirits.

Why is there such a lack both of recreational and instructive films? This is a question upon which it is well to ponder. There are two reasons. Such films are, on the one hand, not easy to make, owing to their intrinsic qualities, while on the other they are of very doubtful profit by reason of the dearth of markets.

They are wrongly classified as films *hors d'œuvre* and considered inferior to ordinary theatrical films; they are supposed to be cheap and easy to produce.

They play the part of the poor relation, or even of the intruder, in the moving picture program. They are shunned by producers, and if they succeed in gaining an almost furtive entrance, they are treated as supplementary or as curtain-raisers.

The same applies to documentary films despite the favor they find with the public.

Another point that should be remembered is that recreational films are the work of specialists and demand peculiar ability that can be acquired only by long experience and conscientious work.

Often these specialized producers are unknown in the film world. The commission for a film on no matter what subject is handed over to no matter whom. The worst results are thus obtained, and educational cinematography is discredited.

Recreational films are neither assisted nor encouraged as regards production and projection, but are, on the contrary, remunerated far below their value and their merit.

Many governments, in order to demonstrate their excellence, have recommended or enforced their acceptance by various means. Some governments have made their projection compulsory, while others have favoured them by exemption from taxes.
It is regrettable to have to acknowledge that these measures, worthy of the highest praise, are, nevertheless, an indirect means, inadequate to ensure widespread diffusion.

In our opinion, it is necessary to lay stress on the mission of these films in all countries. An organism such as the International Institute of Educational Cinematography in Rome might undertake this mission.

This Institute would do well to group and recommend specialized artists, to make their productions known, and thereby contribute to their diffusion throughout the world.

JEAN BENOIT-LEVY
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Syndic of the French Scientific Press.
CULTURAL FILM POLICY

SOME CONSIDERATIONS ON PAN-EUROPEAN FILM PROBLEMS.

(from the German)

One of the biggest and most popular magnates in the American film industry remarked recently in the course of conversation that we Europeans pay too much heed to film policy and not enough to film business; that we place cultural and national interests before business interests.

He was somewhat taken aback on being told that by this criticism he had unwittingly paid a high compliment to the European cinema, and still more so when we assured him that in the opinion of many thoughtful persons the national and cultural aspects of the film were still too much neglected.

All those who have followed the progress of the European cinematograph during the last twenty years, especially in connection with the cultural film, are aware of its shortcomings.

We have been too bent on following in the wake of America, and in our pursuit of an international film policy appealing to the world market, we have overlooked the fact that all really good films must have individuality; they must first of all be national and original before they can engage the interest and stir the enthusiasm of other nations.

Many persons will recall the great success scored in America by the European film, Madame Dubarry, dealing with a purely European subject and handled with all the subtlety of European art. The film Caligari likewise achieved a considerable though less pronounced success, and had a long run; it created a desire among the American public for more European films, for it drew attention to the existence of a specifically European film art on this side of the Atlantic.
This new and previously unknown and unsuspected development of European art, which found its most striking expression in German and Swedish films, created such a big sensation in America that immediate steps were taken to get out the best Berlin and Stockholm film actors to Hollywood, so as to bring new blood to the American cinema. This move was crowned with success. Scandinavian and German stars, soon followed by their French and Italian confrères, became so popular that they actually eclipsed some American stars.

All this was no passing fancy of the «producers» or the public, but created a solid and lasting impression. In proof thereof we need only mention the names of Lubitsch, Jannings and Greta Garbo.

The reader may ask: what has all this got to do with the case? Well, it shows that Germans have been able through the film to influence Americans in America; that nowhere in the world does the public really care where a scene director or an actor comes from, but is just as ready to welcome a good film when taken before the walls of Rome or in a Berlin studio as if it were made in Elstree, Hollywood, or New York.

It shows, furthermore, that the hegemony of the American film industry rests on the power of the dollar and on the ascendency it exercises on the organization of the world film trade.

It is necessary to stress these points in order to show first of all the importance of a national film production to any country that desires to demonstrate its national character and strength by means of the cinema. This should be realized as a fundamental concept by all nations, for the film is not an ordinary commodity, nor yet a mere means of amusing crowds. It is an instrument of high cultural and propaganda value, the influence of which is automatic and inevitable. On this account it is one of the most important factors in the education and improvement of the peoples and one that each nation should guard with jealous care no less than it does its art and literature.

It is hardly necessary at the present time to insist on the more obvious aspects of the importance of the film. We need only
recall recent debates in the British and American parliaments in which it was pointed out that the exportation of both these countries had been greatly influenced by the cinematograph. It is well-known, moreover, that the exhibition of certain films has often had a marked though indirect influence on the importation of certain commodities and fashion goods in English-speaking countries.

We have no statistics on «film influence», but we may rest assured that its ascendancy is, if anything, stronger than that of books, even the «best sellers», or of the most popular painting in any gallery.

All our experience — and many further examples could be adduced — goes to prove that the production of cinematographic films of a national character is a question of cardinal importance to all civilized countries.

Thus it was only logical that the League of Nations should recognize the necessity of creating an international organization for the educational film such as the Rome Institute of the Cinematograph.

There is a clear line of demarkation between popular film production and the cultural educational film. We have here two different domains, two worlds apart, both of which, indeed, may have a common origin, but — as so often happens in the human family — the father has begotten very different children!

It is no doubt true, in a sense, that all films have a certain cultural value. All films exercise some direct propaganda influence in favour of their country of origin. But when we speak of cultural cinematograph policy, propaganda is a very secondary consideration.

By cultural film scientists and educators denote the purely educational and teaching film.

One of the first requisites of the cultural film, as indeed of all films, is that it should possess national individuality. That is to say, each country should choose subjects which are, so to speak, native to their soil.

An Einstein Film illustrating the theory of relativity would, as a matter of course, be produced in Berlin. Television, according
to the Byrd method, would be a suitable theme for an English film, while Van der Velde’s recent achievement in the domain of the film would naturally fall to Holland’s share.

It is obvious that such a distinction cannot be achieved in a day. Technical difficulties are involved, especially the question of copyright, and then, above all, a certain courage is needed, a courage which does not falter at frontiers, mindful of the truth of the adage that «no man is a prophet in his own country».

Strictly correlated with this question is another very big question: namely, whether in connection with this vast field of culture we ought not to turn our attention to the creation of the Pan-European Cinematograph rather than confine ourselves to the work of any one particular country.

We already possess an European Chamber of the Educational Film, and must perhaps reckon with the probability that the production of cultural films will from the outset be confined mainly to our Continent.

The reasons for this are obvious. They are to be sought in the fundamental difference between European methods of teaching and educational aims and those of America. The difference in depth between these methods no doubt counts for much.

But these are specific questions that have only a relative bearing on the final aims of the cultural film.

It is no mere figure of speech to say that the cinema brings the peoples of different countries more closely together. It is unquestionably the most popular, the most versatile and the most impartial of exchange professorships.

There is no more objective reporter than the screen, no more universal medium than the film-image for reaching the understanding of all peoples in all regions of the earth.

It appeals both as a whole and in its details, so that we need not concern ourselves with the question as to which is more conducive to understanding: the thing as a whole or its details.

Much of what I have written is indeed so self-evident to all in their daily round of life as hardly to bear repeating.

Yet our experience shows that, so far, these ideas have not
penetrated beyond a narrow circle and still need to be diffused, and above all to be brought to the attention of those responsible for the guidance of the peoples and of the peoples themselves. They must be impressed again and again on the consciousness of those in authority until they find practical expression in the legislation of all countries.

So far, the cultural film has been recognized and patronized only theoretically. The International Educational Cinematographic Institute is the first practical expression of a whole body of theories.

The term «educational cinematography» as applied to this institute calls for some comment. There is perhaps a certain limitation inherent in the word «educational». But the men at the helm will not hesitate to widen and extend its scope.

When speaking of «educational» films we should always have in mind «cultural» films in the broadest sense of that word; not only the 'ribbon designed from its first to its last metre for the purposes of instruction, but all films capable of imparting knowledge, whether they deal with philosophy or natural history ethnographic or geographical problems.

The task is big and the way is long. But the European nations have at last put their shoulders to the wheel. They have a heavily laden wagon, well packed with ideas and projects, and there is much uphill road to be travelled, a road bristling with difficulties and obstacles.

But the goal though distant is worth while. And we are encouraged by the fact that once this steep hill has been scaled, we shall come to a smooth road, where the wagon will run its course almost unaided.

No matter if the goal often seems to be receding as we advance. The great fascination of the ideal is that it can never be reached; but each success achieved is a step further towards it, and each step accomplished inspires us with renewed ardour.

ALFRED ROSENTHAL
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The thirst for science and culture existing among the labouring masses in the Union of Soviet Republics has greatly intensified the production of documentary and scientific films for cultural propaganda. The production of such films during the last two or three years is of considerable volume.

«The Mechanism of the Brain», the film by the scenario writer V. Poudovkine for the Mejrabpom-Film Company is a characteristic specimen of the documentary film of the Soviets. The scenes of this picture, suggested by the materialistic theories of Pavlov, member of the Academy of Science, on the nervous functions of animals, represent some famous experiments of the scientist on normal reflexes.

The scientific material contained in «The Mechanism of the Brain» is of a complexity that is difficult to assimilate, and the film has a purely didactic structure. Nevertheless it arouses a keen interest in the wide circles of the Soviet Union and is the subject of the most enthusiastic reviews.

During the last few years documentary films have been more and more in demand, above all in the club and village cinemas. They command a public of millions. At the present moment nearly all the Soviet organizations are producing them. Sovkino even has a factory at Moscow exclusively dedicated to the production of films of cultural propaganda. The Mejrabpom-Film has considerably enlarged its section of documentary films, which it is proposed to transform into a special factory.

The documentary film ranks prominently in the systematic plans of the Cinematographic organizations of Soviet Russia. Twenty to twenty-five percent of the total of the resources invested in the production of cinematographic films has been assigned to the production of films for cultural propaganda.
Among the outstanding documentary films are the following: «The Mechanism of the Brain» (Mejrabpom-Film), «The Problem of Nourishment» (Sovkino), Alcohol» (Sovkino), «The Scientific Choice of a Profession» (Mejrabpom-Film), «Naphtha» (Sovkino), «The Assault of the Sky», «Aviation in the Service of Culture» (Mejrabpom-Film) and «Love in Nature» (Sovkino).

Taken from the Film: «Alcohol, Work and Health».

Besides these, an interesting series of documentary films is being prepared. For presentation in the near future, the following are announced: «The Men of the Woods» (Sovkino), «The Spartakaide», «The Struggle for Health» (Sovkino), «Your, Health» «Anti-Alcoholic Propaganda Film», «The Man with the camera» (Vufku) and «The Glass Eye» (Mejrabpom Film).

Very shortly some films of great ethnographic interest will be released: «The Unexplored Regions of the Caucasus» (Sovkino), «Looking for a Meteorite in The Taiga» (Sovkino), «Afghanistan» (Sovkino Leningrad factory), and «The Votiak Region» Mejrabpom Film). It should be noted that most of these pictures
have been filmed with the direct collaboration of prominent scholars and scientists some of whom assisted as consultants at the taking of the pictures. The scientific direction of certain of these films was indeed in some cases taken over by the scientists and scholars themselves. This collaboration has had practical re-

Taken from the Film: «The practical Application of Psychotechnics».

sults and the films in question raised among the masses a keen scientific social interest.

By indicating this path to scientists our documentary cinematography is realizing one of the most important problems of education in Soviet Russia: that of the democratization of science.

In our choice of themes for documentary films we are inspired by the current problems of our economic and cultural reconstruction: illustrating questions of the day which are connected with the industrialization of the country, the mechanization of rural economy, the protection of public health, the struggle against alcoholism, etc.

In the documentary films, the progress of science and tech-
nique are shown in their practical application. These films prove by vital examples the close connection between science and productive labor. The assimilation of the scientific matter depends entirely on the interest aroused by the film.

Consequently we introduce into our documentary films episodes and scenes of daily life, of a kind to interest the spectator.

For the purpose of studying the spectator, the Institutes of Moscow and Leningrad are carrying on research work, the results of which are tried on the public in the cinema halls. The opening of an institution of scientific investigation which will occupy itself specially with the problems confronting Soviet cinematographic art, has been announced as about to take place.

In conclusion we think it well to mention that the plans for 1923 of the largest Soviet organizations, the Sovkino, the Vufku, and the Mejrabpom Co. contemplate the production of a hundred films for cultural propaganda.

Alexander Tiagai
THE DEVELOPMENT OF THE MEDICAL FILM AND OF THOSE DEALING WITH HYGIENE AND GENERAL CULTURE IN GERMANY.

(from the German)

The appearance, on the twenty-fifth of February 1922, of the circular of the German Minister of Public Health addressed to the Provincial Presidents (1) was the first quasi official recognition in Germany of the educational and cultural film.

But the pioneers and founders of the educational film movement had to sustain a long and tenacious fight before this latest branch of the film industry was established. Having taken part in this movement right from its inception, I am in a position to make an almost historical survey of the commencement and the later growth and progress of the German cultural film industry.

When appraising this movement it is well to bear in mind that the film industry in Germany enjoyed unprecedented unpopularity in those years, both with the public and in official spheres and more especially among teachers of all ranks. The revolution of November 1918 had abolished all censorship, and therefore, of course, the film censorship. As a result of this the following years produced shoals of inferior films from inferior factories which sprouted everywhere like poisonous fungi.

Pseudo-scientific theatrical films, dealing with every possible form of sexual interest, including sexual perversion, were exploited and presented to the uncritical public, dissimulated under the cloak of a spurious and venal science.

Indignation at these excesses of the film world brought about not only the reintroduction of the film censorship, but also such a contempt for everything connected with the screen

that for the time being there was no opening for the educational and cultural films which had just begun to take root. They were forced to fight inch by inch first for the respect of the universities and all those connected with teaching, and later for that of public opinion and the general public.

As far back as 1918, when acting as assistant doctor in a nerve clinic, I had made some cinematographic records of particularly interesting cases of nerve cures. At that time — about the end of the war — there were no scientific congresses in which such important and instructive pathological phenomena could be demonstrated to a large number of doctors, and thus be preserved and rendered accessible for further experiment. The scientific film was therefore the only means of preserving such important material for future and better times. These early and quite personal beginnings led to a paper published in the *Review of Neurology and Psychiatry* early in 1919. Simultaneously the Universal Film Co., at that time a semi-official Foundation capitalized to a large extent by German government shares, was founded. The Ministries interested stressed the necessity of founding also a section for cultural and educational films as a feature of the new enterprise, as suggested and advocated in the above mentioned publication. In consequence, I was appointed director of the Medical Film Archive of the newly founded cultural section of the Universal Film Company.

Although I at first believed that by using the film for educational purposes, I had opened up an entirely new field, I discovered later, after having given more attention to the subject, that as a matter of fact the idea had been carried out in the medical profession for a good many years. A large number of medical educational films had been produced, both by individual scientists — prominent among whom were Professors Schuster in Berlin, Kräepelin in Munich, and Forster in Breslau — and by scientific institutes, while the cultural section of the Ufa had, as I discovered, a special collaborator in Dr. von Rothe for the production of surgical films.

I therefore transferred the bulk of my efforts firstly to assembling as comprehensive as possible a collection of existing...
medical, scientific and educational films, with the result that in a comparatively short time the medical film archive of the Ufa possessed an imposing and, at that time, unique stock of specialized educational films dealing with all branches of medical science.

In the second place, we devoted ourselves with ardour to the filming of all material important for purposes of teaching, experiment and improvement. A large number of the scientific institutions, clinics, hospitals, and laboratories of Berlin placed themselves willingly at the disposal of this new enterprise. But I do not deny that on the other hand we encountered a great deal of narrow-minded and obstinate resistance, and even blame-worthy forms of speculation in circles where such an attitude should have been least expected.

Rare and ephemeral cases, difficult to demonstrate in the lecture hall, were filmed. A laboratory, equipped with the latest facilities for modern micro-technique available at that period, filmed the minitiae of microscopic phenomena, complicated Röntgen cinematograms were made in collaboration with scientific institutes, the vibrations of the vocal chords were photographed straight on to the film ribbon, embryology demonstrated by methodical sectional photographs, by thousands of single pictures, each one infinitesimally different from its predecessor and revealing each stage with a consecutiveness and distinctness unachievable by any other method. Döderlein and Kräpelin, of Munich; Hiss, Kraus, Bonnhöffer, Krückmann, Greef, Hefter, et al. of Berlin, Pacconcelli-Calcia, of Hamburg, Walthardt of Frankfort (now of Zürich) are world-famed names in German science — the names of men whose work and support has made the achievement of the medical, educational film a possibility.

A voluntary censorship watched over the production of these films to ensure their scientific accuracy. Each one of them was submitted to the medical committee of the Official Film Office (Bildstelle) under the presidency of Professor Dr. Dietrich (1),

(1) Decree of the Minister of Sciences, Art and Public Education of the 3rd. April 1919.
a sub-Committee, directed by the appropriate University Professor, being appointed to consider each particular branch of film.

During the first two years educational films went on accumulating in the archives, the outlay increased beyond bounds, and as a joint-stock company, even when founded with government funds, is a business and not a charitable concern, steps had to be taken to put all this material to profitable use. In consequence, the scientific collaborators of the Ufa started a system of so-called «model demonstrations» which, under the direction of the chief of the Cultural Department, Major Krieger, delighted the whole of Germany. We visited all the universities, chief towns, provincial and federal capitals, including even the Austrian capital, and everywhere we tried to awaken interest in our endeavours by means of the projection of the choicest films in our archives, accompanied by lectures in the presence of professors and interested public organizations. We encountered mostly enthusiastic assent, sometimes supercilious rejection and in a few cases even open or dissimulated hostility. It happened more than once that we were shown the door, much as if we were importunate commercial touts, for some grey-beards could not for the life of them grasp what the film had to do with science. But such repulses were not always due to hardening of the arteries, for enthusiastic youth itself turned against us, on the ground that the high quality of our films rendered them dangerous, as the facility offered by them would militate against thoroughness of comprehension. But, on the whole, our pioneer work in this field was distinctly a victory, though spiced with some bitter experiences; it was also cheered by the revival of friendly relations in centres of former study with friends of our student years.

But practical success did not materialize to any extent. As the inflation of our currency increased, scientific institutes became so poverty-stricken that the indispensable funds for the exploitation of the educational film and the purchase of cinematographic apparatus became everywhere almost inaccessible. It is true that, with the decline of the German mark, there was a certain
increase of sale in foreign countries, but it is obvious that a thing that has not been soundly established and accepted in its own country can never hold its own abroad. Hundreds, perhaps even thousands of single copies of German educational films have been sent abroad: South America, the Balkans and Japan were our best customers, but nevertheless a really scientific exchange system and reciprocal stimulation, which are the *sine qua non* of really successful international scientific intercourse, did not result. All that was achieved was the mechanical and purely business relationship of a firm with its clients, sometimes even through middlemen, without arousing any real scientific interest, either at home or abroad, in the production and utilization of the educational film.

Besides this, the Ministry of Finance withdrew the millions it had put into the Ufa Co., thus eliminating official influence and rendering a purely business attitude and prudent calculation in the exploitation of the «goods» more and more necessary. This marked the first stage of the passage of the educational film to the «popular scientific» educational film. Actively encouraged by the Ministry of Public Welfare and the State and Provincial committees for hygienic and popular instruction, especially by Professor Dr. C. Adam, the director of the Kaiser-Friedrich Haus for Medical Research, the medical superfilm was invented for the purpose of illustrating medical lectures, and conveying knowledge and enlightenment on all hygienic and public health topics to the widest circles and the remotest mountain hut. Perfect intelligibility for all, even the uneducated, combined with an objectively unquestionable scientific spirit, was the first condition for these films, made in collaboration with authorities in each special branch, and also in close connection with the expert official and semi-official organizations (German Society for Combating Venereal Disease, German Central Committee for Combating Tuberculosis, Organizing Committee for the Protection of Infants and Children, German Association for the Care of Cripples, State Vaccination Office, Robert Koch Institute for Infectious Diseases). Even such grandly conceived films as the historical beginnings of vaccination, from Indian Brahmin and Turkish inoculation and
Jenner's discovery of vaccine, down to the modern science of vaccination were pressed into service, in order not only to instruct the amateur public, but also to rouse and interest it.

A tactful element of humor was cautiously introduced where at all feasible. These films for popular instruction conquered the world in a triumphant tour, and it is a tribute to the production of the «Medical Film Archives» that official organizations, Ministries and public offices of about half the countries of the world have officially adopted these popular educational pictures. It should be noted that they were not only extensively shown in private circles and in Health Insurance Societies, Welfare and Vocational Organizations and Associations, but also that teachers in collaboration with medical men, and more especially school doctors, had recourse to them as practical and effective means of illustrating their official lessons.

To view at the present time one of these out of date popular medical instruction films can convey but the faintest notion of the almost unbelievable difficulties that had to be overcome.

For, unlike all other professions, in which definite work in definite conditions and suitable places is the rule, the doctor depends on continually changing data from the hospitals and clinics, difficult of access and subject to constant modification. His films must be taken, often without any preparation, in operation rooms, dark laboratories and unfavourably located sick-rooms. The hardest part of all is the presentation of internal processes and phenomena, the introduction of bacilli, the inflation and shrinking of organs, the origin of centers of contagion.

Entirely new methods of schematic films constructed from drawings had to be tested until the objectively correct was combined perfectly with the easily comprehensible.

The film «Venereal Diseases and their Consequences» is probably the best known of all the hygienic instruction films of the Medical Film Archives. This film was made in collaboration with the German Society for Combating Venereal Disease, and the late Privy Councilor Blashko was conspicuously connected with the work.
The projection time was one hour and a quarter for 1200 metres of film, divided into four parts. According to the length of the lecture, the film could thus be shown in the normal time or prolonged to any time not exceeding two hours. The printed lecture accompanying the film contained the introductory words pronounced by Professor Adam, as the representative of the District Committee for hygienic popular instruction, and Dr. Roschman of the German Society for Combating Venereal Disease, at the first showing of the film. The film displayed the symptoms of gonorrhoea and syphilis, partly from the patients, partly from pathological preparations and partly from schematic cinematographic drawings.

Another film dating from these early days is the «Babies Film» of a length exceeding 2000 metres, that is to say, lasting two hours. It was made in the Kaiserin Augusta Viktoria Home and aimed at combating infant mortality.

This film was designed for the purpose of training nurses and for popular health propaganda. The several sections show the preparations before birth, the care of the new born child, of the healthy baby and the abnormally small child, nursing, bottle feeding, premature birth, the sickly infant and child, bandaging, general advice and lastly medical treatment. The sixth part (bottle-feeding) and the last were intended from the outset only for infants' nurses.

This film was more especially suited for repetition-courses for nurses, midwives, and sisters who have only had general training. This convenient method of instruction, independent of living or dead demonstration material, available in the remotest towns and far from the big centers, was never sufficiently exploited. The same applies to similar instruction films, such as «Preparations for an Operation», «The Wassermann Test», physiological films illustrating the activities of the heart, the circulation, intestinal peristalsis, pharmacological and many other films, especially those of Councilor Döderleins, which certainly offer better means of instruction for obstetric nurses than the usual means.
Attention should further be drawn to another film « The Effects of the War Blockade on Public Health ». Although made on a scientific basis and chiefly for propaganda abroad, the symptoms shown had unfortunately at that period of inflation again become acute. And the ignorance prevalent in most quarters in regard to proper nourishment and the devastating effects of erroneous or one-sided diet was still amazingly widespread.

With the promulgation of the law for the protection of cripples, a film « Cripples' Needs and Cripples' Aids » was prepared, with the collaboration of the Oscar-Helene Home and that of Professor Biesalski.

Its purpose was to inform, not only the numerous amateurs who, as a result of the new legislation, had found honorary or remunerative occupation in the service of cripples in communal and other public health offices, but also wide circles of the general public interested in these pressing problems.

Professor Adam, of the Committee for Hygienic Popular Instruction, was responsible for the suggestion of the film « Small-pox, its Dangers and how to Fight Them » as a reply to the opponents of vaccination. With the collaboration of the State Vaccination Institute and Professor Gins, a film was produced that was not only instructive but highly interesting. This brings us to the last lecture film of the Medical Film Archive, which technically, and from the point of view of subject matter, was probably the most perfect of its kind, the Tuberculosis Film, « The White Scourge ».

In close collaboration with the German Central Committee for Combating Tuberculosis and with tuberculosis specialists from the Health Office of the Reich and State Insurance Office, this comprehensive and yet compact film, condensing a mass of relevant subject matter, was produced after over twelve months of steady work. Mention should also be made of the films « The Hygiene of Domestic Life » and « Free time Hygiene », advocating rational systems of work and domestic life, and above all healthy sport; these were made with the assistance of Dr Tugendreich and the social welfare doctors of the City of Berlin. Lastly,
it should be mentioned that each of these films was accompanied by a lecture placed at the disposal of renters.

The year 1921-22 marks the opening of a new initiative, the Scientific Film for public cinema projection, without accompanying lectures. The tremendous problem of the Steinach experiments had created a bigger demand than could be covered by a single film. Side by side with the former scientific lecture film, compiled according to the usual methods, a popular version of this theme was produced in a second edition. The subject, Steinach's «War Against Old Age» was particularly suited to this form of experiment, although this film does not so much provide sensation for the curiosity of the amateur as correct the farcical opera buffa ideas current in public circles on these mysterious problems, and put a damper on fantastic notions about «Rejuvenation». But as this film in its popular edition was shown in the course of the ordinary evening cinema theatre programs, concessions to the taste and wishes of the spectator had to be made by inserting aesthetically fascinating, interesting, and even exciting and amusing pictures between the sometimes inevitably dry scientific dissertations. The Steinach film ran for months in Germany's largest cinema theatres, was followed with burning interest by the public, and well received everywhere abroad, except in the prudish Anglo-Saxon world. By degrees it became a matter of course that the exhibition of a scientific subject to an amateur public must be accompanied by a certain amount of sensation; such films as «The Hygiene of Marriage» and «Hypnosis and Suggestion» were thus successfully launched. I had prepared the two latter films after my departure from the Ufa, in connection with the Kultur Film Co., of the German-American Film Union. The model Ufa Physical Culture film «The Road to Strength and Beauty» continued the series of this class of popular and educational films in the cinema theatre.

But German scientific medical cinematography developed somewhat apart from the Cinema theatre. Notwithstanding the active progress made within a very limited circle, it would have been lost to the world, if Dr Von Rothe had not
succeeded in establishing his productions on an absolutely scientific basis and keeping them separate from the film industry, though placing them on a solid financial footing. Dr. von Rothe founded in Berlin the Medical Cinematographic University Institute, and the Publishing House for the Scientific Film, which, though independent, worked in close connection with the Institute and from the outset was developed according to the principles and methods of a scientific institution, avoiding the customs of the ordinary Film publishing and managing businesses. The Medical Cinematographic University Institute of the Charité Hospital is unique in the world on account of its highly technical equipment, including every possible accessory for scientific cinematographic projections. This unique institution, throughout years of tenacious work, has accumulated immense quantities of scientific and experimental material. Besides this clinic, several German University clinics have installed Dr. von Rothe's apparatus and have thus become collaborators in the scientific film publishing business. Contracts have been entered into abroad and thus the nucleus of the Rothe foundation promises a development and organisation that in the course of time will probably comprise the whole world.

The absolutely international character of the documentary motion picture which renders the exchange of scientific knowledge, unrestricted by limitations of language, as easy as child's play, is the great and inspiring side of the scientific film.

It is conceivable that before long we in Berlin shall be able to watch an operation taking place in New York, that Tokio will be able to follow the latest results of European microscopic technique, that the hygiene of the tropics will be made accessible to European students, mountain sickness demonstrated in the lowlands, and the local doctor in the smallest hamlet enabled to keep in touch with the latest achievements of medicine.

But to return to the popular medical film. The great success of these educational films for amateur audiences, unaccompanied by lectures in the cinema theatres, caused for a short time an absolute over production. Among these films, which invariably
call for certain concessions to the sensational requirements of the masses, we will only mention the Ufa film, «Mother Nature», the title of which was later changed to the more provocative «Love and Nature» and the Cobfilm «The Development of Man». In these films an attempt was made to convey fundamental biological principles to an amateur public. A new series of films on the rearing of infants, tuberculosis and other general health questions was released, amongst others that of the Bundesfilm Company, «His Majesty the Child». After having been shown in the motion picture theatres, such films were often exhibited in clubs, associations, trade organizations and so forth. Later, the so-called night performances were developed. These were extra performances, beginning about 11 p.m. after the regular program, already overcrowded with recreational films.

Often completed by a scientific lecture, the popular character of these films made them a powerful attraction. Both long and short films were produced for nearly every special branch of scientific and public life. The instructive content was made as palatable as possible, and though not actually dramatised, was treated in a brisk and popular fashion. We quote the two great films «First Aid» and «The Prevention of Accidents». On the occasion of the Reich’s Accident Prevention Week (March 1929) when the Reich Committee organised an extensive propaganda on the subject, it was found that thirty different films of this character were available. Among them were the two pictures produced by the Land-Industrie Film Co., «Help to Prevent Accidents» and «Man in Danger», produced in collaboration with the Union of German vocational corporations, further films of the German Red Cross, the Anti-Alcoholic Movement, and so forth.

But by degrees the once rejected notion of making popular hygiene accessible to the general public by means of the recreation film began to spread. The reason adduced was that the public sedulously avoids all films that betray the purpose or desire to instruct. But when these aims are introduced almost surreptitiously into the ordinary program, the millions of spectators who strenuously shun «education» are caught and convinced. Such
hygienic propaganda is consequently much more far-reaching and effective than intentional and professedly instructive films. The very first attempt in this direction made a «hit» that was felt far beyond the German frontiers. The Ufa film «False Modesty», treated the delicate and painful question of venereal disease. But this time the scenario was based on four short stories which, ostensibly taken from a doctor’s diary, not only gave practical information, but also insight into social and economic conditions connected with sickness, pain and suffering, the pangs of conscience and the tragedy of shattered homes.

In each case the point stressed was that a timely diagnosis and treatment are a practical guarantee of cure. Statistics regarding this film have shown that many clinics, hospitals, information offices, laboratories, and specialists registered an increased attendance of 80% and even 100%. Among the applicants 40% were neglected and therefore very bad cases, who had no idea of their disease and consequently neglected treatment. It may therefore truthfully be said that this film has saved the health and lives of thousands.

Another sensational film of the same educational, recreational type is the Ufa drama «Secrets of the Soul».

The success with the public was not so great because the problem was too remote from the interest of the masses. But none the less it was a masterpiece of scientific, technical and artistic composition, and earned a certain amount of success at a later period when, with an accompanying lecture, it was included in the above mentioned after-hour repertoire.

When in the course of years the idea of heredity and eugenics became more prevalent, an officially patronised film «The Curse of Heredity» was produced.

This is a typical example of the pure recreational film, so full of sensation and exciting catastrophies that the public hardly realizes that it is being informed and instructed. For this very reason the effect, because unconsciously absorbed, is all the more lasting.

In this way the «man in the street» is made acquainted with

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the complicated problems and laws of heredity, with degeneration and the necessity of a selective breed of worthy human beings. Recently an excellent recreational film, «Inherited Instincts», through a purely criminal plot skillfully enforces the old demand that criminals should be debarred from having children in order to prevent degeneration.

*The Reichsausschuss für hygienische Volksbelehrung* (Committee for Popular Hygienic Instruction) which held a «Health Week» in 1926, making wide use of film propaganda, following the nation-wide campaign of popular education, afterwards started a film center which was responsible for the recreational films above mentioned. Also on the occasion of the already mentioned «National Prevention of Accidents Week» the Reich Committee for Popular Hygienic Instruction made a film with a simple but humorous plot, dealing with domestic hygiene and the prevention of accidents. This caused a popular sensation inasmuch as it was the first German colour film of the Sirius Colour Film Co. But the committee for popular hygienic instruction was careful to keep public interest for hygiene awake by scattering short propaganda films throughout the cinema programs. The Eccentric Film firm (Zorn and Tiller) produced a short series of grotesque drawings with the title «Merry Hygiene» which met with great applause in the moving picture theatres as program extras. The action was carried out by two fantastic characters who, introduced by means of animated drawings into natural photographs and appearing, as it were, in daily life, offered their eccentricities and adventures in the cause of hygienic-propaganda. Similar films were made for the Reich Committee by the Kraska Film firm. The Ufa, in collaboration with the Reichs Committee, produced a «Grippe» film, which was revived whenever an epidemic threatened.

Mention must be made of a recent feature of cultural film production, namely the partnership of film and book. At the time of the Steinach film, a small volume «Medical Advice supplementary to Consultations» had been published by the Kraska Film Co. as a sort of complement to the film: it explained the complex system of
internal secretions to the lay reader. The film «False Modesty» was accompanied by a book of the same title, a large volume published by the Ufa in collaboration with the Eigenbrödler Verlag.

Written in the narrative short story form, but with over a hundred instructive pictures taken from the film of the same title, it dealt with all the questions relating to venereal disease, its treatment and cure, especially for the young.

The book, which achieved a great publicity, was translated into foreign languages, which is the best proof of its international authority and the intrinsic value and merit of this first attempt at imparting information in such a form.

The Eigenbrödler Verlag also published a thick encyclopaedic volume on «His Majesty the Child» in which thirty professors, specialists, social educators and other authorities on child rearing gave advice to young mothers in an arresting and chatty form.

The reciprocal complementary work of book and film is of enormous importance, because the effect even of the most impressive film is comparatively fugitive. But the book gives values that have lasting and creative effects. On the other hand, the film with its immediate appeal counterbalances the dry science of the book. It may be confidently hoped that in the production of future cultural and educational films this method of reciprocal stimulation of propaganda by the book and the film will continue to be developed in the cause of hygiene and social welfare.

In brief, it may be said that the German film industry can justly claim to have produced standard models of the medical, hygienic, social, educational and cultural film, and at one time to have given a stimulus to the whole world. For the time being, indeed, there seems little prospect that the painstaking work of long years can bear much more fruit. The financial straits of Germany, and especially of the official administrations, make it almost an impossibility to produce such educational and cultural films to any great extent. Consequently a cross between the advertisement and the educational film has been devised, the purpose of which is to combine hygienic instruction of a popular kind with the propaganda of the use of certain industrial products.
As a typical example we quote a series of films entitled «German Municipal Hygiene» consisting of a series of scenes dealing with such subjects as garbage destruction, water-supply, and soil and air sanitation, in which, together with the Prussian Institute for Water, Air and Soil Sanitation, the manufacturers of the necessary machines and implements have a preponderant interest.

But it is apparent to any unprejudiced person that such compromises between advertisement and propaganda, no matter how ably and decorously dissimulated, and the real aims of the educational and cultural film can only be temporarily reconciled.

As a result of the rise of the sound film, German and international film production are faced by entirely new problems. The stimulation of the living picture by the living word, and even in the above indicated fashion, by the printed word, may in the course of the next few years provide us with an ideal cultural and educational film, bringing to perfection the vast and important tasks of this modern Great Power in public life. May the International Institute of the Educational Film in Rome be an inspiration and a stimulus to the specialists of all countries, so that this revival be brought about as quickly as possible in the interest of the whole of mankind.

Curt Thomalla
Professor of Pathology and Neurology.
If there is one question on which the public is ignorant, however much it may be talked about, that question is the use of the cinema for the purposes of instruction.

A fundamental error which is very common is to confuse the documentary film and the instructional film.

Popularization is the sole object of the documentary film. It gives a superficial summary, a passing view of the subject dealt with, and makes no pretence at any deeper study of it.

This deeper study is the function of the instructional film.

The Belgian Army is in the vanguard in the application of this new and indisputably valuable method of teaching.

The Cinematographic Service was created during the great War. Immediately after the Armistice, the Service devoted its efforts to getting out films which aimed at bringing home to the populations just freed from the enemy yoke the huge, painful and self-sacrificing task which the Belgian Army had accomplished.

In 1920, the Service proposed to Lieut. General Maglinse, at that time Chief of the General Staff of the Army, to make use of the screen as an auxiliary in the technical instruction of the officers and ranks of the Army.

These suggestions were welcomed with a broadness of vision which evidenced a real understanding of the difficulties of training, and in 1921 Monsieur Deveze, Minister of National Defence, ordered the purchase of the first 17 projection apparatuses (at the present time 70 are in use).

From that time onward the Cinema Service devoted its efforts to the production and exhibition of films for the technical training of the Army.
The question of the best method of utilizing films for this purpose was taken up by Commander Poignard, Professor of Methodology in the Army Colleges. With the utmost fervor and unquenchable faith in the future of this new method of teaching, M. Poignard inculcated the principles of the new system in the teachers, partly by special courses, partly by practical demonstrations of a kind to convince the most sceptical.

This machinery is now in full working order. Although still incomplete — for this is a matter of time — the Cinemathiques (Film Collections) make it possible for each branch of the Army to avail itself to the full of the new method.

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Let us take a summary glance at some of the most interesting aspects of the production of a film.

There are many kinds of instructional films: first of all come those which show things which it is impossible to make visible in any other way: as by abstracting component parts or processes, showing the internal working of a given mechanism (in shooting

![Shooting. The axis of the barrel is prolonged in a direct line to the bull's-eye of the target.](image)

The Bullet passes under the bull's-eye of the target.
practice, the use of arms, gas, bombs, etc., and in administering artificial respiration).

Certain films make it possible to decompose complex movements and to train the audience to imitate them in their several stages (tying knots, maxim-gun operating, etc.).

The Bullet, passing through several targets, tends to deviate downward as compared with the prolonged line of the axis of the barrel.

Other films reproduce exercises which it is very difficult to observe in actual life owing to the accidents of ground, weather, personnel, etc. These films enable the teachers to present to the best advantage both the preliminary theories governing these exercises, and in subsequent theoretical courses, to demonstrate the manner in which a manoeuvre has been actually carried out and to compare it with the classical and academic execution of the same manoeuvre (search-lights, concealment from the enemy, fighting cars, etc.).

Lastly there are films of a sentimental or psychological order which aim at explaining to the soldiers the practical utility of...
tain rules and requirements (first-aid equipment, dangerous bathing, etc.).

The Cinema Service sees the films through all their stages, from taking the photographs to supplying the positives.

A scenario composed by an instruction officer is handed over to the Service.

This scenario consists of a written description in extenso of the theory the film has to illustrate.

Experience has shown, however, that there are many formidable obstacles to a satisfactory elaboration of the scenario. The principal difficulty is due to the fact that the author, being himself an expert on his subject, often fails to realize that his future audiences will not possess his knowledge or his mental capacity, and will not always be able to understand his explanations with the same facility he would himself.

There is a tendency to imagine that recruits are acquainted with ideas that are in fact quite new to them; these ideas seem to be of elementary simplicity to the teacher, who is familiar with them, while their novelty renders them obscure to the raw recruit.

This represents a danger not only for recruits, but also for the film producer. It is his job, when first studying the scenario, to discern such defects and to remedy them.

Let us suppose for the moment that the scenario writer is an excellent teacher, who thoroughly appreciates the quality of his audience, but who deems it tedious and fussy to reproduce in a film the multitude of explanations which he is wont to give verbally when conducting his courses.

He forgets that the screen rapidly replaces one image by another, while in his class he would keep beside him the objects which would help to elucidate his remarks.

For this reason he neglects to interrupt the unrolling of the pictures on the screen, either so as to immobilize a given image (1)

(1) Do not let us fall into the very error of which we are accusing the scenario novice, and forget to state that the instructional film must be projected by means of an apparatus which allows pictures to be immobilized on the screen and the show to be assisted by slides.
or to replace it by the projection of a slide of the same object enlarged, or of a different object which would help to elucidate the explanations that follow.

Such a scenario could not yield the best results, because the tool has been clumsily handled: fortunately the producer is there to put this to rights.

It is obvious that the scenario writer cannot foresee the mistakes that will be made in answering the teacher's questions nor the unexpected questions which certain of the recruits may ask. The scenario cannot do more than give sufficient indications to allow teachers in general to present a methodical and comprehensible exposé.

When writing his scenario, the teacher should realize that he has three means at his disposal to illustrate his theory: slides, moving pictures from life, and animated drawings.

Slides show all kinds of objects, in the fullest detail, emphasizing them where necessary by arrows or numbers.

The fact that slides may be projected easily and as often as may be desired, makes them a most valuable help to the teacher and gives him the greatest latitude in demonstrating his theory.

We fail to understand the hostility — only partial to be sure — which some film writers show towards stationary slides.

Slides should form the skeleton of the film, because they are of indisputable pedagogic value.

We need not dilate on the subject of the film, the function of which is to reproduce movement.

Motion pictures can be shown at a normal pace or with accelerated speed. The miracles of the slow motion picture are no longer a mystery to anyone.

As for animated drawing, this is the most precious of all methods for making a film instructive. It makes abstractions concrete or shows scenes on the screen which cannot be observed in reality.

The possibilities of animated drawings are almost unlimited if only one has an intelligent, competent, clever and patient draughtsman available. The Belgian Cinematographic Service has had this good luck in the person of Monsieur F. Clausse.
The films published by the Cinema Service are supplied to Army Corps and Colleges, accompanied by notes for the use of the instructor.

These notes, which consist of the scenario placed in complete concordance with the film, give *in extenso* all the commentaries requisite for getting the best possible results out of the picture.

It is essential that instructors should be supplied with these notes; a lesson consists in a series of animated projections, separated by stops, during which still pictures are shown, the whole show being sprinkled with commentaries, unforeseen questions, and mistaken answers: all this tends to produce something of an imbroglio, through which the teacher is helpfully guided by his Notes.

It is useful to point out that no captions are given in these training films of the Cinema Service; they are replaced by letters, numbers, simple points of reference, which enable the instructor to illustrate concisely the picture which he wishes to have immobilized on the screen.

The unavoidable brevity of the captions makes it difficult for the audience to understand them, but they always last long enough to distract attention, and their presence might be a temptation to teachers to leave the film to speak in his stead. Now the film is there to help the instructor, not to replace him.

The most beautiful and captivating of art films, when not brought out by a sufficient light, produce a worthless and dull show. In like manner, a training film which is not illuminated by the instructor's appropriate commentaries is well nigh sterile in its results.

Before closing, let me say that the instructive film is a necessary collaborator of the modern teacher. It helps him to inculcate into the rawest Army recruit the elements of indispensable knowledge, presented with the greatest possible degree of accuracy.

It does not shorten training, it intensifies it. It supplies any deficiencies in the vocabulary of the audience, it guides instructors in presenting their lessons methodically, while it engraves, so to speak, these lesson on the soldiers' memory.

*From the Belgian Ministry of National Defence.*
INSTITUTE TOPICS

LEGISLATIVE ASPECTS OF THE CINEMA

BRITISH FILM CENSORSHIP

As stated in our note to Mr. Canty’s article in the 3rd. issue of the Review, we herewith place before our readers the first of a series of systematic studies on the question of National Censorship systems. Dr. Seeger’s authoritative article, published in our first issue, presents a complete and valuable survey of Germany’s position. In later issues we shall deal turn by turn with the different countries. This study should furnish us with a most important body of criteria and information, rules and data. As soon as the study of this question is completed, the Institute will compile a study thereon which will be forwarded gratis to our subscribers. This publication will comprise:

a review of film censorship laws, regulations, special measures, etc. throughout the world; the working systems of the several film censoring organs; a comparison of the different systems prevailing; an indication of the bases of agreement between these; an account of the particular principles whereon certain of them are based; a systematic description of the practical rules guiding the functioning of the censorship in different countries.

This publication, which will be distinguished by absolute impartiality and will contain no expression of opinion on the part of the Institute, should serve as a valuable text-book for the Film Industry, for all those concerned with social and moral problems and for those who devote their lives to safeguarding the physical and moral well-being both of children and adults.

The British Censorship. According to the British Cinematograph Act (1909) the exhibition of pictures or other optical effects for the purposes of which inflammable films are used is allowed only in premises licensed
for the purpose by the local Authorities (1). The Licensing Authorities are required to acquaint themselves with the character of the films shown. The main object of the Act in question is to protect the public against all dangers inherent in the cinematograph, whether material (danger of fire, etc.), by the proper inspection of cinema premises, or moral and social.

The Local Authorities subject the granting of licenses to certain conditions and restrictions, which we will examine hereinafter.

As far back as the year 1912, British cinematograph trade associations formed a non-official body, supported by the film trade and industry, known as the British Board of Film Censors. There is no compulsion to submit films to this Office and their decisions are not legally enforceable. The work of the Board has, however, proved so efficacious by reason of the thoroughness and appositeness of its rules and methods, that its decisions have in nearly all cases been endorsed by public opinion.

Notwithstanding that it acts in a non-official capacity, the British Board of Film Censors has succeeded in practically standardizing the system according to which licenses are granted by the local authorities, and the expediency has been considered either of entrusting the official censorship to this body or of placing it in a position, through the medium of the local authorities for instance, legally to enforce its decisions by law. Thus in January 1917 the Home Office issued and sent round a circular which amounted to a Code of Cinematograph Censorship regulations, for the guidance of the local Authorities, drawn up in accordance with the principles and rules laid down by the Board.

_How the Office works._ — The Board is assisted by an advisory body of experts who examine films and suggest such emendations as they may deem expedient.

When favourable to a film, the Board expresses its approval by the issue of a certificate: Certificate U applies to such films as are considered suitable for showing to any kind of audience and Certificate A to films which are regarded as fit to be shown to adults only.

The Board does not issue any certificate for films which it disapproves.

No distinction is made by the Board between dramatic and educational films.

The Board has established the following tariff of fees for its services:

Educational, scenic or industrial films: 1 shilling per 500 feet;

All other classes of film: £. 1 per 1000 feet.

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(1) The County Councils, which may delegate their powers to other authorities, including the justices sitting in petty sessions, and the County Boroughs which may, in their turn, delegate them to the Borough Councils. These local authorities act in accordance with the regulations issued by the Secretary of State.
There is no express provision in the Cinematograph Act of 1909 for any appeal against the Licensing Authorities’ decision; but under the general law appropriate means of recourse to the Courts are available and there are a number of decision of the Courts practically recognizing the right of appeal.

No film — other than the photographic record of current events — which has not been passed for universal exhibition (Certificate U) by the Board may be exhibited in public premises in the presence of any child under the age of 16 years. This rule is not, however, applied in practice when the child is accompanied by its father or mother or by some adult person ostensibly responsible for its presence.

It is thus seen that the English censorship regulations are not based on any complete or definite system. They are based on custom and tradition, and settle points at issue in accordance with local rather than with national criteria.

Given, however, the authority attaching to the British Board of Film Censors, and the practically official value of its decisions, it is desirable that we should look carefully into the system upon which it regulates its censorship, with particular attention to the findings of the Board during 1928.

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Functioning of the Board. — 1047 subjects were submitted to the consideration of the Board during 1928, representing a total length of about 2,034,863 metres (6,676,178 feet). 1378 of these were deemed suitable for universal exhibition and 330 for Public Exhibition under the restrictive «A» Certificate, while 8 films were entirely rejected. In addition to the rejected films, there were 31 films to which the Examinors took exception and which they returned to the publishers in order that certain emendations and cuts might be made in them. In respect of the latter it should be noted that the Board did not take exception merely to the captions or to some easily emendable or excisable scene, but to the themes upon which the films were based, so that it is difficult to see how they could be suitably emended.

305 of the films which were passed for universal exhibition were ordered to be emended and revised before the certificates were granted. Thus, we see that out of 1947 films:

8 were totally rejected;
31 were sent back to the publishers for revision;
305 were granted certificates upon the condition of certain emendations being made;
1603 were considered suitable for exhibition.

General principles by which the decisions of the Board are actuated. — The Board considers that it is impracticable to lay down definite rules and
classifications of subjects which call for revision or actual rejection. The lists of subjects drawn up thus serve merely for the purposes of general guidance, and the Board considers each particular case on its merits in the light of general principles and precedent in respect of films of a like nature. It is obvious that, however simple the plot of a film may be, it may be unsuitable for exhibition on account of some particular part played in it.

As a general principle, no film is passed which is considered likely to be injurious to morality or to encourage or incite to crime or vice, or to be offensive to public feeling or to the respect due from the public to all nations.

A demur has been raised against the efficacy of these general principles. It is objected that a large proportion of the subjects dealt with are drawn from books and that if exception has not been taken to a given theme dealt with in a printed book, there is no reason why it should not be dealt with visually, i.e. shown on the screen. This objection is very properly answered by the contention that there is an essential difference between the book and the screen in their possibilities of penetration, understanding, and influence on the mind of the public. The first reaches a limited number of readers, while there is no limitation to the number of spectators; moreover the film exercises its ascendancy on whole crowds at a time, which is not the case with the written book. The reading of a book demands a certain mental effort, an effort of some considerable duration, before the message it conveys synthesizes, so to speak, and takes hold of the reader’s mind. The film acts almost instantaneously and demands little or no effort; it is not fatiguing and does its work of suggestion or propaganda, whether for good or evil, in the briefest space of time, so that the synthetic purport of the plot or theme is rapid, precise and striking in its details and its ensemble.

Lastly, the manner in which books react on the emotions, and the reader’s apprehension of its sordid or dangerous elements are purely intuitive, central and proportionate to his psychological and cultural development. The film acts through the sight, through the senses; and relies on no internal mechanism to be taken in and realized in all its details. The psychic process of transmission to the understanding that takes place when reading is outstripped by the immediacy of vision.

It is moreover contended — and this is a point which the British Board has taken into proper consideration — that a single film, considered by itself and isolated from its surroundings, has no great suggestive influence. Its ascendancy works by degrees, by geometrical rather than mathematical increase, according to frequency, that is to say the possibility of repetition; while this is not the case with books, owing to the time and fatigue involved by reading.
The element of frequency is at the root of custom and habits and has a singular power of impressing its effect on the brain and of imparting the impression of normality. Considered by itself, a given situation may stir the soul of the spectator and give rise to questioning and discussion, especially in the case of persons of a certain culture and endowed with more or less psychic powers of inhibition. But repeatedly viewed, the same situation will produce the impression of the habitual and the inevitable, and persons, even above the normal mental standard, end by being unconsciously attracted to what they come to regard as a normal way of thinking and feeling.

It has also been observed that it is not always permissible to reproduce on the screen certain facts and realities of life, though in actual life these may have their motive and their justification. For instance, it may be true that in some circumstances a woman may sacrifice her honour for reasons not of the heart alone, but impelled by some necessity which ennobles an action in itself blamable; such incidents occur in real life and even conventional morality absolves the woman from blame. But to show such incidents on the screen is often dangerous, because the whole theme is apt to be treated in a commonplace way, because no fine feeling or delicacy is shown in the plot, and the scenes depicted are forced and untrue to life. In such circumstances, the representation of reality becomes an element of corruption.

Special Criteria. — The following particular reasons were adduced for the rejection of films during the year 1928: Advocacy of companionate marriage; crude immorality; indecorum of dress; predominance of the criminal element; scenes of procuration and of excessive and sustained brutality.

The reasons for revision, alterations and cuts were more numerous and may be summarized under the following heads:

a. Religion. — Religious rites and ceremonies dealt with irreverently or shown in such a way as to arouse contempt; biblical quotations when out of place or rendered comical; travesty or mockery of Biblical characters; frivolous treatment of the solemnity of death; representation on the screen of the figure of Jesus Christ.

b. Political. — Generally speaking (apart from peculiarly British reasons, such as the high respect due to the Sovereign and the Prince of Wales) all subjects and treatment which may give offence to the Heads of States or their representatives are rejected in the interest of international good will and more particularly so as not to display other countries — friendly countries especially — in an undesirable light.

Another point included among the political reasons is the necessity of avoiding all scenes likely to lower the prestige of the white populations
in the sight of other races, scenes likely to create or foment class ill-feeling, or representing British Possessions as lawless sinks of iniquity rather than as centres of civilization and progress.

c) Military subjects. — The British Board’s revisional functions in this regard are naturally confined to Empire interests, and are concerned with maintaining the prestige of the British uniform and in excising scenes of conflict between soldiers and civilians or reflections on the family relations of responsible British officers likely to discredit the Army.

d) Administration of Justice: For obvious social reasons and so as to avoid any scenes likely to impede the ends of justice, any scenes representing conflicts between the police and populace are subject to revision or excision, as also scenes displaying the police in a false or derogatory light and objectionable prison scenes.

e) Social Questions. — The aims of the British Film Board are highly moral, and in this sphere its action is guided by an endless series of suggestive indications susceptible of being added to as occasion demands.

There are local considerations, such as the need of avoiding all scenes showing the white populations of the Empire in a derogatory light as compared with coloured populations; this is a point to which, as we have already seen, the Board attaches also political importance.

Then there are reasons of a general domestic character: the observation of all due respect to State Authorities and citizens (soldiers, magistrates, etc.) performing public offices.

Reasons of a moral character: these exclude painful scenes of lunacy, drunkenness, debauchery, intimate biological studies unsuited to general exhibition, suggestive and indecorous dancing, nude scenes, particularly of women and girls, allusion to sexual perversion, painful family scenes, such as marital infidelity and collusive divorces, illicit medical practices, such as abortion, or otherwise unsuited to public showing (childbirth, venereal disease, surgical operations, etc.) and in general all scenes of excessive vulgarity or brutality.

The British Board of Film Censors are particularly severe in their tutelage of all questions inherent to sex.

Questions of Sex are included among questions of social importance and all scenes are taboo if considered as of a crudely immoral character: scenes showing prostitution in an agreeable or frivolous light, scenes of accosting, of procuration, rape, violence, white slave traffic, scenes entering into intimate details of sexual love; all scenes, in short, likely to foster immorality.

f) Crime. — In a general way films in which crime plays the predominant part are not passed by the Board, nor those in which crime is displayed in an attractive or alluring light, either by showing the triumph of crime with the success of the criminal, or through the representation of
criminal acts, either in full or in detail. Films in which the criminal element is predominant or actually forms the main theme of the film, unless other elements in the drama tend to produce a counter moral influence and to show the social danger and negative issue of crime, are rejected.

Thus the British Board includes among criminal scenes, scenes of hanging, as being the method of public execution throughout the Empire, and deliberately excludes from the social category, and includes in the criminal one, scenes dealing with the use of drugs («Dope scenes») and the propaganda of vices which are degrading to the race and to mankind.

g) Cruelty. — Scenes representing cruelty to men or beasts and representing human agony, for the sake of the thing itself and not by way of warning, brutality in life or in sport, personal and mass brutality and vulgarity, which convey no worthy moral lesson but merely embriten and degrade, are rejected.

h) Titles. — All films and scenes require some form of title to explain the luminous image. The effect of the captions as a means of propaganda or publicity is very great, especially in respect of minor cultural subjects which are not sufficiently clear from the photograph and the cinematographic movement alone, but require to be explained also by words.

In such cases, which are certainly the most numerous, the comment is an essential auxiliary to the film, and often when this has been poorly constructed, the caption actually falsifies the concept and merely confuses or interrupts the scenes by a string of words which have little or nothing to do with the case.

Titles ought therefore to be examined from two different points of view. First of all, do they answer to the purport of the film; secondly have they any moral value of their own? The British Board has confined its control to the second point; and considers whether titles are in themselves objectionable or otherwise. Titles are censored when they are intrinsically offensive, when they comprise irreverent quotations of biblical texts, are irreverent or blasphemous, have an objectionable political bearing, are morally equivocal or contain objectionable innuendoes.

It may roughly be said that the revision of the title goes hand in hand with the revision of the scene to which it refers, and that it is censored or otherwise according to the same standard as the scene itself.

Moral qualities of British cinematograph production in 1928. — In its Report for the year 1928 the British Board of Film Censors deplores the fact that during the year under review British films had displayed a tendency towards a marked revival in the production of films dealing with crime, notwithstanding the circulars on the subject sent round by the Board in 1917 and 1925.
These circulars are very explicit on the following points:

a) that no serial film dealing with crime would be examined except as a whole, it being impossible otherwise to form a fair estimate of its value;

b) that no film in which crime was the dominant theme would be granted a certificate;

c) that no film in which the methods of crime are shewn and illustrated would be passed;

d) that, lastly, no "crime" film would be passed, even in cases where, at the end of the drama, retribution is supposed to have fallen on the criminal, or where actual crime is treated from the comic point of view.

**Synchronized Films.** — The British Board has recently taken up the question of the synchronized film, in view of the favour shown by the trade to this new form of cinematograph production which has roused so much public interest.

The synchronized film, by reason of its musical accompaniment, demands a different standard of revision from the silent film. So long as music and song were introduced merely as an accompaniment to certain scenes, the silent film served the purposes of the censor, but when the synchronised film became a veritable fusion of images, song, music and dialogue, the Board found itself up against a serious difficulty and realized the need of engaging the services of experts capable of judging the limits within which films could be revised without eliminating, suppressing or marring the audible accompaniment.

As a general principle it was laid down that the silent version of the film should in the first instance be submitted for revision to the Board, which would re-examine the same in its complete form after this preliminary examination; one of the reasons for this being the fact that it was noted that the synchronized version corresponded so closely to the silent one that the former version suffered very little from cuts made in the latter.

The Board further decided that in all cases where two versions of a film existed — one silent and one synchronized — both versions should be submitted to it and that they should be subject to separate certificates.

**Children and the Cinema:** The British Board remarks that there has been considerable agitation afoot on a subject of the greatest social interest, that is to say the influence of the animated vision on the mentality and spirit not only of the general public, but especially of children.

This question has been debated by the leading educational organizations, who have repeatedly asked that a definite distinction should be established between films to be exhibited in the presence of children and those suitable for the general public. All this points to the fact of how little even English educational circles are acquainted with the work and aims of the British Board of Film Censors.
The Board, as stated above, does in fact issue two kinds of certificate, the U Certificate and the A Certificate. The first relates to films which are suitable to be shown before any kind of audience (Universal Exhibition) and the second those fit for adults only.

The British Board examined all the complaints that reached it during the year under survey, so as to check the correctness of the issue of certificates, and it was noted that all the films concerning which complaint had been made had been granted A Certificates.

In any case, the Board has decided to exercise greater severity in future in the issue of U certificates and to grant these only to films which cannot exercise any deleterious influence on the youthful mind.

It is certainly not easy to define exactly the line of demarcation between the films receiving the two types of certificate, and it is only possible to exercise a general discretion in each instance. It can anyway be affirmed that no British film is classified under the U category if it treats sexual problems, delicate love questions, painful or disgraceful scenes in family life, crime, or incidents and circumstances in which due respect is not shown to social morals, the governing powers, and the authority of the Law, or wherein the themes dealt with are not treated with proper respect and in a manner calculated to obviate all possibility of corrupting the young mind.

A systematic definition of the British censorship system is in course of being studied. The Home Office has this matter in hand. In any case the work done by the Local Authorities and the British Board of Film Censors up to the present time has been most effective, and with the active and spontaneous support of the film industry, the cinema in the United Kingdom has been able, even in the purely dramatic domain, to make considerable progress towards its final goal of culture and education.

THE FILM AS AN AUXILIARY TO AGRICULTURE

HOW AGRICULTURAL CINEMATOGRAPHY IS ORGANIZED IN GERMANY

It is only natural that the importance of the aims and of the task assigned to the International Institute in the domain of agriculture should claim the attention of so important an agrarian Country as Germany, which is always on the look-out for the latest technical improvements and the best methods of production.
Thus the Reich Minister of Food and Agriculture has called our particular attention to the Centralinstut für Erziehung und Unterricht (the Central Institute of Education and Teaching) and to the Deutscher Bildspielbund (German Cinematographic Federation), both of Berlin, as the proper organs to collaborate with us in our common endeavour, since there are no government organizations in Germany concerned with agricultural films.

The Reich Ministry of Food and Agriculture and the Prussian Ministry of Agriculture, State Lands and Forests have recourse to the Film Collection of the Central Institute of Education which, though it is not a government institution, is considered throughout Germany as an institution at the service of the several States for all that concerns the domain of teaching.

Both of these Ministries obtain from the Institute all information respecting the development of agricultural cinematography and they take a direct part in its activities through the medium of their representatives in the Commission for the examination of agricultural films attached to the Institute.

This Commission consists of some 60 persons chosen from among authorities on agricultural questions belonging to the Ministries, German agricultural societies and associations, and Higher Schools of Agriculture and Veterinary Science.

Among the organizations interested in agricultural cinematography, the German Agricultural Society and the several Chambers of Agriculture, which are all federated to the Prussian Central Chamber of Agriculture, deserve special mention. The latter organization does much good work by subsidizing on a big scale the production of good agricultural films by the ordinary film producers.

Lastly, we may mention the Deutscher Verein für ländlicher Wohlfahrts und Heimatpflege (German Association to Promote Agricultural Prosperity and for the Preservation of Local Customs) on account of its special relations with the Central Institute of Education and Teaching. This association has organized a Central Committee for the exhibition of films in rural districts. The Central Committee, which is in close touch with the Film Service of the Central Institute and with other institutes of a like nature, aims at producing educational and recreational films for exhibition in country districts and is also concerned with drawing up cinema programmes and compiling catalogues. Furthermore, it works in close touch with that branch of the film industry that specialises in publishing agricultural films in seeking out new cinematographic forms for demonstrating the all importance of agriculture to the life of our times. At the same time it helps the Communes, Provincial and agricultural associations, and above all agricultural associations created for the purposes of rural welfare, in the choice of films and in installing projection apparatus.
The Central Committee, furthermore, advises on the drawing up of contracts with cinematographic companies, furnishes all useful information needed by firms producing or hiring out films and projecting plant, indicates the most reliable firms and points out the less reliable, and gives all the information necessary when making application for projection licenses. The Committee must abstain from all activities of a political nature, and the production, sale and exhibition of films must be non-commercial and not done for valuable consideration. The Central Committee has induced the Reich Ministry of Food and Agriculture and the Prussian Ministry of Agriculture to send representatives to its meetings so as to further the production and use of agricultural films.

The Central Committee is composed of the President, his deputy, and of 12 members. The President of the German Association for promoting Agricultural Prosperity and for the Preservation of Local Customs is ex officio President of the Central Committee. The members, with the exception of those representing the Reich and Prussian Ministries of Agriculture, are chosen from among the members of the following organizations: the « Plant cultivation Society » the « Organization for the Rearing of Domestic Animals », the « Federation of German Farmers’ Associations », the « German Agricultural Council » « the German Agricultural Society », the « Permanent Agricultural Congress » and the « First Prussian Chamber of Commerce ».

The means requisite for the functioning of the Central Committee are contributed in part from their own revenue and in part by the Reich and Prussian Governments.

It is obvious from the above information that private initiative and the initiative of the various Associations is mainly responsible for the organization of agricultural cinematography in Germany. The Central Institute of Education and Teaching and the Central Committee of the German Association for Promoting Agriculture, etc., are the two essential factors in the organization of German agricultural films. It would, however, be a great mistake to assume that agricultural cinematography has attained to a lesser degree of progress in Germany than in other countries because government initiative in the matter is limited. On the contrary, a publication of the Prussian Ministry of Agriculture, entitled « The Importance of the Film to Agriculture » written by Major D. R. Kleinhaus, Director of the Central Committee of the German Association for Promoting Agricultural Prosperity, shows clearly that, ever since pre-war days, the German rural population has realized the exceptional usefulness of the agrarian film. This, indeed, is no more than we should expect of a people whose agriculture is founded on science and the industrialization of methods. The Brandenburg plains, once so arid and desolate, are at the present time one of the most flourishing agricultural regions
in Europe. The interest of the above cited publication of the Prussian Ministry of Agriculture is considerably enhanced by a fine list of over 300 agricultural films, all of the greatest technical perfection, and representing a total length of nearly 200,000 metres.

THE CINEMA IN THE SERVICE OF HYGIENE AND SOCIAL WELFARE

FRANCE:

The National Office of Social Hygiene attached to the Ministry of Labour has sent us the following answers to our questionnaire on hygiene and social welfare propaganda by means of the film in France.

There is a general Propaganda Commission attached to the French Ministry of Labour, Hygiene and Social Welfare, which has at its disposal a cinematographic section and a Film Archive, where all the films of the Ministry are gathered together with those of the National Office of Social Hygiene and other big national hygiene associations (1).

While no special laws have been enacted to regulate film hygiene propaganda, it is nevertheless under the methodical control of the said Ministry, which works in concert with the National Health Office, the principal hygiene associations and departmental organizations.

Film propaganda of this kind is organized directly both by the General Propaganda Commission, through its travelling cinemas, and by the departmental organizations, and in a general way by other associations concerned with social education.

Both primary and secondary schools include films in their curricula of health instruction.

Independently of the Censorship Commission for the censorship of all films, the propaganda commission of the National Health Office exercises a special censorship over films dealing with public health. No film of this kind can be distributed unless it has been passed by the said commission; it also examines beforehand the schemes of proposed films. But the greater number of films for hygiene and social welfare

(1) These films may be hired on the following conditions:

<table>
<thead>
<tr>
<th>Length</th>
<th>1 projection</th>
<th>1 week</th>
<th>2 weeks</th>
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<tr>
<td>not more than 300 metres</td>
<td>8 Frs.</td>
<td>17 Frs.</td>
<td>35 Frs.</td>
</tr>
<tr>
<td>from 300-1000 metres</td>
<td>15 Frs.</td>
<td>30 Frs.</td>
<td>60 Frs.</td>
</tr>
<tr>
<td>from 1000-1500 metres</td>
<td>20 Frs.</td>
<td>40 Frs.</td>
<td>80 Frs.</td>
</tr>
<tr>
<td>over 1500 metres</td>
<td>25 Frs.</td>
<td>50 Frs.</td>
<td>100 Frs.</td>
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propaganda are produced by the Commission itself with the assistance of the appropriate technical organizations.

The Commission has compiled and published a complete and detailed catalogue of all films dealing with matters of hygiene.

SWITZERLAND:

In reply to our questionnaire, the Hygiene office of the Federal Public Health Department states that propaganda in matters of Hygiene and Social Welfare is not centralized in any single government office, nor is it the subject of any special legislation.

Such propaganda is, however, effectively carried on by private organizations which are responsible both for the production and appropriate distribution of films on the subject. A number of associations concerned with preventive medicine and social welfare organize public cinema shows accompanied by popular lectures, while films bearing on hygiene and of a kind to diffuse its essential rules in everyday life are regularly shown in the cinema theatres.

Special mention should be made of the following organizations as responsible for the production and distribution of Films on Social Health questions:
- The Swiss School and People's Cinematograph of Berne;
- The Swiss Red Cross Society, at Berne;
- The Central Swiss Health Office.

LUXEMBURG:

The Hygiene Service of the Grand Duchy informs us that Social and Welfare Propaganda by means of the film is entirely in the hands of the Ministry of Health, which places its cinema material at the disposal of private and official organizations interested in public health questions.

These organizations carry on an active propaganda by the regular public exhibition of appropriate films accompanied by popular lectures.

Special meetings with projections and lectures are organized for the students of primary and secondary schools.

Luxemburg does not produce its own cinematographic material and all its requirements are supplied from abroad.

JUGOSLAVIA:

The Ministry of Public Health in Belgrade informs us that the several Jugoslavian Hygiene Institutes, of which there are nine in all, are entrusted with the task of hygiene propaganda by means of the film; apart from this, however, private associations interested in questions of public health carry on similar propaganda in the same field, the requisite films being placed at their disposal by the said Institutes.
This propaganda is not subject to any special legislation, but is carried on by the free initiative of the Health Institutes and Associations mentioned above.

The Zagabria Hygiene Institute has its own Cinematographic Section, which provides in considerable measure for the production of the requisite films. Recourse is also had to foreign films for this purpose.

LATVIA:

Film propaganda on hygiene and social welfare is not subject to any legislation in Latvia; nor is it centralized in or organized by any Government department.

Films dealing with the matter are, however, shown from time to time in the public cinema halls and are accompanied by lectures of a popular kind.

The programs of instruction in secondary schools are now in course of being reorganized, and it is intended to include propaganda in matters of public health and social welfare in the new curricula.

A special law requires all primary and secondary schools to include anti-drink propaganda in their curricula.

All requisite films are imported from abroad.

THE ACOUSTICS OF SOUND RECORDING ROOMS

In dealing with this subject, one must of necessity be concerned with general considerations. Each sound recording room presents special problems calling for particular solutions, which arise from conditions that are imposed by necessities which are quite other than acoustical. In the particular case, therefore, the designer of a sound recording studio has to include in his general design problem the special conditions that must be met in order to record sound faithfully, and free from extraneous noise.

The first of these general considerations to be urged is that the matter of acoustic conditions be included from the very first in the development

(Ed. Note). The International Educational Cinematographic Institute does not propose to narrow down its interest in technical questions solely to the strict domain of the cinematograph; all technical problems of special interest which have even an indirect bearing on the cinema will claim its attention.

For this reason, we have pleasure in publishing herewith an article on the acoustics of sound recording rooms from the pen of Mr. Paul E. Sabine.
of the plans. This would mean that the site, in the case of a new building, would be selected with the probable conditions as to noise in mind. The noise of heavy traffic, of street cars, or of elevated railways, being transmitted in part by way of the earth is almost impossible to eliminate. If the recording room is to be included in an old building, careful consideration should be given to its location with reference to machinery or other existing sources of noise. The difficulties of successful sound insulation in a building already constructed are frequently extremely great.

Having admitted the acoustical problem as of prime importance in the studio or stage layout, the designer should undertake to secure definite quantitative data on the various specific problems involved. In a field as new as is the recording of sound in connection with motion pictures, there will have to be considerable experimentation as to the acoustical conditions for recording which will produce a record that most nearly simulates music and speech as heard by an audience from an actual stage, yet the principles governing the behavior of sound within closed spaces are well known, and quantitative data for producing the desired conditions can be had, once these conditions are determined. Having determined the acoustical conditions that are desirable it is not necessary to guess at or experiment with means of obtaining these conditions. Let me illustrate by an example. In listening to a stage production, the audience hears the voices of the actors as they are modified by the acoustic conditions of an actual stage. What is the best means of securing this illusion in the case of the talking moving picture? Is it to make a record that is entirely free from « room effects », and then put in the room effects by reproduction upon a stage that will introduce them, or will it be better practice to record under conditions that will include the « room effects » in the sound record? Only trial can answer this question, but once answered, I think it is safe to say that our knowledge of acoustics is at a point where the desired conditions for recording, whatever they may be, can be secured without further experimentation.

At the risk of indulging in the thankless task of carrying coals to Newcastle, by speaking of matters upon which many of you are already informed, may I very briefly outline the subject of the acoustics of rooms in general as an introduction to the consideration of the specific problems of the sound recording room.

Sound consists of the rapid to and fro motion of the particles of the air or other elastic medium. This motion is propagated from particle to particle with a velocity of about 1120 ft. per second at ordinary temperatures. This vibrational motion of the individual particles results in a cyclic variation of the pressure, above and below the normal atmospheric pressure which in turn is accompanied by a corresponding fluctuation in temperature — a rise in the compression phase, and a fall in the rarefaction phase.
As a form of energy, sound can disappear from an enclosed space in which it is produced only by transmission or by absorption. The latter consists in the dissipation process of transforming the regular vibrational motion of sound into the random molecular motion of heat, and occurs only when work is done against dissipative forces, such as by non-elastic compression or flexure of soft materials or by motion to and fro in the minute channels of porous materials. When sound is incident upon a solid surface, part of its energy is reflected, part transmitted through the solid, and part absorbed. For purposes of the interior acoustics of rooms, it is unimportant whether the energy disappears by absorption or by transmission, and since in general the latter is a relatively small proportion of the unreflected energy, we include it in the absorption. The absorption coefficient depends in a marked degree upon the pitch, to some extent upon the quality, that is whether the sound is pure tone or one with harmonics, and, probably upon the intensity, intense sounds being absorbed more strongly than faint sounds.

From the foregoing, it is apparent that sound once produced within a room will persist for an appreciable length of time after the source has ceased emitting it, due to the fact that it requires time for the multiple reflections necessary to reduce its intensity to inaudibility. This persistence is technically called reverberation and is measured by the time required for sound to decrease to \( \frac{1}{1,000,000} \) of its initial intensity. The phenomena of reflection, absorption, and reverberation can all be illustrated by means of photographs of sound pulses taken by means of electric sparks.

Another phenomenon that occurs in rooms is that of interference. This results from the undulatory nature of sound. As a simple illustration consider the case of a train of waves incident upon a plain surface. At points at which the reflected wave train travels an odd number of half wave lengths further than the oncoming, the condensation of one will coincide with the rarefactions of the other and assuming equal intensity the pressure change at such points will always be zero. For an even number of half wave lengths difference, the two pressure changes will reinforce each other. Thus we have in a room with a sustained source of sound of fixed frequency a point to point variation in the intensity, which changes with changing pitch at the source, with the position of the source, and with any shift in the position of reflecting surfaces within the room. As a general rule this inequality of distribution is not an important factor in the acoustic properties of a room. Concentration of reflected sound by extended curved contours, may accentuate these inequalities to the point of being a real acoustical defect.

Echo is the distinct repetition of a sound of short duration, by reflection from some solid surface or surfaces. In order to separate two sound
impulses the time interval between must be of the order of $\frac{1}{20}$ of a second or more. This means that the reflecting surface must be at least 28 feet from the observer. Multiple echoes which merge into each other constitute reverberation. Concave reflecting surfaces serve to produce localized echoes.

By far the greatest number of cases of acoustic difficulties arise from excessive reverberation. Its effect is to prolong the separate elements of speech or music so that these run into each other, thus lowering intelligibility and sharpness of enunciation. Thus suppose for example that each syllable of speech in a room persists for three seconds after it is spoken. (Not an unusual length of time in an empty room). Speaking at an ordinary rate, a speaker will utter fifteen syllables in this length of time. There will be thus at any time the residue of sound from fifteen, preceding syllables competing with the direct sound at the ear of the auditor with resultant confusion and loss of distinctness.

Without going into the mathematical analysis of the theory or the very careful experimental work that has been done by Wallace C. Sabine and others in verification of this theory, we may state the laws of reverberation as follows:

1. For a sound of fixed initial intensity in two rooms, the periods of reverberation are directly proportional to the volumes and inversely proportional to the total absorbing powers of the two rooms, the total absorbing power of a room being defined as the sum of the products of the area of each surface exposed to sound multiplied by the absorption coefficient of that surface.

2. In a given room, the duration of audible sound after the source has ceased is proportional to the logarithm of the initial average intensity of sound in the room.

Law 1 may be put in the form of the well known reverberation equation

$$T = \frac{0.05}{a}V$$

wherein $T$ is the time required for the sound intensity to decrease to $\frac{1}{1,000,000}$ of its initial value, $V$ is the volume of the room in cubic feet, and $a$ is the sum of the products of area and coefficient for all surfaces in the room.

With the data at hand for determining $a$, it is apparent that we can compute the reverberation time for any room. One immediately raises the question as to what the reverberation time as thus computed should be for an acoustically good room. The answer is arrived at by seeing what $T$ is for rooms that are acoustically good. Fig. 1 shows the values of $T$ for six different auditoriums which are recognized as being acoustically very satisfactory for both music and speech. Included also are two other rooms, one too reverberant, the other too «dead». $T$ is plotted as a function of the logarithm of the volume, and the graph shows that longler
reverberation times as defined above are allowable for large than for small rooms.

We thus have a very usable criterion of excellence for rooms that are for audience purposes. Thus for example, if the volume of a proposed room is 200,000 cubic feet, then the absorbing power, including that of the audience, should be 6667 units in order to give a reverberation time of 1.5 seconds, the value which according to the graph is desirable in a room of this size. If the calculated total absorbing power of the room surface and the audience is less than this, then sufficient area of absorbent treatment should be introduced to bring the total up to the desired value. It should be said that the departure from the values shown without materially affecting hearing conditions is fairly large, certainly as great as 5% and possibly as great as 10%, so that the graph serves simply as a working basis for designing rooms with comfortable acoustics.

Coming now to the question of the proper reverberation time for sound recording rooms, I have to confess the lack of any very precise data. As you know, the early practice in phonograph recording and in radio broadcasting was to cut down sound reflection to the limit, by the use of heavy drapes hung well out from the wall and over every foot of available surface. While this practice serves to eliminate any trace of room effects, at the same time it produces a dull lifeless quality to music particularly, that is extremely trying to artists and is easily perceptible to discriminating auditors. Gradually the tendency toward less deadening and longer reverberation times has grown up. In 1926, I conducted a series of tests for station WLS in Chicago to find out whether differences in room conditions were perceptible to radio listeners, and what condition was preferred. It was arranged to vary the absorbing power of the studio in three steps by the removal of drapes, thus increasing the computed reverberation time from 0.25 to 0.64 seconds. In this test, the same short program was broadcast under each of the three conditions, and the preference of the radio listeners was asked for. Of the 121 replies received

![Fig. 1 — Reverberation Times of acoustically good rooms of different volumes](image)
only 16 expressed a preference for the least reverberant condition, while 73 preferred the most reverberant. It was not possible to carry the experiment to still longer reverberation periods. It is interesting to know that the reverberation time of 0.64 is not far from what one would predict from extrapolating the graph of Fig. 1 to the volume of this particular studio. From my own observations and experience and what I have been able to gather from the experience of others, I am inclined to believe that what we consider good auditorium conditions will come to be recognized as not far from good recording conditions. This of course does not mean that recording studios do not as a rule need some absorbent treatment. As a matter of fact they do. When we remember that in an auditorium 213 to 415 of the total sound absorption is supplied by the audience, and that there is usually no audience in the recording room, it is obvious that the deficiency must be made up by special absorbent treatment of some kind. In fact, in large stages the amounts of absorbent treatment necessary to give good audience room conditions will be rather formidable. For example a room with a volume of 500,000 cubic feet, would normally have an audience of 2500 people, with an absorption of 11,500 square feet of perfect absorption. At least 23,000 square feet of felt with a coefficient of 0.50 is required to reduce a stage of this size to good audience room conditions. Now 500,000 cubic feet would be a small motion picture stage according to present practice, so that it appears plain that to provided proper acoustical conditions on the very large stages now used for the silent motion pictures requires a considerable outlay for sound absorbents. It is apparent that from the standpoint of economy, it is the part of wisdom to provide in the initial layout for the necessary acoustical treatment. Frequently it is possible through the exercise of a little ingenuity to utilize materials for the purposes which are much cheaper than the usual types of materials now used for an acoustical correction in auditoriums. In the latter, requirements of appearance and decoration add appreciably to the cost of the materials employed.

Speaking entirely from the standpoint of an outsider knowing only incidentally of the requirements, other than acoustical, of a motion picture stage, I would venture the suggestion that possibly the requirements of sound recording would call for radical departure from the present plan of having very large stages designed to accommodate simultaneously a number of sets, to the plan of having a number of smaller separate stages acoustically insulated from each other. Certainly the problem of the control of reverberation in moderate sized rooms is much simpler than in extremely large rooms.

The Effect of Absorbent Treatment on Tone Quality

Practically all musical tones are complex. That is, they consist of a fundamental tone with its series of harmonic overtones.
It has long been recognized that the phenomenon of reverberation may affect the quality of musical tones produced in a room. In the open air, at a distance from any reflecting surface and at short distances from the source of sound it may safely be assumed, I think, that the wave in the air is identical with the wave form produced by the source. That is to say the quality of the tone does not materially change as the wave advances. But in a room, the resultant vibration at any point is that due to the sound coming directly from the source combined with that which has been reflected from the bounding surfaces of the room. Now, if these reflecting surfaces reflect all the components of the complex tone in the same degree, the quality of the reflected sound will be identical with that of the direct sound. But as a matter of fact, practically all materials are selective to a greater or less degree, so that, theoretically, at least, the quality of reverberant sound is altered by the room.

Fig. 2 shows the absorption coefficients of hair felt of different thicknesses from 1/2" to 3" over the frequency range from 128 to 4096 vibrations per second. It will be observed there is a maximum of absorption that shifts to lower frequencies as the thickness of the material is increased. The ratio of the maximum to the minimum absorption is 6.2 for 1" material. This ratio is reduced to 2.5 when we get to a thickness of 3". This selective absorption is characteristic of all porous material. One obvious method of ironing out the curve is to increase the thickness. This however is an expensive procedure and as a practical matter is sometimes difficult. It is also possible to reduce the peak absorption relatively to the absorption at other frequencies by surfacing the porous material with a flexible though impervious membrane. Fig. 3 shows the effect of cementing a painted fabric to the surface of 1" felt. This however, has the disadvantage of producing a decrease in the general efficiency of the material.

The effect of this selective absorption is pronounced in rooms in which the major portion of the total absorbing power in supplied by a selectively absorbing material. The high pitched components of music
or speech are dissipated more rapidly, resulting in a preponderance of the lower tones producing a peculiar hollow effect which is far from pleasing to the ear, and which in sound recording may result in a serious over-emphasis of the low tones.

We have had occasion in our laboratory to solve this problem in the treatment of the room in which the response of loudspeakers is measured. By a somewhat fussy arrangement of the absorbent material we have been able to secure conditions such that the measured response is quite independent of the relative positions of the source and the pick-up showing that the reflection of sound at all frequencies is negligibly small. Fig. 4 shows the increase in absorption of sound of low frequencies that can be secured by properly disposing two layers of $\frac{1}{2}''$ hair felt with reference to each other. The work of Dr. Wente at the Bell Laboratories as well as further uncompleted work in our laboratory indicates that absorbing structures can be designed that will give much more nearly uniform absorption over the pitch range than do simple porous materials. Whether or not such conditions make enough difference in the quality of the sound record to warrant the pains and expense to secure them is a question that can only be answered by recording experience. The point here emphasized is that if necessary for good recording they can be secured.

 Extraneous Noise

Freedom from outside noises is more a matter of attention to numerous details of construction than of building magic sound proof walls. That term «sound proof wall» like the term «projectile proof armor» is a purely relative one. One thinks of an eight inch brick wall as fairly sound proof, yet sounds that are not so loud as to be painful can easily be heard through such a wall. On the other hand, much less formidable constructions than an eight inch brick wall will serve to exclude sounds of ordinary intensity. One finds the explanation of the difficulties of complete sound insulation in the extreme sensitivity of the ear, and the wide range of intensities to which it responds.

During the last nine years, a great deal of work on the transmission of sound by partition walls has been done at the Riverbank Laboratories. The results can be summarized only very briefly for the purpose of this paper. The outstanding facts are as follows:
1. For what may be considered as continuous masonry including walls of gypsum tile, clay tile, solid plaster, and brick the reduction of sound in transmission increases according to a fairly definite law with the increasing weight of such constructions.

2. Felts and other fibrous porous materials, used alone, are not effective sound insulators as compared with stiff, heavy, and impervious materials. As generally employed for sound insulating purposes, either as an inner-lining for double constructions, or as a fill between wood members in single construction, they do not produce any very marked effect in increasing the degree of sound insulation.

3. Double wall constructions furnish a higher degree of sound insulation than do single walls of equal weight. The greater the structural and spatial separation of the two component structures, the greater the degree of sound insulation afforded.

Fig. 5 presents the results of some of the tests in the transmission of sound by more usual types of wall construction. The vertical scale gives the average logarithm of the reduction of sound intensity for 17 different tones ranging from 128 to 4096 vibrations per second. The horizontal scale gives the logarithm of the weight per square foot of the partition structure. The points lying along the straight line are masonry partitions including walls of clay and gypsum tile, both hollow and solid, and of different thicknesses, as well as solid plaster on metal lath, from 1 1/2" to 4 1/2". The double partitions were of gypsum tile, with complete structural separation between the single units. The effects of the various types of fill as well as the effect of bridging the intervening air space are shown. Unless otherwise indicated, the separation between the double walls was 2 inches.

It appears then that when insulation from external noise is necessary the double wall construction is the most effective means of securing it with wall construction of moderate weight. Equally important is the matter of preventing the entrance of sound by means of openings, including doors and windows, and ducts for heating or ventilation. The ventilating system of a talking moving picture stage requires especial care in the planning. Quiet operation should be a first consideration in specifying the fans, pumps and other machinery employed in air conditioning. Flexible canvas coupling between the fan and the ducts should be specified to prevent the conduction of vibrations along duct walls. The cross section of ducts should be figured large enough to allow lining with sound absorbent
material. Properly constructed baffles of sound absorbing material can be effectively used in reducing the passage of noise through conduits. It is good practice to surface exterior walls with cork and plaster, particularly in cases where ducts leading to and from rooms that should be acoustically separated run parallel or close to each other.

It should be remembered that so far as the admission of sound is concerned, there is no difference between intake and outlet ducts.

A system of sound insulation is no more effective as a whole than its least effective element. Pains should therefore be taken to provide doors and windows which are as «soundproof» as possible. A double door of as heavy construction as feasible, with the maximum possible separation of the two units, and provision for closing tightly, is the best means so far available. Care should of course be taken to procure a proper degree of insulation of motors, generators or other sources of vibration from the main structure of the studio or stage. Structural vibrations may be transmitted with amazing facility through an entire building.

It is fairly clear, as stated at the outset, that freedom from disturbing noise is a matter of careful detailed planning. The foregoing serves to indicate along broad lines the possible sources of trouble and the means by which these troubles may be avoided. On the whole, the acoustical problems of sound recording rooms are not seriously troublesome if taken into account from the beginning. They may be extremely annoying, if omitted and brought in only as an after thought.

THE CINEMA AS AN AUXILIARY TO THE SCIENTIFIC ORGANIZATION OF LABOUR

While methodically pursuing its enquiries in respect of all those organizations which, from their intrinsic character, are in a position to

(Ed. Note). In later issues of the Review we shall publish some notable articles by Monsieur Urwick, Director of the Geneva Scientific Management Institute, by Prof. Fon-
furnish data on which to formulate in due course definite projects for applying the cinematograph to the domain of labour, and while reports and information are pouring in from the leading industrial authorities, government departments and employers' and workers' organizations, the International Institute is at the same time devoting its efforts to the collection of films of a kind to throw light on the diverse methods of scientific management.

New methods of business are at the present time stirring great interest throughout the world; these are based on the principles of scientific management and rationalization, the phases of which the Institute follows with growing interest. The Institute with the help of an instrument whose didactic and demonstrative possibilities in this field have not yet been fully realized, is anxious to contribute its share in formulating the new doctrines which modern progress regards as the very cornerstone of up-to-date business organization.

In this connection, we have no doubt that our readers will be interested in a list which we give below of films published by the German firm the «Fachfilm» Co., of Berlin, on account of private companies and manufacturers, the descriptions of which give an idea of how scientific theories are now being put practically to the test.

FILMS RELATING TO SCIENTIFIC MANAGEMENT

The Physiological bases of Scientific Management:

This film, which is based on the research of the Kaiser Wilhelm Institut of the Physiology of Labour, illustrates the measurement of the amount of energy consumed during work by means of experiments connected with respiration. The chemical bases and the apparatus used are illustrated by animated drawings and certain natural photographs of the respiratory system are shown; these are followed by the detailed reproduction of three series of experiments, namely: raising weights, turning a wheel, and supporting weights. The results of maneuvering the machine are further illustrated in detail by means of curves.

Introduction to the study of work and work-time:

This film introduces us to the question of time study. First of all an animated drawing reproduces the subdivision of a somewhat extensive piece of work into separate jobs. The fact that it is first necessary to improve working conditions before proceeding to the study of working-time is illustrated by natural photographs and by a simple example (lathe work). An animated drawing illustrates the special character of the ma-teque, Director of the Paris Service a'orientation Professionnelle (Vocational Guidance Service) and by Herr R. Thun.

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chine. Later on natural photographs reproduce a complete view of the
time-study. The times employed are shown on a clock which appears
in the photograph. Some perturbations are registered in the course of
the time-study so as to show how the employee intent on the study must
act in such circumstances.

An Experimental Film on the study of Labour and Working Time:

This film was taken by way of experiment for the use of employees
assigned to time-study. The different stages of very simple work (the
manufacture of small brake valves) are illustrated by means of scenes from
life. The whole process of the work is then shown in chronological order.
A clock is photographed contemporaneously with the work on such a
big scale that it may be consulted while the film is being turned.

Office Organization:

This film gives us a brief introduction to the so-called Hinz System
and illustrates how an order received by a firm is carried out. The
numbers of the customers’ cards and registration in the card indexes is
here shown, according to the system of «mechanical geography». Then
all the entries necessary to the execution of the order made according to
the copying system are shown.

Modern Production:

This Film gives a succinct picture of modern serial production:
the storing of the raw material, the smith-shop, the foundry, manufactur-
ing works, turnery works, drilling, planing, polishing and checking.

Experimental Film on Time-Study:

This is another experimental film for the use of employees assigned
to time-study. It illustrates a complete cycle of work; namely, the man-
facture of a hinge, its design and drilling. A clock is photographed at
the same time on such a big scale as to be easily consulted while watching
the film. This film lends itself particularly to demonstrating how ac-
curately time studies may be carried out by workers. The photographs
were taken under the auspices of the Germans State Railways.

Film to measure Labour Speed:

This film is intended for measuring the subjective appraisement of
the proper working-speed of employees assigned to time study. It con-
sists of 15 scenes, all showing the same working cycle, namely a brief
filing job and revolution counting. Each scene is preceded by a pro-
gressively numbered caption with certain numerical indications. It is ar-
 ranged for each of the film scenes to be projected at a different speed. The
length of the intermediate titles is so fixed that the insertion of new pro-
jection speeds may be made without difficulty. The speed with which the
following scene should be shown is in its turn indicated in the intermediate
title and on this point other indications are given, so that the spectator is
unaware which of these speeds the operator will adopt at a given moment.
Each spectator must then state whether each particular photograph has
been shown at a normal speed or too slowly, and from the opinions
expressed the correctness of the judgment of the employees assigned to
the study of working-time may be gauged.

The Influence of Skill (Peeling Potatoes):

This film shows potatoes being peeled as an example of the fact that —
since this process does not involve any exercise — a whole lot of
unnecessary movements are made in work, which may be eliminated by
a little skilfulness. Two persons are photographed simultaneously:
one is shown peeling potatoes for the first time; the other displays con-
siderable skill at the work. The film clearly shows how the first is labour-
ing with his whole body, while the other uses his hands only.

The proper way to burn Wood in the Home:

This film is intended for exhibition in Sweden: it illustrates the ra-
tional handling of the different kinds of stoves in use in Sweden for burning
wood. First of all, the economic importance of a proper system of wood-
burning is stressed in a series of scenes. Certain rules are then set forth:
such as the advantage of disposing the wood horizontally rather than
vertically, the closing of the stove, kindling the fire, etc.

Other photographs illustrate the rules applicable to kitchen stoves,
as well as the changes which are desirable in these: decreasing the fire
space and the construction of an efficient smoke register.

Final Measurements:

This film illustrates the use of special lathes with the use of final pa-
rallel measurements. This is compared with work done on old fashion-
ed lathes which require the constant repetition of operations and the
turning of parts, which involved unnecessary loss of time. The new
lathes do away with all this by the introduction of final parallel mea-
surement. The lathe stops automatically as soon as the desired measure-
ment is attained. Any measurement required can easily be obtained.
A comparison is shown of the times taken over the same job of work by
an old fashioned lathe and by this new system.

A Study of Fatigue by means of the Kaiser Wilhelm Ergograph:

The scenes shown reproduce certain experiments made with the finger
ergograph. The manner in which the fatigue curve is formed is also
shown.

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NOTES TAKEN FROM REVIEWS AND PAPERS

CULTURAL FILMS

Notwithstanding the fact that cultural films are exempted from duty under the Chekoslovakian Customs Law, this provision is constantly being infringed. (Lichtbildbühne, Berlin).

An interesting article by Messrs. Clifton Tuttle and C. A. Morison deals with the experiments they have carried out in the domain of the film as applied to medicine. (Protographische Korrespondenz).

M. Raimond Berner writes in detail on the aims of the new « Cinelux » Company, the principal of which is to distribute films in country districts, especially in out-of-the-way parts where there are no regular cinema halls. (La Cinématographie Française, Paris).

The « British Filmcraft Production » Co. is about to release a biographical film on the famous English musician, Leslie Stuart. (La Cinématographie Française, Paris).

Sir James Marchant analyses the educational possibilities of the cinema, and tells of the work carried on since 1916 by the British Board of Education in relation to the educational film. (The Times, London).

The French « Société de Photographie et Cinématographie » has set up a special section known as the Amateur Cinema Section. This has its headquarters in Paris (31, Rue de Clichy) and has at its disposal a studio, a meeting hall, a projection hall and a laboratory. (Mon Ciné de Paris, Paris).

The Prussian Ministry of Science, Art and Instruction is contemplating the creation of a State Academy of Cinematography. (Lichtbildbühne, Berlin).

The « Dux Film G. M. B. H. » Co. has been constituted in Berlin for the production of documentary, industrial and publicity films. (Lichtbildbühne, Berlin).

Herr Scharschmidt, of Waldshut i. B., is making a special study of the different impressions produced on school children by the projection of stationary and motion films. (Bildwart, Berlin).

Mr. Arthur Lassaly deals with the use of the technical film in elementary school teaching. (Bildwart, Berlin).

Mr. William Brass has asked a question in the British Parliament respecting the use of the film in schools. (Lichtbildbühne, Berlin).

The « Offices Régionaux du Cinéma Educateur » the purpose of which is to encourage the production of educational and teaching films, have held a meeting at the Musée Pédagogique of Paris. (Cinéopse, Paris).

The Permanent Commission on Technical Education has met at the Paris Cinémathèque (14 Rue de Fleurus) to view certain films. (Cinéopse, Paris).

M. Michel Coissac contributes an interesting paper on the big advance made by the cinematograph in the several branches of education. (Cinéopse, Paris).

The Direction of the Travelling Chair of Agriculture has started in the Province of Parma an interesting series of projections for agricultural propaganda. (La Cinematografia di Milano, Milan).

The Pathé Enseignement Company has produced a film on the selection of milk cows. (Le Ciné Educateur, Lille).
The present position of the cinematograph and the value of the film for educational purposes is examined in a leading article. (El Debate, Madrid).

In an article entitled «Popular education and the Film» Herr Gustav Ulrich deals with the question of the cultural and the educational film. (Volksbildungarbeit, Teplitz).

M. Jules Marc deals with the problem of the film as applied to education and more especially with the psychic factor of «attention to the film», its characteristics, and how to arouse and maintain it. (Ciné Educateur, Lille).

This paper publishes a list of Chekoslovakian cinematographic concerns that have organized cultural Film Collections. (Volksbildungarbeit, Teplitz).

An article by M. Jules Marc deals with the value of the cinema as a means of education. (Le Ciné-Educateur, Lille).

M. Louis Jacob contributes a paper on the question of the cinematograph in secondary education. (Le Ciné-Educateur, Lille).

Dr. Eberhard Moes writes on the misapprehension current in Germany on the cultural film, which is too often confused with the documentary film. (Hamburgische Correspondenz, Hamburg).

A survey of the educational film in England calls attention to the improved conditions in its regard. (Motion Pictures, Washington).

The Bulgarian Government is organizing a travelling cinema service, on the same lines as that organized by the Luce Co. (Motion Pictures, Washington).

An article deals with M. Emile Veillemoz’s paper in the Temps on the possibilities of an agreement between book and film editors. (Comoedia, Paris).

The South Californian University makes use of films as a means of education and has set up a Museum of World Cinematography. (Der Montag, Berlin).

M. Katzigrass deals at length with the question of the cultural film and analyses the principal problems connected therewith. (Kino i Kultura, Moscow).

A Cinematographic Atlas containing all information on world cinematographic production is in course of preparation. (Kino i Kultura, Moscow).

A special commission has been appointed in Moscow to consider the foundation of a Cinematographic Museum. (Kino i Kultura, Moscow).

In an article entitled «the Dawn of the Cultural Film», Dr. Rudolf Harms illustrates the manifold possibilities of the cultural film in the several social domains. (Rhein-Mainische Volkszeitung, Frankfort).

Herr Willi Hein expresses the view that the talking film will play an important role in teaching. (Der Film, Berlin).

An article by Erwin Wolfgang Nack deals with the problem of photographing birds for the Cinematograph. (Reichsfilmblatt, Berlin).

A further article by Herr Karel Fischer deals with the organization and work of the Committee for the projection of educational films in Breslau. (Bildwart, Berlin).

A leading article deals with the question of the hire of educational films to Berlin Schools by the Municipal Film Archives. (Bildwart, Berlin).

Under the title «The Film Library» a description is given of a contrivance for adapting the pages of a book for serial projection on a cinematographic screen. (Je sais tout, Paris).
An interesting article by Dr. Hanser Rathenow deals with the question of instantaneous photography and cinematography of the capillaries in living man. (Kinotechnik, Berlin).

The John Betts Co. has produced a film dealing with English military history (Seventeenth Lancers). The War Office collaborated in the production. (Daily Film Reuter, London).

The Office Cinématographique Suisse, of Lausanne, is about to release an important documentary film on aviation and the services rendered by this new means of transport. (Comœdia, Paris).

The UFA Co. has produced a film entitled « Science confined within Books » which fully illustrates the Lexicon of the Brockhaus Publishing Company. (Ufa-dienst, Berlin).

Herr H. Lieberenz, of Berlin, who accompanied the Swedish explorer Sven Hedin into the African desert, has made a documentary film on the Gobi Desert. (Bildwart, Berlin).

The « Naturalfilm Hubert Schonger » of Berlin has released a film illustrating the transport of trees in the Alps. (Bildwart, Berlin).

Dr. Martin Rikli has made a documentary film, 11,000 metres in length, on behalf of the UFA Company, illustrating the ethnography, cultural and scientific development, and the zoology of Tunis. (Volkbildungsarbeiten, Teplitz).

Mr. Martin Johnson, who led the expedition into the virgin forests of Africa, during his four years stay in those regions took a number of films which are now collected together under the title « Simba, the King of Beasts ». (Ufa-Dienst, Berlin).

A film has been taken in a Leper Colony in Culion, Philippines, in which the roles were acted by the lepers themselves. (La Cinematografia, Milan).

The last scenes of the first documentary film of the UFATON have been taken in Neubabelsberg, in which a number of extremely rare animals are shown in their natural habitats. (Comœdia, Paris).

The Metro-Goldwyn Mayer Co. has produced an aviation film entitled « Icarus ». The American Government has allowed the staff and apparatus of the San Diego Aviation Academy and of the aeroplane carrier « Langley » to take part in the production of this film. (La Tarde, Bilbao).

The UFA Co. has released a film illustrating the life of stray animals in urban centres. This film is called « The Animals of the Metropolis ». (Hannoverscher Kurier, Hanover).

A leading article describes how the building of a giant steamer in the Weser naval shipyards was cinematographed. (Film Illustrierte, Berlin).

Herr Renhold Peting deals with the film as a substitute for educational travel. (Reichsfilmbllatt, Berlin).

The Chekoslovakian Ministry of National Defence has released a film illustrating army mountain manoeuvres. (Presse Prager, Prague).

Following on an agreement entered into with « His Master's Voice » Co., the Elstree Studios will bring out a film under the title « Wolves ». This will be followed by a film on « Beethoven » illustrating the life and the music of the great composer. (The Daily Telegraph, London).

A propaganda film is about to be published in New Zealand to make known its beauties and natural resources. (Motion Pictures, Washington).

The UFA Co. has completed a documentary film on the Panama Canal and its history. (Motion Pictures, Washington).
The Goswoienkino Co. of Moscow (attached to the War Commissariat) has produced a film on the life of hunters in Polar regions. (Deutsche Film-Zeitung, Munich).

An operator of the P. C. D. Company has taken a film of the last voyage of the Zeppelin to America (Film Kurier, Berlin).

The German Pharmaceutical Association has had a film made, entitled « German Chemistry ». (Film Kurier, Berlin).

The African explorer, Hans Schomburg, is organizing an expedition into ex German East Africa during which a number of films will be taken. (Deutsche Filmzeitung, Munich).

In an article entitled « The Spartans of India » Mr. Himansu Rai describes the inhabitants of the State of Mewar, their customs and usages. This documentary film is the work of the UFA Company. (Ufa Feuilleton, Berlin).

A new film entitled « Dice casting » illustrating Indian life and customs, is described in a leading article. (Berliner Lokalanzeiger).

A documentary film has been produced on the breeding of cows in East Russia. (Ostpreussische Zeitung, Koenigsberg).

The Vitagraphic Pictures Inc. is about to despatch a cinematographic mission into the Argentine Republic to film certain industrial aspects of that country. The mission will visit also Uruguay and Brazil. (La Pelicula, Buenos Ayres).

« Angels of Hell » is the title of a film devoted entirely to military aviation. 80 aeroplanes and one airship will take part in it. (La Puntalla, Madrid).

The First National Vitaphone will release a sub-marine talking film which will reproduce all the sounds that can be registered in the depths of the sea. (Oester Film-Zeitung, Vienna).

The UFA Co. of Berlin is taking a documentary film entitled « The Microscope as Detective » demonstrating the vast differences in perception between the human eye and the microscope. (Filmwoche, Berlin).

The celebrated explorer, Dr. W. Filchear, has taken a film in Thibet to which he gives the title « On mani padme lam ». (Munchener Neueste Nachrichten, Munich).

An extract is given from the book on the Gorilla by Mr. Ben Burbidge, the cinema operator of the Congo Film expedition to study the life and habits of the gorilla. (Chemmicker Tageblatt, Chemmik).

A Film entitled « Cleanliness » in the Animal World » has been produced by the Universum Film Co., illustrating hygiene among animals. (Bildwart, Berlin).

The Fox Film Corporation of New York has produced an interesting documentary film on theantarctic regions entitled « The North Pole Tomb ». (Bildwart, Berlin).

The Emelka Kulturfilm of Munich has released a film illustrating the new systems for road building and another illustrating the building of a bridge on the Ammer. (Lichtbildbühne, Berlin).

The UFA expedition has taken a film in Africa, entitled « Pari » in which venomous serpents taken in the virgin forests are shown. (Feuilleton Ufa, Berlin).

The explorer Von Dungern is taking a film at the source of the Amazon illustrating a hitherto unexplored region. (Film Kurier, Berlin).

Dr. Ado Buessler, directing the Great Chaco expedition, in the heart of South America, is taking a film illustrating the primitive life and customs of the ancient Indian tribes. (Film Kurier, Berlin).
Mr. Jean Benoit Levy, assisted by Madame Epstein, has taken a film entitled « First Aid before the doctor arrives ». (La Critique Cinémato- graphique, Paris).

M. P. Dreyfuss Lemaître, comments on the meeting held in the great Amphithéâtre of the Faculty of Medicine and states that in the course of this meeting a film was projected (by means of a special luminous motion slide) for the purpose of objectifying the normal and abnormal rhythm of cardiac contractions. (Mon Ciné, Paris).

Dr. Ulrich K. T. Schultz, director of the Ufa Biological Section, contributes an article on the representation of microbes on the screen. (Hamburger Fremdenblatt, Hamburg).

The Trader Horn Africa Expedition of the Metro Goldwyn Co. has organized an expedition to take films of the Murchison-on-Falls (Uganda) region, where a very grave form of sleeping sickness prevails. (Neue Zürcher Nachrichten, Zurich).

An article published in the periodical « La Rason » of Buenos Ayres deals with the problem of the film as applied to astronomy. (Le Figaro, Paris).

Herr Michel Gesell contributes an article on the medical influence of the cinematograph consequent on visual illusions. (Badische Presse, Karlsruhe).

The abolition of vivisection in England is dealt with in an interesting article, which suggests that many experiments are being effectively replaced by films. (Hannoverscher Kurier, Hanover).

The Emelka Kulturfilm has brought out a film on the treatment of carcinoma by means of radium and X Rays. This film also illustrates the treatment of the invalides. (Lichtbildbühne, Berlin).

SOCIAL ASPECTS OF THE FILM

M. Maurice Rouvroy contributes a long psycho-criminological study on the public cinema and childhood, with special reference to the instructional film, the censorship, physical exhaustion, the influence on criminal tendency, and the educational screen. (Revue Internationale de l'Enfant, Genève).

A criticism appears on the article in the « Medical Officer » of London on « Children as Cinema Actors ». (Revue Internationale de l'Enfant, Genève).

There is an interesting criticism on the article recently published in the review « Maternité » by Monsieur L. Theodore, Professor at the School of Higher Social Studies in Paris on the subject of « The Public Cinema and Minors ». (Revue Internationale de l'Enfant, Genève).

Madame Elmine Pantalaki deals with the problem of the cinema and minors and analyzes the problems of the Greek Cinema. She mentions the foundation in 1927 of the Society for Promoting Cinematographic Shows for Children. (Revue Internationale de l'Enfant, Genève).

On the proposal of the Cesare Beccaria National Association, the first Italian Childrens' Tribunal has been instituted at Milan and has been working for some months past. (Revue Internationale de l'Enfant, Genève).

A petition has been filed with the competent authorities in England for the abolition of the Censorship. (L'Ami du Peuple, Paris).

The French Union of Cinema Theatre Directors has set up a permanent Board of Arbitration for the purpose of settling disputes in the profession. (La Cinémato-graphie Française, Paris).

Prof. Elsa Schücker writes on the importance of the cinema in connection with the young. (La Cinémato-graphie Française, Paris).
An English school master writes in criticism of the laxity of the censorship and of police regulations which allow children to attend cinema shows that are fit for adults only. (*The Times, London*).

Jean Morienval writing on the subject of the «Employment of Minors in the Cinema and in Theatres», refers to the French law passed in 1925 which raises the age limit at which children may be so employed from 13 to 15 years. (*Le Citzopie*, Paris).

The Censors of Maastricht and Sittard have ordered two cinema halls to be closed because immoral films were exhibited therein. The Dutch Association of Film Hirers have had the cinema theatres in both these cities closed by way of protest. (*Film Daily, New York*).

The Senate of Wisconsin has not passed the Bill for allowing Public Spectacles on Sundays. (*The Film Daily, New York*).

A leading article deals with the difficulty of preventing minors from attending spectacles in public cinemas which are suited to adults only. (*The Times, London*).

Speaking at the International Catholic Congress at Munich, Dr. Canziani referred to the question of the moral and physical dangers which beset minors employed in cinematographic productions. (*Italia*, Milan).

The Rev. D. R. Jones Falconer Fraser affirms that the cinematograph does not incite the young to crime. (*The Film Daily, New York*).

Mr. Charles E. Milliken, Secretary of the Motion Picture Producers and Distributors, expresses the view that, notwithstanding the efforts made by the American film industry to organize special programs for the young, a great responsibility must always rest with the parents in the choice of suitable spectacles for their children to attend. (*Josy Journal*, Cairo).

The Japanese censorship prohibits the projection of scenes in which kisses occur. (*Kinematograph*, Berlin).

The City of Montreal has decided to extend censorship to posters and photographs. (*The Film Daily, New York*).

Mr. Grant M. Utson will lay a Bill before Congress at its forthcoming session demanding the «economic and political» censorship of all films intended for exportation. (*Prager Presse, Prague*).

Mural posters announcing educational cinema shows are exonerated from taxation in France. (*O. C. E. N., Lille*).

The Ministry of Fine Arts having been abolished in Rumania, all questions connected with cinematography, broadcasting, etc., have devolved on the Ministry of Public Health. (*Lichtbildbühne*, Berlin).

Señor I. G. Veraz Sormanini contributes a very interesting article on the moral improvement of the cinematograph. (*El Matí*, Barcelona).

Frau Maria Lazar contributes a thoughtful article on the question of the employment of minors by the cinematograph. (*Der Tag*, Berlin).

The Soviet Commissioner of Education has issued a decree requiring all cinema advertisement posters to state the length of the film announced, the time taken by projection, etc. (*Prager Tageblatt*, Prague).

Mr. Clarence Darrow, an ex-Magistrate, is the leader of the movement in Atlantic City against the prohibition of Sunday entertainments. (*Exhibitors' Herald World*, Chicago).

An article deals with a recent public ation in the «Echo de Paris» in which Mlle Andrée Wanda sets forth her ideas on the cinematograph for children along the lines adopted by the Childrens' Theatre. (*Conseodía*, Paris).
Herr J. I. Heifetz, a Professor at Leningrad, publishes a comprehensive study on the question of Copyright in the Soviet Republic. *(Droit d'Auteur, Berne).*

M. Jean Bénoit Levy has finished his latest film « Maternity » dealing with the general principles of social education. *(L'Ami du Peuple, Paris).*

An interesting article deals with the question of censorship in India. *(Lichtbildbühne, Berlin).*

Dr. Fritz Wertheiner, General Secretary of the Institute of Germans resident Abroad, deals with the cinematograph considered as a connecting link between persons of a given nationality settled abroad and their compatriots at home. *(Film-Kurier, Berlin).*

The French Ministry of the Interior has sent orders to all the Police authorities of the Republic to remove the posters stuck up by the Légue pour la défense de l'Idée Française, entitled « France colonized by the American Film ». *(Ciné Journal, Paris).*

The new British « Hygiene Society » has released a film demonstrating the immense advantages to public health of the observation of the general laws of hygiene. *(Con vocis, Paris).*

A leading article contends that films representing crimes often exercise a moral and educative influence, by reason of the normal tendency in mankind for good sentiments to prevail over bad ones. *(Tremonia, Dartmund).*

A leading article analyzes the new Russian film « A Fight for Paris » which, while most remarkable from the technical standpoint, is nothing more nor less than a communist propaganda film. *(The Daily Film Renter, London).*

Dr. Albert Hellwig, of Potsdam, describes the penalties contemplated by the new German Censorship Law. *(Kinematograph, Berlin).*

A leading article deals at length with the question of the censorship in Germany and police regulations, especially in regard to minors, etc. *(Berliner Tageblatt, Berlin).*

Germany is about to codify all the different regulations throughout the Reich on the exclusion from cinemas of children aged under 16 years of age. *(The Film Daily, New York).*

Sound-Film apparatus has been installed in Sing-Sing Prison (United States) for the projection of films aiming at the social re-education of the prisoners. *(Hebdo, Paris).*

An interesting article deals with the question of the social influence of the cinematograph in Japan. *(Bourse Egyptienne, Cairo).*

A sort of Film Ministry has been created in America. This department will examine the experiments made in the Government laboratories in order to give the producers gratis information on all matters calculated to improve film production. *(Ciné Journal, Paris).*

Dr. H. Roon, of Berlin, contributes an interesting article on the question of sound films as an auxiliary to medicine, jurisprudence, and criminology. *(Kinotechnik, Berlin).*

Dr. Karl Leibig, of the Munich Censorship Office, contributes an article on the censorship of films in Germany as contemplated by German legislation and as actually exercised. *(Allgemeine Rundschau, Munich).*

**RELIGIOUS FILMS**

The Alfa Film Corporation is contesting the censoring of the film on « Martin Luther » in which certain scenes dealing with the purchase of absolution were ordered to be excised. *(The Daily Film Renter, London).*

Dr. A. Hättenschwiller describes the cinematographic work carried on by the
Catholics in Switzerland, and points out how this is limited by lack of means. (Voralberger Volksblatt, Bregenz).

Herr Ernst Mandowski devotes a long article to the study of the several films released up to the present dealing with Biblical subjects. (Berliner Tageblatt, Berlin).

The Secretary of the Protestant Alliance expresses the view that the public has a right to be informed of the reasons for which the exhibition of the film «Martin Luther» has been prohibited. (The Daily Telegraph, London).

In an article entitled «The Catholic Church and the Cinema», Canon Raymond states that the so-called «moralizing» films ought to be proscribed from public cinema halls because they don’t exercise the slightest moral influence. (Ciné Journal, Paris).

«The Churchman», the organ of the American Episcopal Church, has published an article criticizing Mr. Will H. Hays. This criticism is connected with the attacks of which Mr. Hays was the object at the Congress of the Religious Press at Washington. «The Churchman» contends that the cinematographic industry is in no way concerned with moral and religious principles. (El Sol, Madrid).

An article is contributed on the film activities of the Belgian Catholics and the report of Canon Brohe, who maintains that the Belgian Catholics ought to endeavour to counterbalance the Pagan tendencies of American film production. (Film Kurier, Berlin).

An interesting lecture by Dr. Hans Wieg on the subject of «The Film as an Economic and Cultural Factor», describes the course that ought to be pursued by Catholic Film action. (Film Kurier, Berlin).

An interesting paper by Father Friedrich Muckermann deals with Catholic principles in connection with the Film. (Reichsfilmblatt, Berlin).

The Friars of the Monastery of St. Francis, near Milan, have released a film reproducing chants and liturgical ceremonies, which it is intended to project in the presence of the Pope. (Comedia, Paris).

TECHNICAL QUESTIONS

An interesting series of articles by Marcel l’Herbier, Abel Gance, Henri Fescourt, Henri Roussel, Jacques de Baroncelli, Germaine Dulac and Henri Chomette, deals with the different methods used for the development of sound films. (Le Cinéma de Paris).

Professor E. Moscone puts forward Italy’s claim to be the first inventor of the synchronized film. (Rassegna Fotografica, Milan).

Dr. C. E. K. Mess, Director of the Scientific Department of the Kodak’s Amateur Section, explains the uses of 16 mm. films. (Il Progresso Fotografico, Milan).

An article by Herr Ewald Jahn deals with the function of convertor groups in cinema projections. (Kinotechnik, Berlin).

An article by Dr. A. Klage studies the movement of electrons in vacant and gas-filled spaces. (Kinotechnik, Berlin).

Comprehensive details are given in regard to Mr. Spoor’s invention known as the «Giant Plastic Film». (Kinotechnik, Berlin).

Herr Hans Pander writes on the technical perfection of the 16 mm. projectors of the De Vry Co. of Chicago. (Kinotechnik, Berlin).

A study on the taking of panchromatic films is reviewed in this number. (Photographische Industrie, Berlin).

An interesting article is devoted to an examination of the various technical problems of the synchronized film produced in different languages. (Licht-Bild-Bühne, Berlin).
A series of articles deals with the problem of cinematographic "faking". (La Publicidad, Barcelona).

A leading article deals with the reason for which the synchronized film does not always reproduce sounds faithfully. (Harrison's Report, New York).

Mr. Leonard Donaldson has published an article in the «Morning Post» suggesting the use of the film in examinations for pilots. (Kinematograph, Berlin).

Ordinary chemistry has found its use also in cinematography, since by its means phantoms can be represented on the screen. (La Tarde, Bilbao).

A study on the technique of film advertisements appears in this paper. (Film Kurier, Berlin).

A leading article gives a list of the several ways of regulating illumination in order to obtain a perfect rectangle on the screen. (Le Fascinateur, Paris).

An interesting article deals with the filming of high frequency images by means of the Ueber Zeitlupe. (Frankfurter Oder Zeitung, Frankfort).

Mr. J. H. Goldberg examines the technical problem of colour effects in cinematography. (Exhibitor's Herald World).

Mr. R. E. Farnum examines the technical problem of illuminants. (American Cinematographer, Hollywood).


An article by Mr. Joseph Dubray deals with the question of the synchronized film. (American Cinematographer, Hollywood).

Dr. Diippo Kramer publishes a study on the sensitiveness of bromide of silver. (Photographische Industrie, Berlin).

M. F. De Marcé contributes an article on the invention of acetate of cellulose and states that the process of its manufacture being common property, anyone is able to make films of this kind. (Ciné journal, Paris).

Mr. Leslie E. Cuffe contributes an interesting article on astronomical photography. (American Cinematographer, Hollywood).

Dr. L. Busch, writing on the exhibition of films by amateurs, explains various methods of obtaining perfect images on the screen. (Kinematograph, Berlin).

An experiment has been made in England of the new system of films of variable dimensions. (The Daily Film Renter, London).

An illustrated article deals with the question of lamps for taking sound and panchromatic films. (Film Atelier, Berlin).

A striking article deals with the question of taking sound films by means of transverse line phonograms. (Kinematograph, Berlin).

Mr. Howard H. Fenner has invented a new safety mechanism which will be put on the market by the Industrial Development Co. In case of the film splitting, this contrivance automatically stops the projector. (The Film Daily, New York).

Mr. Edmisson has invented a new apparatus for 16 mm. sound and talking films. This apparatus is known as the Cinemaphone. (The Film Daily, New York).

Mr. M. Ambard contributes an article on the invention of Mr. Arthur C. Hardy, the Photoelectrical Colour Analyzer, the purpose of which is the rapid measurement of colour on reflector surfaces. (Revue Optique, Paris).

An inventor at Hollywood states that he has discovered a method for produc-
ing films of double the normal length which can be exhibited by means of an ordinary projector. (American Cinematographer, Hollywood).

The Eastman Kodak Co. has set up a laboratory at Hollywood which will be placed gratis at the disposal of cinematographic experts for the purpose of their studies and research. (Rivista Italiana di Cinotecnica, Rome).

A leading article deals with the progressive development of the Cinematograph from 1923 to the present day. (Cinema Suisse, Montreux).

An interesting article deals comprehensively with the changes produced in Japan in all spheres and especially in architecture by the cinematograph. (Berliner Börsenzeitung, Berlin).

Herr Georg Otto Stindt deals with the problem of plastic projections in the future. (Film Kurier, Berlin).

The local authorities in Northumberland are making great use of the cinematograph for the purposes of teaching, and have set up screens in a number of schools. (The Daily Film Renter, London).

An interesting study is published on the German instructional and publicity film. (Lichtbildbühne, Berlin).

Plant is being set up in Milan for the transmission of film images. (Il Corriere della Sera, Milan).

M. Albert A. Greanac, a Chicago Optician, states that he has invented a system for television by means of orange-coloured rays. (The American Projectionist, New York).

An interesting article deals with the rationalization of the cinema industry in Russia. (Kinematograph, Berlin).

Prof. Karolus claims to have solved the technical problem of teletransmission. (Neue Wiener Journal, Vienna).

Señor Jose Antonio De Artigas has given a lecture at the Royal Academy of Exact Sciences at Madrid on the «Automatic reproduction of Colours on the Cinematograph Screen». According to the lecturer, the problem of automatic colouring of any black and white film is now definitely solved. (Comoedia, Paris).

Various experiments in stereoscopic films have been made in the Cinematographic studios of Brooklyn in accordance with Mr. Randall’s system. (El Debate, Madrid).

Mr. Hickow, Head Operator at Hollywood, states that it is possible to obtain stereoscopic effects by a discriminating distribution of half tones. (Sound, Hollywood).

An interesting article by Dr. Patzelt of Berlin deals with the theory and practice of projector illuminants. (Kinotechnik, Berlin).

Mr. Harry Ivarson Blommenholm, of Oslo, contributes an article on the new optical commutation projectors, according to the Gunnar Nilsen Veg system. (Kinotechnik, Berlin).

An interesting article by the Russian, S. M. Eisenstein, deals with the problem of 3-dimension cinematography. (Film Kurier, Berlin).

Dr. LUCIANO De FEO — Editor and Responsible Manager.

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In few spheres of social activity do we find such freedom and boldness of opinion and criticism as in that of the cinematograph. Hitherto regarded by most people merely as the most accessible, the cheapest, and the most popular form of amusement, the cinema has been treated with scant respect, and its anarchic development has proceeded pari passu with a general lack of purpose and a feverish anxiety to doctor its real or supposed ills by treatment which has mostly proved to be negative and ill-considered.

We do not dispute that this negative policy, always inspired by the best intentions, has been conscientiously suggested by competent persons who genuinely believed in the existence of a cinematograph bristling with defects, but which could be set right by fetters and remedies. This attitude displayed but scant faith in and lesser understanding of the so-called seventh art and a feeble intuition of its means and possibilities.

History ever repeats itself. In this problem, as in the history of labour, we are bound to pass through the usual phases: laissez faire, laissez passer; and lastly a muddlesome interference, which claims to set matters right. From this we shall gradually progress to a conscious and considered, though meticulous, vision of the problem, and lastly to an organization of producers, hirers, and consumers, which will avoid, as far as possible, any rigid official intervention and commit the care of constructing the cinema of the future - so much desired by all - to those actually concerned in film production.

The intervention of the public authorities in the negative policy so far pursued with respect to film censorship has taken the following forms:

Restrictions on Production and Exhibition:

Censoring: free admittance to the exhibition of films passed by the Censor, or admittance subject to certain restrictions.
Restrictions on admittance: age limitations. Special certificates (films pronounced fit for children, either alone or accompanied by parents or guardians). Special spectacles.

Special Restrictions (with respect to the conditions of exhibition, etc.) — Lighting of the halls. Supervision of hygiene and moral behaviour. The actors' work. Censoring of advertisements, etc.

The third of these groups offers no special interest nor any insuperable difficulty in connection with the cinema. It belongs to the public authorities to provide, by the normal means at their disposal, for carrying out the formal rules in regard to exhibition.

This is not the case with the first two groups, that is to say, the measures so far adopted by the authorities — either on their own initiative or at the more or less general request of public opinion — especially with respect to the exercise and efficacy of the censorship and the protection of children in cinemas, a problem on which we should like to express our views to the readers of the International Review.

The censorship is, in brief, the authority that claims the prerogative to oppose the free play of any activity in the way of freedom of expression and opinion. The differences in public opinion in this regard depend on the constitutional or legal concept of sovereignty prevailing in the various countries, from those which, by general consensus of opinion, repudiate any form of censorship, to others that submit all forms of expression to it. The essential thing is that some general principle should be established and that this should be generally recognized and enforced.

Now, is it possible to establish a dogma that will command sincere and genuine respect in art (or rather aesthetics), in education, scientific pedagogy, etc.? Does the universal character of the cinematograph justify a belief in the existence of some general principle or dogma by which the authorities of all countries will be able to defend their national spirit?

I remember hearing the valiant Austrian champion, Dr Ude, declare at a congress organized by the campaign against obscene literature that « anyone who was not an idiot knew perfectly
well whether a thing was pornographic or not». A truly naïf statement, which even in reference to a subject with which the general public is pretty familiar, did not satisfy his hearers as affording a sound criterion for judging erotic art.

The public authorities, however liberal they may claim to be, must justify and defend the censorship, considered as a legitimate attribute of the sovereign power.

M. Poucet, the French Under Secretary for Fine Arts, in a speech he delivered before the Film Authors’ Society, after declaring that he did not approve of the restrictions imposed by the censorship, added: «It is however necessary for the State to exercise control over films. We cannot run the risk of seeing our screens given over undefended to the exhibition of films which, under a seductive aspect, would menace the health of our national and social organism and demoralize the people.»

After citing such valid evidence, I cannot but call to mind the Ville Lumière, («Paris c’est une blonde...»), Berlin, New York, Madrid, with their infinite temptations and attractions, their dancing halls, music halls, the brilliant and frivolous shows of their reviews, their illustrated papers fluttering like butterflies over the garden of Bocaccio, and all those other factors which enervate the national and social organism of all countries, unchecked by the censor, convinced that the self-restraint of the citizens themselves is the most efficacious form of moral restraint. My illustrious compatriot, Ramón y Cayal, has expressed this conviction better in these words: «The will itself is the strongest stimulant of the will». And before his time, it was said: «The evils of freedom are cured by freedom itself.»

I am myself convinced that certain films, and all films under certain conditions, may have a pernicious influence on the minds of the young and not of the young alone; but I do not think we should attribute an excessive ascendancy to the film as compared with other mediums of ideas and feeling, such as the press, the theatre, novels, etc. I am aware that some persons who have devoted themselves to studying the moral and scientific aspects of the question take a view contrary to my own; but I fail to under-
stand how it is that so far no penetrating and exhaustive enquiry has been made to show, by irrefutable data, gathered by authorities free from all anti-cinema prejudice, why preliminary censorship should be of two different kinds: one almost exclusively political for the press, for instance, (which tells children all about robberies, adulteries, frauds and deceits, the hatred and war between classes and peoples...) and another of a generally rigorous character for the cinema (which does not yet penetrate our homes for one penny !) This enquiry should not be limited to the pernicious influence of the film (and who, indeed, is to prove that it will be pernicious in many instances ?) but should take into account also the formidable current of human energy and social good that the cinema has created between the different peoples. The United States are masters in this type of enquiry, yet despite of this and of their exemplary protection of childhood, they have not yet found the best way of safeguarding the young at cinema spectacles.

Signor de Feo, in a document pregnant with ideas (the statement laid before the fifth session of the Committee on Child Welfare) supports my opinion that three mistakes are currently made in censoring the films viewed by the young.

These consist in a lack of psychological, pedagogical and pediatric competence on the part of the censors; the failure to realize, when fixing age limits, how difficult it is to determine a priori when the psychological conditions characteristic of childhood cease; and the problem of the so-called «foreground ». I may add that I have found other serious basic defects in the criteria pursued by the censorships: such as excessive nationalist scruples and a lack of regard for the child's freedom to express his own views within reasonable limits.

From the standpoint of efficacy, the censorship seems to me almost akin to the old system of «lazarets», and the idea that cholera could be stamped out by prohibiting for a time entrance into infected areas. Of such a purely negative efficacy is the use of the scissors in a field of production which cannot be limited, but should be developed and purified by means of a rigorous selection, which only the education of public opinion can effect.
While the water is contaminated at the source and should be purified there, the censors are busy catching microbes on official forms and binding them up with red tape! The partisans of film censorship defend it as the most practical means of averting worse evils and the only possible defence of the rights of the public and especially of the child. But they lose sight of the principal factors of the educative and social problems of the cinema:

1. The fact that, apart from the official censorship, which may certainly save trouble to parents and teachers, it nevertheless behoves the latter to judge whether the children under their care should or should not attend the cinema, according to the child’s individual characteristics.

2. That the greatest evil of all would be to abandon the cinema to itself; the whole question really consists in finding the best means of purifying and directing it.

For our own part, and from a purely practical standpoint, in the interest of the common weal which would require the public authorities to exercise paternal control over all classes of citizens, regardless of age or other distinctions, we would favour a general system of control (such as has recently been adopted in Italy) over all forms of public spectacles, and prohibiting in precise and general terms all shows liable to offend the fundamental principles on which the life and actions of the community rest.

Under such a system all those concerned, from producers, film manufacturers and impresarios to parents, know once and for all what is allowable, no exceptions being admitted, whether in regard to arbitrarily fixed age limits or other circumstances. Let us not fight shy of new ideas or new systems... which, by association of ideas, recalls to my mind how, in my own Country, a distinguished President of the Council very nearly brought about a political crisis by his opposition to the precocious passion of the King of Spain for automobile driving.

While there are many partisans of film censorship, there is no lack of opponents either. One of the most convinced of these, Diamant-Berger (1), declares that the censorship is an outrage

on commonsense and a stimulus to hypocrisy. According to this writer, the censorship has done as much damage to the French film as the war did, for he considers it more dangerous than useful to give the constituted authorities the power to enforce their views. « Censors » he says « are but human, and professional bias rapidly urges the mildest of men to pursue with sadic avidity everything that he can possibly prohibit »... « It is an obvious absurdity » he concludes « to look for sensible results from a policeman ».

The chapter devoted to the censorship in this book is of great critical severity, yet we must recognize that Diamant-Berger draws a line between the cinema and the protection of childhood, and allows that it may be well to prohibit children going to the cinema unaccompanied by their parents — an extreme solution which, apart from the difficulty of applying it, would place the cinema in an unfavourable position as compared with all other possible agents of evil, and would make it seem all the more desirable to the child, like all forbidden things. Adam was no child and yet he succumbed to the forbidden fruit.

In many countries where a censorship system is in force, (I appeal to the loyal testimony of all) the public does not sympathise with or support it, nor does it feel protected by it, and it devises systems of its own to make up for its real or imagined shortcomings. The « Dossiers du Cinema » in France furnishes an example of this. The fact is that a mere official censorship, unsupported by public opinion, which falls back on official wisdom, tends to become a kind of customs house through which there filter in contraband influences and goods which, being apparently unobjectionable in their volume, are all the more insidious. The example offered in respect of drugs and pornographic literature does not encourage us to place blind reliance in official action.

It would not, however, be fair for me to overlook the fact that many competent persons have assured me that in some countries the censorship laws yield good results. But neither can I forget the evidence given by the woman Doctor, Delcour, a member of the advisory commission of the Belgian Junior Red
Cross Society, in which she stated: «It would appear that the censorship is in all cases ineffectual... To debar children under a certain age from going to the cinema is an advertisement for the condemned film in the eyes of children above that age, and it must be admitted that whatever is dangerous for a youth of 15 years of age is in all probability equally so for a youth of 17 », to which M. Humbert added: «the greater number of the persons consulted consider that the censorship makes it possible to eliminate at least a part of the harm caused by the cinema theatre ».

Lastly, let me recall that the illustrious Senator Posner, with characteristic sincerity, recounted to us on one occasion in the Genevan Committee the numberless and clever methods whereby the children in Warsaw eluded the regulations that debarred them from attending the cinema and, for my own part, I frankly declare that in my own country the mild regulations in this domain are not obeyed because they are not enforced. That such facts as these cannot be adduced to the discredit of any particular country is confirmed by the fact that in the United States and Australia — both countries in which the law is observed with the greatest respect and where a number of acts have been passed to restrict the admittance of children to cinemas — the number of children who frequent them is exceptionally high: 54 % of the children in Australia go to the cinema regularly once a week at the least, and the remaining 46 % per cent go there from time to time. In the United States 25 % of the children aged less than 12 years go regularly to the cinema, and 37 % of the audiences in country districts consists of children beneath this age, as shown in the de Feo Report to the Committee on Child Welfare.

Now, to pursue this argument a little further, we may ask whether the 31 countries out of 47 which (as shown by Document C. P. E. 134 of the Genevan Committee), have passed special measures regulating the admittance of minors to cinema shows and the selection of the films shown in their presence, have achieved any practical results in protecting the young from the pernicious effects of the film? In dealing seriously with social problems such as this, it behoves us to judge impartially, especially when considering the practical experiences of interference.
The Inquisition is probably the most perfect and typical example of censorship that history offers us. Yet, the noble anxiety to preserve intact the treasures of the Faith, though supported by almost unanimous opinion, could not, even by the sacrifice of human life, prevent ideas from being expressed and spreading. I neither judge, nor comment; I merely record facts.

In selecting as the subject for this article the limitations which government interference imposes on the cinema, in its more or less successful effort to purify it, my main object was to call attention to what I regard as possible deviations from the duties which the public authorities and public opinion can practically carry out in this domain, if they wish to make use of the film for the advance and improvement of mankind.

The cinema is a fairly faithful reproduction of life. Whatever we offer it — virtue, vice, heroism, baseness — the luminous screen gives back to us. Let us make life more moral and more beautiful, let us raise the tone of social feeling, and the screen will reflect our efforts brilliantly.

I do not suggest that the public authorities should divest themselves of powers they consider necessary, so long as they use and do not abuse them, or create an obstacle to evolution and progress. Although I am no partisan of systems that denote a lack of public opinion and public spirit, I nevertheless accept the need for their enforcement until such time as the general level of the cinematograph world is not such as to render them superfluous. This seems a long way off, but under the influence of the Rome Institute of the Cinema the right spirit may yet be formed through concentric ways — through the family, religious influences, and the peoples themselves.

My views of the question may be expressed as follows: create the educational cinema for the people and educate the people for the cinematograph.

Piero Sangro y Ros de Olano.
Marqués de Guad-el-Jelu.
Professor of Social Legislation.
When the first International Cinematograph Congress met in Paris in September 1928 under the auspices of the recently constituted International Institute of Intellectual Cooperation, the International Labour Office took part in its proceedings and laid a number of reports before the Congress. The Congress forthwith entrusted the execution of various definite tasks to the International Labour Office.

As an outcome of this Congress, an international commission on the educational film was set up in Paris, at the office of the Institute of Intellectual Cooperation; the I. L. O. was invited to take part in it, and accepted.

Meanwhile, a European commission on the cinematograph as applied to teaching was formed; this developed in time into an international commission, with its secretariat in Bâle. The International Labour Office followed its work with interest and took part in its various congresses.

Last but not least, on the generous initiative of the Italian Government, the International Educational Cinematographic Institute was created in Rome, under the auspices of the League of Nations; its statutes provided that the Director of the I. L. O. or his representative should take part in the proceedings of its governing and executive bodies on the same footing as the Secretary General of the League of Nations, the Director of the International Institute of Intellectual Cooperation, and the President of the International Institute of Agriculture.

It should, moreover, be recalled that long before the Congress of September 1926, the I. L. O. had introduced into its organization a modest cinematographic service and compiled a catalogue of films of «social» interest.

All this shows that the I. L. O. is present, and its presence is deemed proper and necessary, wherever the film, and more parti-
cularly the educative film, is in question. Why? Because, by its very essence and underlying principle, the International Labour Office must consider all questions which interest the worker, and because all workers are interested in the cinematograph and above all in the educational cinematograph.

The cinematograph is a multiform industry that appeals to many categories of vocation; to intellectual workers: scenario writers, scene directors (producers), managers, actors, scene painters and decorative artists, photographers, and chemists; to manual workers: machine operators and electricians; and «non manual» workers: projection operators, the employees of cinema halls, etc. Very special conditions of work, the regulation of which gives rise to hitherto unforeseen problems, apply to most of the above workers. The peculiarity and delicacy of these conditions are all the greater from the fact that the cinema employs a large number of women and children. The conditions of work in the cinema are hardly comparable to those prevailing in other places of entertainment: theatres, music-halls and concert-rooms. It is, for instance, difficult to conceive conditions more different than those of the work and general life of children employed in cinema studios and on the theatrical stage: night work, opportunities for study, risks of illness — no two conditions are alike. The cinema, moreover, has its own conditions of remuneration and arrangement of working hours; its specific vocational illnesses and risks of accident.

It is only natural that the I. L. O. should pay special attention to the peculiar labour conditions in studios; it has its duties towards film workers, as towards all other classes of workers. As far back as 1928, it laid before the Paris Congress a first preliminary report on vocational diseases in the cinema industry, and was requested by the Congress to pursue the study and to carry out others on the labour conditions of children employed in studios and on those prevailing in the industry as a whole. This enquiry is now in progress.

It is obvious, therefore, that this is a domain well within the competence of the International Labour Office and to which it
has very properly devoted its attention for some time past. The cinematograph interests the labour world, since tens of thousands of workers depend on it for a living.

But the cinematograph does not concern merely some particular category or categories of workers; it concerns them all. How? As a means of employing their leisure hours.

For the past quarter of a century, efforts have been devoted to reducing the worker’s working-day, so as to make it possible for him to find time for physical recreation and to cultivate his mind between the hours of work and of sleep; to enable him, in short, to live like a human being. Everything in the world’s social organization (and here we have the I. L. O. more especially in mind), as in its economic organization (and here we are more particularly thinking of rationalization) tends towards a rational and humane disposition of the working day that allows proper time for leisure.

As far back as 1924, the International Labour Conference opened its recommendation on the utilization of the worker’s leisure addressed to the States adhering to the Organization with these words:

« Considering that, by the adoption at its first meeting held in Washington of an agreement on the hours of labour, it (the Conference) aimed more particularly at ensuring to the worker, in addition to the requisite hours of sleep, sufficient time to do what he pleases, in exact accordance with the etymological meaning of the word «leisure»;

Considering that the worker can employ these leisure hours to develop, according to his own tastes, his physical, mental, or moral capacities, and that all such effort is in the highest interest of the advance of civilization .........».

To offer the worker the means of utilizing his leisure time is as much as to offer him the means of educating himself, cultivating his mind, and obtaining relief from his daily cares, imparting a touch of imagination and beauty to the terre à terre daily round of his labour and existence. Now, in the cinema have we not an unique instrument, capable of offering the worker the means of satisfying this triple need?
The desire to learn. — What better means is there than the documentary film for making him acquainted with the work of his fellows at the antipodes, the points wherein they differ and those wherein they are akin in their daily work, thus affording him a view of the diversity and of the unity of labour? What better means is there of imparting, without effort, the elements of science, of inspiring him with the desire to live healthily, to demand and observe proper hygienic rules in the workshop and, where necessary, to avoid accidents at work?

The desire to cultivate his mind. — The cinema offers the worker a daily opportunity, if he wishes it, to travel, without stirring abroad, a vision of the wide world, and the reproduction of the finest works of art; by the intelligent and faithful interpretation of literary or scientific works, it inspires him with the ambition to read and to know them.

The desire for diversion. — We assuredly have all workers in mind here, but more particularly the manual worker. What does relaxation from work mean to him? It means first of all physical relaxation; after eight hours or more shut up in the workshop, he requires exercise in the open air. After having worked certain muscles of his body — always the same muscles — for hours on end, he is able to exercise and strengthen them all, to aerate his lungs, to relax the strain on his heart. It means also mental relaxation. As regards food for the mind, nothing will ever replace reading and the opportunities for meditation arising therefrom, or a leisurely stroll through a museum at one’s own sweet will. A good gymnasium, a good library, a good museum — all these are precious things for the manual worker. The cinema will not replace them. But what valuable supplementary advantages it offers the worker!

It brings its own peculiar and powerful contribution as an auxiliary to the time-honoured methods of culture; the universality of its unspoken language, its gift of addressing itself to the most receptive and best developed of all our senses, that of sight; the faculty of appealing at once to feeling and intelligence, of suggestion as a step to understanding; in short it contributes what we may define as its facility of access.

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This, indeed, is the essential virtue of the cinema for the education of the workingman — at least under the prevailing conditions of modern economic life.

Gymnasiums, libraries, museums: how many workers are not deprived of these throughout their daily life, by the very conditions of their work? In big cities, the workman may enjoy these, or they are within his reach. But, reflect for a moment on the agricultural workers, scattered in small groups around a farm, at a distance from any big centre: where can they seek the library or museums to supply the modest mental pabulum they need? Reflect on the workers in factories, electric power stations, electric steel works, paper-works, mills, silk factories, etc., lost in the mountainous heights, close to the white coal mines (water-power stations) in the high table-lands where man chains the power of the torrents. There are no museums, no libraries (or only the most rudimentary) for these, no theatres, not even the animated spectacle of the streets, which is one of the main attractions of the big cities and perhaps one of the best schools for teaching the realities of life. Now, all these things which are lacking for the country labourer and the worker in the mountain factories are supplied him by the cinematograph. What are the requisites for this? A modest meeting hall, an inexpensive screen, projection apparatus costing a reasonable price, and lastly, a good film distribution system. As regards all the former factors, what little village, what country parish, what small factory organization — what big farm, indeed — has not got these within its reach?

As for the last factor — namely, a good film distribution and circulation system — many efforts have been made to provide for this in different countries. As far back as 1926, the International Labour Office, in the preliminary report on the cinema and the workers' leisure which it laid before the Paris Congress, summarized what had been done in this direction all over Europe, from England to Belgium and Russia, from the Scandinavian Countries to Germany, Italy, and France. The Office is just now bringing to a close a more comprehensive and highly encouraging study of this subject.
In a field such as this, everything depends on making up good programmes, where the useful does not encroach on the agreeable at the risk of becoming boring, and which provide the worker not only with the knowledge, but also with the entertainment that he needs; and in the convenient, practical, and inexpensive organization of the distribution, circulation and hiring of the films. It is not so much a question of production (for we already have a great number of good films of all kinds) as of setting up organisms capable of selecting the films, of drawing up programmes, and of managing the distribution and circulation thereof, right to the most isolated and abandoned groups of that big mass of consumers formed by the world of labour.

In this regard, the International Labour Office represents the «consumers». The International Educational Cinematographic Institute possesses all the necessary qualifications as «organizer» and «distributor». We doubt not for a moment that these two great organizations will work together in active and earnest partnership in the interest of the workers and — to cite the words of the 1924 recommendation — «for the progress of civilization».

FERNAND MAURETTE
Head of the Scientific Section of the I.L.O.
THE MARVELLOUS STORY OF IMAGERY
AND THE EDUCATIVE RÔLE OF THE CINEMA

Art is speech made visible
Dante.
The world is a book of images
Baudelaire.

(From the French)

We read in Holy Script this axiom for all teachers: «The letter killeth, but the spirit giveth life». But, since the advent of the cinematograph, it looks as though the living image had indeed spelt the doom of the letter, without encroaching on the essential part of the spirit.

Descartes’s words ring truer than ever: «we think in sensible images», and herein we find confirmed the precepts of the naturalist school and the reflections of Aristotle, Epicurus and Zeno: «Nihil est in intellectu, quod non prius fuerit in sensu». And S. Thomas Aquinas expressed himself in terms similar to the philosophers.

Such is the educative rôle of the cinematograph. But this amazing magician is equally capable of proving his excellence by the inversion of these formulae and of justifying these profound words of Chateaubriand: «We must lead the people by imagination to reality».

The screen demonstrates the power of the image, it consecrates the quest of ages; and solves the problem of the universal language which learned philologists have sought in vain.

And yet, in its present form, and despite the relative degree of perfection attained, the image still lisps somewhat, it is far from having attained to complete expression or the full development of its beauty.

But what a splendid beginning and what a lightning triumph! No invention of man has so rapidly conquered the continents, nor evidenced such universal power.
A short sketch of the history of imagery throughout the ages will not lack interest. First of all, let us define the cinematograph and enquire into its pre-natal history as well as consider what it is and may become.

If we consider it merely as the *enfant prodige*, born of the marriage of photography and mechanics, devised incontestibly by the Frenchman, Louis Lumière, of Lyons, then assuredly the cinematograph was born but yesterday.

But, in truth, it comes to us from far-off times and great distances, on the swift wings of light, but also by the slow vehicle of computations, of experiments that check or foster imagination, by the thorny route of discovery.

What is the cinematograph? A mere illusion; the surprising quickening of fragments of dead things, which take on a semblance of life, untruth transformed into factitious truth, the miracle of wizard light, a mass of fictions culminating in the strangest of realities.

We see, we believe, we are voluntarily deceived and most agreeably convinced.

Man has captured movement — that most elusive and fragile of contingencies; from this he has contrived to trace back to inner causes and define the forms thereof; he has seized the unseizable, for the moment has no more actual existence in time than the geometrical point in space.

Here action gives concrete form to thought; the states of the soul are expressed as much by gesture as by expression, by the mysterious language of light and shadow. Night and day have an eloquence of their own, no less than the play of physiognomy; this had to be revealed.

All this was done aeons ago in the simplest way possible.

One of our ancestors came forth from his cave one fine morning, and having made his way through the treacherous maze of the forest, he emerged into the sunlight. A strange being appeared at his side and dogged his footsteps, now dwindling to a dwarf, now growing to a giant. For a long time the puzzled ancestor regarded this image; he shook his fist at it in self-defence and it responded to his wrath.
Man had discovered his shadow and, all unwittingly, had made the cinema. Nothing, in fact, was missing: neither light, nor the object, nor projection on the screen of the earth, nor that essential condition, movement.

Our ancestor made his way further on to the spring; the mirror of the water was before him; he drew back, amazed.

A face rose from the depth of the waters towards his face, through the liquid transparency, and the trees and the sky surrounded it.

He could not understand this strange phenomenon, and it worried him. But he knew it to be his own face when he led his mate to the enchanted spring and beheld her too twice over, standing beside him in the still air and there again in the limpid water.

Thus man came to conceive the portrait, and to snatch at the dream which led in time to drawing, painting, and statuary, later on to photography and, all unexpectedly, the cinematograph.

Man felt less alone, when accompanied by his shadow or the effigy of his face. He came to take for granted a double existence down here; one tangible and one unreal. This was, no doubt, the origin of the Egyptian idea of the double and the Christian notion of the guardian angel.

This dream seemed so far removed from human possibilities that several religions forbade images, as evincing an ambition to imitate the Creator.

Now our ancestor returned to his cave. He seized on a bone, already sharpened as a weapon of defence, or a piece of flint he had detached with his hatchet, and he engraved on the rock his remembrance of the beings that surrounded him; firstly his dangerous foes of the forest, that he might recognize them and put his family on their guard against them.

With a stroke he evoked the image of the bear and the bison. This was, unquestionably, the first educational document of imagery. The rough drawings were indeed a means of teaching. Later on, man reproduced familiar animals, so as to exercise his imagination and decorate his retreat. Then he added colour,
tried hard to make his representation faithful, and even to master movement.

This is why he multiplied his lines in his effort to give the illusion of movement. At a more advanced stage of civilization, he endeavoured to decompose gestures, or else, without paying any heed to his model, he added legs and arms, as we see so often in Hindu art. Some persons have sought to discern symbols in the curious idols thus graven; we incline to the interpretation that this was an endeavour to reproduce life, whether it be in the seven-armed Buddhas or the coiled-up serpents that form a stand for him.

Some of the Angkor-Val bas reliefs seem to grow alive if we look at them while walking. The Boeroeboedoer friezes in Java unfold a chronographic story of the life of Buddha. The same curious effort to grasp movement is to be found in the Egyptian bas-reliefs and even in the hyeroglyphs. In the eastern frieze of the Parthenon, known as the frieze of the gods, there is a singular effort to analyse chronologically the movement of walking; this is also to be noted in the racing horses and the gestures of their riders, in the western frieze.

We might cite a number of examples in support of our theory: they are to be found everywhere in Rome, especially on the tombs and in mosaics. Look carefully at the sarcophagos of Alexander, discovered at Sidon in 1877, now in Constantinople, and the mosaic known as the Battle of Alexander, discovered at Pompeii in 1831.

Right back in these remote times imagery was cultivated, not only for aesthetic reasons, but also for educational. Artists contrived to conceive life in the suppleness of line and the modelling of form.

In primitive times, letters were unknown; they were preceded by the image, with the intention, as we have already said, of illustrating, informing, and teaching.

Ideographic signs were the first form of graphic images.

The letter alone kills, and that is why the illuminators were wont to illustrate the margins of their copies. They decorated their parchments with compositions more suggestive than the texts; beside the written lines we find a sort of still projection.
Teaching by images dates back to unsuspected origins, which it would be fascinating to recall in a comprehensive treatise on education.

The following passage from Anastasius has lost nothing of its truth with the passing of twelve centuries: «Some learned men» he said «take care to teach us that painting can reproduce all that history records and that it must be as clearly enunciated as speech; that writing and painting are indeed the same thing».

I could readily produce a hundred quotations in support of the superiority of the image for teaching. Let me quote the following very typical words of Saint Gregory of Nazianze: «To be an artist does not consist in laying a number of colours on a picture like flowers scattered in a field; the able painter is he who gives us real, living, speaking images».

Till the first century of our Era, the walls of churches, like the sides of the catacombs, were entirely clothed in painting, and by mosaics commenting maxims, even the ground was thus decorated; all this was for the instruction of the faithful.

The Synod of Arras, held in 1025, said that the images where-with the sanctuaries were decorated were the books of the unlettered: «Illiterati quod per scripturam picturae lineamenta contemplatus».

We need hardly point out the double mission of stained glass, often distributed, after the manner of films, and depicting a life, a miracle, a legend, or a Chapter of the Scriptures in a series of pictures. Angels unroll bands, like film ribbons, on which are displayed images underlined or surrounded by explanatory texts.

The stained glass windows projected and paraded their multicoloured images on the flags of the cathedrals. Lit up by the sun, they arrested attention and were pregnant with the most direct and resolute suggestion.

From its inception, the printed book emerged illustrated from the press. This is evident from the rich Vatican collection; for Rome had the honour of possessing the earliest celebrated presses, the Vandelm of Spires and the Jenson of Venice.

It is, however, a fact that imagery in schools served the purpose
only of agreeable, futile, or indispensable illustration, up to the close of last century. It was as though teaching remained an austere function and apart. Great pains were taken in commentaries and dissertations, while the value of easier and more efficacious forms of teaching were overlooked.

Great educators suggested nature study and object lessons, without themselves discerning the virtue of the image.

The magic lantern had a very singular career, restricted to mere amusement purposes and thus discredited, as was well nigh the case with the cinematograph, when it denied its true function and strayed into the domain of the theatre and fantasies of literary illustration.

Still projections for the purposes of teaching date back half a century; but they never went very far.

We must, however, here make mention of a precursor, and award him the honour of having been the first pedagogue by images. I refer to the Comte de Paroy, one of the Dauphin’s masters.

He explained in a remarkable manner to the Queen Marie Antoinette the advantages and amenity of lessons assisted by those glass slides which the Savoyard chimney-sweeps were wont to hawk about Paris to amuse the crowds.

In his Mémoires which are preserved in the Bibliothèque Nationale, we read:

«I suggested the magic lantern to the Queen, but she considered this ridiculous. True, Your Majesty, it has up to the present been in the hands only of ignorant clowns who go about the streets with their marmots; the subjects painted and shown on the glasses are on a par with their naïf commentaries; the more grotesque they are the more they make the children laugh. For a long time past, I have had the idea of ennobling this example and of making it subservient to childrens’ education.

«I have always been struck by the attraction that the magic lantern has for children and have thought that one ought to choose good subjects and to multiply copies by a special process, so as to be able to transfer the images onto glass. In this manner one could obtain a great number of images of the same object and distribute them at a moderate charge.
"One might represent all the subjects from sacred and secular history, the holy mysteries, mythology, natural history, and even mathematics. They should be accompanied by explanatory booklets, mentioning the works wherein more detailed and scientific elucidation might be sought.

"Schools and colleges would be glad to occupy their pupils in this manner at winter evening entertainments. A small contribution would enable the directors of such establishments to possess a considerable number of glass slides. A method of education such as this would spread from China to Canada, and I should be proud indeed if it might make a start with the education of his Highness, the Dauphin «.

These lines set forth nearly the whole programme of the educational film. In less precise terms, but with amazing foresight, Fenelon expressed the hope that new methods might be introduced into the schools. In his book, Traité de l'Éducation des Filles, we find the following reflections: "The child's mind is like a lamp lighted in a place exposed to the wind; its flame flickers continuously. A child asks you a question, and before you have had time to answer, his eyes have strayed to the ceiling; he is counting all the figures painted there, or the panes of glass in the casement. Ah, that we might have some means of making images file past him, and of stopping them so as to impress them on his mind! What rapid progress we should make!».

This means has been furnished us by the cinema in a manner surpassing our wildest hopes. The film synthesizes all that is most valuable in the image, all that can serve to train and educate the child, or promote social and moral education. Thus it achieves the object which our ancestor dimly discerned.

By the artifice of illusion, the cinema may be said to recreate life. It makes us understand the words of Masson: "The more we love truth, the more surely are we seduced by all that which takes on its semblance ».

The first, the real, the only worthy application of the film is to teach; all other uses are secondary, whatever the defenders of the mute art may claim. There is, indeed, no mute art, there
is no seventh art; I go so far as to contest that the cinema is in its very nature an art at all.

In any case, we are entitled to claim it as an unrivalled educator, whether for good or for evil, whether precious or despicable. It is up to us to use it for the good and the beautiful alone, these two qualities going hand in hand in the formation of character, the exercise of intelligence, and the development of the heart.

It is important that all films should instruct or fortify, forewarn or correct. We do not want dull pictures; far from this, they ought to arouse our curiosity, move us, make us laugh with enjoyment.

These conditions apply even to scholastic and documentary films; do not let us replace arid texts by crude illustrations. Let us provide attractions for all ages, for the improvement of all.

The three essential qualities for an instructional film, an educational film, or a film for social propaganda, are: truth, clearness, beauty.

It must be truthful, that is to say, accurate and alive; it must be clear, which means that it should engross, without tiring attention; beautiful, for all imagery appeals and interests by its aesthetic quality.

These three factors depend, moreover, on a fundamental principle, the *cinegraphic sense*, the condition *sine qua non* of movement, whether the object be alive or whether it take on the semblance of life by clever presentation and well calculated and artistic effects of light.

Both pedagogic and technical ability are essentials in the construction of a school film; a combination of knowledge and capacity but rarely realized.

In this study we must limit ourselves to pointing out general principles; and defer to a later article a more comprehensive survey of cinegraphic teaching, in its several aspects.

No one is able to create a good instructional or educational film unless he appreciates fully the value of the image and can give expression to all its persuasive eloquence.

Let us make no mistake, our methods of teaching call for complete renewal. It is a matter both of progress and of going back
to the past. The film carries the teacher back to the Socratic method and at the same time compels him to take up new processes, unknown till our own time. Contrarily to what is generally supposed, the screen addresses itself to all our faculties, to the imagination and to reflection. It is able to meet the present needs of overladen programmes, to solve the formula: quickly and thoroughly, but not without effort on the part of both teacher and pupil.

This pedagogy is founded on Horace’s wise maxim: «It is good to hear, but better to see. What enters by the ears has a longer way to go than what enters by the eyes, which are our surest and most faithful witnesses».

Films of a social tenour have the same exigencies and demand enormous psychological insight.

Whether addressed to the crowd or to the élite, the image must always be as precise as a well chosen word, so as to form measured phrases in good taste whose meaning is self-evident. To be boring is a fatal quality. The juste milieu must be sought between sermon and pleasantry.

There is another legend to be contradicted in connection with documentary and general culture films, which are supposed to be devoid of scheme and not to entail lengthy preparation.

It is a more difficult and more delicate matter to produce a good school, educational or social film, than to stage the most showy scenic super-film. We have hundreds of renowned and able producers; in the whole world we have hardly any authors of genuine instructive and educational films. There are but few indeed who have specialized in this line and who are armed with the experience of several years.

Another point that should be borne in mind is that there is a deplorable lack of excellent school and social propaganda films. The banal documentary film has been too much confused with the image for instruction.

Let us not hesitate to admit it: both children and the general public have too often been driven away from the screen by absurd and vulgar productions. Too many persons have improvised
themselves in this branch of the cinematograph and have discredited or paralyzed it by their irrelevancies.

For this reason we should like to see, especially in Europe, the few specialists belonging to the different countries grouped together, under the auspices of the International Educational Cinematographic Institute in Rome. In this manner we could safeguard the film we have at heart, and make it better known, more influential, and more widely diffused throughout the world.

In this way we should avoid mistakes, discourage the inept, and help the master craftsmen of this art.

The image, marvellously distributed on all the screens of the world, penetrating the minds of all, disseminating notions of science and morals, is symbolic of the modern book, the Book, which it is no longer necessary to translate into the different idioms.

We can never devote enough knowledge and enough money to make of it an instrument of pure truth, the messenger of peace and good-will, the mentor of mens' minds and the guide of their consciences.

Let us make for all men a magnificent book of images, to teach them their duties, to enlarge their virtues, and to enable them in an agreeable manner to beautify their lives by a common ideal.

Emile Roux-Parassac.
Correspondent Member of the I. E. C. I.
A popular educational film, to be effective, should not be restricted to mere instruction or information. Its aim is to touch and stir the souls of the indifferent. The dramatic form is the most suitable for making a lasting impression.

Seriousness of purpose must always remain apparent. But the stale and the dry are mortal enemies of all popular educational endeavours. The dramatic form is the most captivating to the spectator. The peculiar characteristic of the film, the achievement of the maximum effect by dramatic means, should be made the most of and should never be sacrificed to any pseudo-scientific demands.

Take, for instance, the subject of contagious venereal disease. The real facts, the cause and the method of transmission, the symptoms and possibilities of cure must of course be represented in the pure instruction film. But the psychic conflicts arising from such factors, such as the undermining of health and capacity for work, the ruin of family life, the peril to the children, all elements which have a decisive influence in the popular imagination, cannot be conveyed by a mere film of instruction. Only by means of dramatic elaboration is it possible really to convey to the masses this eminently important social hygienic problem.

Thus the doctor should have recourse to the screen drama, which is the only form of the popular educational film capable of achieving lasting effect.

Boredom is the arch enemy, to be avoided at all costs. There is a close link between the business of the film producer and the interest of the doctor who pursues social hygienic ends.

While the hygienic import of the film must be made apparent, and must even be present in the consciousness of the spectator
from the very beginning, the theme is only the skeleton. Like the amusement film, the instructive film should, above all things, grip and entertain the public. The motive, though dominating the dramatic action, should be subordinated in detail, being skilfully adapted and woven into the dramatic action.

The doctor's contribution in the development of a recreational film is quite different from what his task would be in a scientific film of instruction. He may be perfectly capable of assuming the sole responsibility for the direction of the latter. But it is the technical scene director whose competence as regards effect is decisive for the popular instruction film, for he is the expert, familiar with the ways and means of influencing the masses of film frequenters. Collaboration between the director and the doctor is requisite for a complete result. In this partnership the doctor's part is that of inner elaboration, the director's the production of the exterior impression.

Squeamishness and exaggerated reserve should be avoided. Clear terms, emphatic accents, stirring action are necessary, if in the space of two hours an idea is to be impressed on the inmost heart and mind of the spectator. The doctor's task is a two-fold one. Firstly, to supply the hygienic groundwork and its scientific bases; secondly, to make sure that the idea is neither falsified nor belittled. This is quite possible, even though he may subordinate its execution to the demands of the film director. Each party will hold himself in check in the interest of the general result. The dramatic embodiment has its limits where the sincerity and the applicability of the educational film would be impaired.

Perfect production, unity of direction and acting, and impeccable photographic technique are indispensable. Unless these conditions are fulfilled the spectator, accustomed to the perfections of the amusement film, will repudiate the film of instruction as second class and shoddy in point and purpose.

How should didactic ideas be conveyed? By the repetitive method of inserting short scenes in recreational films? Or by expression in a special dramatic film with a purpose? Although
the first method of short scenes introduced into the film drama may awaken fugitive interest and attention, they can scarcely ensure lasting effect. The scenes pass too rapidly. The spectator should be made aware from the outset of what is going to be shown him, and for this reason motion pictures devoted to the production of a definite concept are of decisive significance for popular instruction; in other words, films with a purpose. There is no reason to dissimulate the didactic purpose. It may be frankly announced at the outset, only provided that the execution be good, stirring, and adequate.

Practical experiments have already been made. Several films of value from the social hygienic viewpoint have made a triumphal progress through the motion picture theatres of all the towns and villages of the civilized world. The enormous interest of all classes in such films is demonstrated by the way in which every skilfully handled idea-film is seized upon by the masses, insatiable for knowledge. But one single film of ideas cannot of course achieve lasting results. The problem is to say the same thing persistently over and over again; the difficulty, to put the same content into constantly new form and, by variety of nuance, to steer clear of monotony. No single hit, however brilliant, can bring about the desired mass effect, but only the methodical process, lasting through years and years.

It would be an error to dispense with the accompaniment of music, the elimination of which has sometimes been demanded in the case of the educational film. It is not by the lack of music that the public should be made aware that there is a fundamental difference between the film of instruction and the film of amusement. That difference must be made apparent by the interior structure of the film. Besides which, the accompanying music best prepares the ground for the emphasis of the image, heightening the spectator's receptivity and enhancing his willingness to accept the idea.

The film theatre must remain a place of recreation, for then the occasionally inserted hygiene films are much more effective and reach an audience which would sedulously avoid any public
place of instruction. And it is just such an audience that should be reached, for it consists of people who do not know how to obtain instruction on hygienic problems and who, indeed, have no idea that such a thing even exists, or else of those who, although they are aware of the problems and the opportunities for information, shun either from laziness or lack of time the small effort they would have to make to find out what is worth knowing. The few who want to know and try to find out are only of secondary importance for a popular film of instruction, for such people are capable of getting for themselves the information about things that interest them. The ignorant and the indolent can nowhere be more readily influenced by an idea than in the cinema.

It is there they are to be found packed in solid masses. Everyone, in brief, «goes to the pictures» and it is there that they must be handled. An expert, reasonable, and responsible application of the film of instruction can bring about results in hygienic education which, transcending in their effects the short hour of the projection and the immediate small circle of spectators, are of service to a whole people.

Dr. W. Schweisheimer.
AN ENQUIRY RESPECTING THE CINEMATOGRAPH MADE IN THE SCHOOLS OF GENEVA, LAUSANNE AND NEUCHÂTEL

by Prof. André de Maday, Librarian of the International Labour Office, in collaboration with Mlle Hermine Aellig, Mlle Rose Jung and the students of Neuchâtel University, the Womens' School of Social Studies in Geneva, and the Institut J. J. Rousseau at Geneva.

(From the French)

INTRODUCTION.

The enquiry the findings of which are published herewith was carried out in 1914 and 1915, and may therefore be taxed with being somewhat behind the time. In deciding to publish

(Ed. Note) We have pleasure in publishing herewith the first part of Prof. De Maday's interesting study; the second part containing the results of the enquiry will appear in our next issue.

Such studies as these of De Maday and Mr. Finegan (which appeared in our August issue) are always welcome to the Review. The school film is still viewed with distrust by teachers and educators in many countries, and in other countries the governing classes are prejudiced against it as a means, or even an auxiliary, of instruction.

And yet there can be little doubt that the film is one of the most potent instruments that mechanical science has placed at the service of teachers in all branches of education. The systematic publication of the enquiries carried out and the studies and experiments pursued in this field, should prove one of the best means of persuading the unconvinced.

In later numbers we look forward to publishing the encouraging results of the practical experience of many years' standing in several countries.

Many problems have yet to be solved — problems which absorb the attention of this Institute: — the right type of scholastic and tutorial
the results of an enquiry made fifteen years ago, I have, however been acted upon by the following considerations:

1. Notwithstanding the profound change that the last fifteen years have produced both in the film industry and in the psychology of the young, my enquiry is of interest, since it enables us to establish points of comparison with similar enquiries that are being made at the present time. Moreover, certain facts of a psychological order ascertained by my enquiry have a value that time cannot diminish — as, for example, the variation, according to age, in the answers given to the question: «What subjects do you like best?».

2. The fact that the answers to the Neuchâtel enquiry were obtained before the war, whereas the enquiry was carried out at Geneva and Lausanne in the early days of the war, enables us, by comparing the returns of the three towns, to gauge the influence which the war exercised on the youthful mind.

3. And, lastly, my enquiry has the additional interest of being supported by government and communal authorities and the

film; the best systems of producing them, the new forms of practical pedagogy arising out of the use of films, technical problems, the methods of using animated drawings, the gradual transformation of text-books to adapt them to the fullest utilization of the school film. To these problems must be added the question of international exchange, and hence the suppression of customs barriers against educational films. In this connection we have pleasure in stating that the Governing Body of the I. E. C. I., in the course of its October session, resolved to take note of all the studies carried out by the Institute’s technical organs and to appoint without delay a commission of experts charged with the study of the systems whereby the educative character of films might be determined and with the drafting of an international convention, to be submitted to the Council of the League of Nations, and, later on, the organization of an International Conference for the suppression of customs duties on the importation of films of recognized educational and scholastic value.

We shall return to this interesting problem, after publishing a number of papers on the subject from authoritative contributors, and the practical results of enquiries, when we shall be in a position to put forward concrete and practical suggestions.
educational organizations, which has enabled us to get in touch with a large number of children and to obtain 9656 replies.

I. - History of the Enquiry

In the month of May, 1914, Mme. Marthe de Maday, professor at the Institut J. J. Rousseau, and I conceived the plan of making an enquiry in Romanic Switzerland on the effect of the cinematograph on the people, and especially on young persons.

On May 27, 1914, I published a questionnaire preceded by an appeal in the Feuille d'Avis de Neuchâtel. Thanks to the kindness of M. Sublet, L'Essor de Genève reprinted both appeal and questionnaire in its issue of January 9, 1915. At that time the questionnaire was completed by the following new question: «What do you think of cinematographs during the war?».

Reprints of the article have been distributed in various places. The following is the text of the appeal and questionnaire as published by the Essor.

Enquiry respecting the cinematograph

The influence exercised on the people generally and especially on the minds of the young by the cinematograph has led jurists, legislators and teachers to devote attention to the regulation of these shows. Several cantons of Romanic Switzerland have issued a decree imposing regulations on cinematographs and prohibiting morbid spectacles. The Geneva Public Utility Society opened a competition for a work on «legal measures that might be instituted in regard to public cinematograph shows and their control».

At Geneva recently, during the trial of Favre-Bulle, who was condemned by the Court of Assize to twelve years imprisonment, the prisoner declared during the hearing that the idea of the crime had come to him in consequence of a cinematograph
show that he had seen; as a result, the jury unanimously signed a petition to the president of the Council of State asking that urgent measures should be taken to prevent the injurious influence exercised on young people by the cinematograph.

Under these circumstances, it was considered that it would be of interest to find out by investigation the effect of the cinematograph on the public.

This enquiry will be absolutely scientific and impartial. It will not be influenced by any kind of prejudice; on the contrary, the desire is to study not only the undeniable evil influence exercised by the cinematograph, but also its advantages. It is desired also to find out to what extent the cinematograph may help to raise the intellectual or moral level of the people; for instance, is it possible that it might indirectly contribute to the decrease of drunkenness? or that it might to some small extent provide a little joy for those whose lives are passed in hard daily labour?

In cases where the cinematograph exercises a bad influence, is such influence inevitable, or would the authorities be able to eliminate it without damaging the interests of the industry?

We beg all those who have a juridical, educational or moral interest in the question, to lend us their aid. We invite all those (teachers, pastors, parents, workers' unions, employers and others) who have been able to verify the effect of the cinematograph on the people, and especially on the young, to communicate the results of their experience to us.

On the other hand, we ask the public that frequents the cinematograph to reply to the questionnaire.

ANDRE DE MADAY
Professor at the University of Neuchâtel.

Questionnaire.

1. a) Sex? b) profession? c) parents' profession? d) age? e) birthplace? f) what schools have you attended?
2. What do you do in the evening and on your free days (rest, work, recreation, social meetings, religious worship)?

3. What are your recreations? 
   a) excursions? or walks? 
   b) sports (taking part in them or spectator?) 
   c) café? 
   d) theatre? 
   e) concerts?

4. Do you go to the cinema and how many times a week?

5. Do you go alone or in company? (Additional question for scholars: if yes to the latter part of the question, whether with parents or friends?).

6. What is it that attracts you to the cinematograph (posters, newspaper announcements, hand-bills, etc.)?

7. When do you go to the cinema (weekday or Sunday, afternoon or evening)?

8. Have you a season ticket or not? How much do you pay for your seat?

9. What are the subjects you like best (topical events, travel or geography, dramas, comical scenes)?

10. Is your artistic feeling aroused by the cinema?

11. Has the cinema opened new horizons in your life?

12. What do you think of cinematographs during war?

Please address replies, signed or otherwise:
   b) For the Canton de Vaud, to the Maison du Peuple, Caroline, 8, Lausanne.
   c) For Neuchâtel, as well as for all the other cantons, to the Séminaire de législation sociale, at the Université, Neuchâtel.

As will be seen by the last phrase of the text, the Institut J. J. Rousseau at Geneva has granted us its assistance, thanks to the kind intervention of M. Pierre Bovet. The questionnaire was included in the number of the Intermédiaire des Éducateurs for January-March, 1915, published by the Institut. The Chronique de l'Institut published the following note: «We draw the attention of our readers — and of our Swiss readers particularly — to the leaflet bound up with this number. The enquiry respecting the cinematograph which has been organized by M. de Maday will
be made at the Institut as far as Geneva is concerned. The questionnaires are kept here at the disposal of those of our readers who might wish to make an enquiry on their own ».

The difficulty that I found in obtaining a sufficient number of replies from persons belonging to the various social classes led me, later on, to give up the enquiry among grown-up persons and to limit myself to the enquiry among school children. The enquiry among scholars promised success, thanks to the assistance of school authorities and teaching staff, which I had already secured in Neuchâtel in the summer of 1914, at Geneva in November 1914, and at Lausanne in February, 1915.

A) HOW THE ENQUIRY WAS ORGANIZED

a) Neuchâtel.

The Société Pédagogique du District de Neuchâtel, presided over by M. Brandt, very obligingly granted me its aid in inviting school-masters and mistresses to submit the questionnaire which we had drawn up together to their scholars (see text of questionnaire further on).

The enquiry in the school of Neuchâtel resulted in 1836 replies.

b) Geneva.

As far back as November, 1914, M. William Rosier, Councillor of State and Chief of the Department of Public Education, promised me his support. The Neuchâtel questionnaire was adopted, with a slight modification. On March 20, 1915, M. Rosier addressed the following circular to the teaching body of Geneva.

REPUBLIC AND CANTON OF GENEVA


The Councillor of State charged with the Department of Public Education, to the principal Schoolmasters and Schoolmistresses of the urban centre of Geneva:

M. André de Maday, Professor of social legislation at the University of Neuchâtel, some time ago asked the Department if
an enquiry respecting the cinematograph could be organised at Geneva in the elementary schools, in the same way as it has been done in different Swiss Cantons.

At its meeting of December 17, the Teachers' Union declared itself unanimously in favour of the proposal that M. de Maday had submitted to the Department.

We are therefore sending you, together with this circular, a certain number of copies of the questionnaire that is to be filled in. We shall be obliged to you if you will have this enquiry made in the classes whose masters are willing to interest themselves in the matter, and have the questionnaire filled in by those pupils who are willing to reply to the questions.

The questionnaire could be dictated to pupils of the 5th and 6th year and to those of the complementary class, who could write the answers on the questionnaire. In classes of the 3rd and 4th year, the masters and mistresses could read the questions aloud and themselves write on the questionnaire the number of each type of reply received.

In the hope that this enquiry will be well received by the teaching staff, we are,

Yours faithfully,
W. Rosier.

P. S. The enquiry is not addressed to pupils of the 1st and 2nd year.

***

The enquiry in Geneva yielded 4262 replies, including replies from pupils of the Elementary and Intermediary Schools, boarding schools, technical schools and schools of domestic economy.

c) Lausanne.

The enquiry was carried out at Lausanne with the kind assistance of M. Ch. Burnier, Director of the Schools. On February 11, 1915, M. Burnier addressed the following circular to the teaching body:
To the teaching staff of the upper elementary classes, domestic economy classes, and 1st to IIIrd standard boys and girls.

The Department of Public Education has sent on to me a request for assistance from M. de Maday, of the University of Neuchâtel, who is making a study of the rôle of the cinematograph, and to this end has opened an enquiry among the general public and also among the school children of Neuchâtel, Geneva and Lausanne.

We beg of you to study the accompanying questionnaire and get your pupils to reply to the questions printed on it. The replies are to be given in class. A sheet out of copybook No. 4 is to be given to each pupil with the following heading:

Elementary Schools of Lausanne. Class...

The questions are to be written on the blackboard and their numbers only are to be written on the copybook page by the pupil, who will write down the replies as he or she chooses.

This enquiry is to be made in all the above-mentioned classes on Tuesday morning, the 16th inst., and the sheets of paper are to be sent to the head superintendent, who will deliver them to Contrôle II during the day.

Lausanne, February 11, 1915.

The Director of Schools
CH. BURNIER

M. Burnier’s circular dealt with the elementary and domestic economy classes, and the young girls’ High schools. M. Payot, Director of the Cantonal Classical School, M. Gilliard, Director of the Cantonal Classical Grammar-school, M. May, Director of Scientific Colleges and Grammar-schools and M. Ad. Blaser, Director of the Higher School of Commerce, also lent
me valuable assistance in organizing the enquiry in the schools under their direction.

The replies obtained in Lausanne numbered 3558.

B) How the Enquiry was Conducted.

This enquiry has passed through a number of vicissitudes, which explains how it is that it has lasted ten years. The first difficulties that I met with were due to the war, but others that I encountered later on were caused by private circumstances of my own: from 1918 I fulfilled the double charge of professor at the Neuchâtel University and the Womens' School for Social Studies at Geneva, from 1921 I had the charge of dean of the Faculty of Law at the Neuchâtel University, and from 1924 the direction of the Library of the International Labour Office.

At the time I began the enquiry, I intended, as soon as the replies were sent in, to proceed with the summing up by the aid of my scholars of the Séminaire de Législation sociale of the Neuchâtel University, and the students of the Institut J. J. Rousseau at Geneva. But in the winter of 1915-16 the work, which was scarcely begun, had to be indefinitely postponed.

At Neuchâtel, a large number of foreign students had left and a certain number of the Swiss students were mobilized. I begged those who remained at the university to assist us in the Prisoners' Bureau for student prisoners of war which had been founded by the professors of the Neuchâtel University, rather than to concern themselves with an enquiry that seemed of secondary interest beside the grave questions of the day.

The war produced similar effects in the Institut J. J. Rousseau at Geneva, and there also, the summing up of the results of my enquiry had to be abandoned, just in its beginnings.

I was able, however, to make out a provisional result of the enquiry from the fragmentary classification made by the students of Neuchâtel and Geneva and from some other investigations, which I presented to the IIIrd Annual Assembly of the Société Suisse des Juristes, held at Olten on September 11, 1916, where the
cinematograph question and the independence of the industry had been one of the subjects of discussion (1).

Since the foundation in 1918 of the École d'Études Sociales pour Femmes in Geneva, where I direct the Séminaire d'Économie sociale, I have resumed the classification of the enquiry, entrusting the summing up of each cahier, that is to say, of the replies obtained in one class, to the several students inscribed in the Séminaire. The work progressed slowly, and came to a stop when the replies of all the classes had been tabulated.

As I myself was very busy, and as I could not find any collaborators with the necessary time at their disposal to undertake the definitive tabulation, I began to wonder at last whether the papers I had collected really held the core of the enquiry that I had undertaken with so much enthusiasm, for the organization of which I had obtained so much and such valuable aid. I recalled with sadness a printer’s error in the report on my communication to the assembly of the Société Suisse des Juristes, where it says of M. de Maday: « The tabulation of the 8000 replies received pursues him still ». Seven years later, I realized that the phrase might stand, with truth.

At last, in July, 1923, two students of the Womens’ School for Social Studies, Mlle Hermine Aellig and Mlle Rose Jung, accepted my proposal to undertake the final summing up of my enquiry, on the condition that their work should be counted as « diploma work ». Mlle Aellig undertook to sum up the replies of Geneva, and Mlle Jung those of Lausanne and Neuchâtel. They brought their labours to a conclusion in 1925.

The present report is entirely based on the results of the tabulation by Mlles Aellig and Jung.

II. - THE QUESTIONNAIRES AND THE METHOD OF CHECKING AND TABULATING THE RETURNS.

When we began our enquiry in the schools of Neuchâtel, we made use of the following questionnaire, which had been drawn up in agreement with the Société Pédagogique:


— 540
Questionnaire:

Société Pédagogique of the District of Neuchâtel


This questionnaire was adopted also for the enquiries at Lausanne and Geneva, although with some modifications which I will indicate further on when explaining the results of the enquiry.

Some explanations are necessary respecting the method of checking and summing up.

The methods used were fixed, on general lines, by myself, in the course of several meetings which I had with Mllses Aellig and Jung. We also had a meeting, on July 3, 1923, with M. Pierre Bovet, Director of the Institut J. J. Rousseau, and M. Jean Brocher, in order to secure their advice on certain questions connected with tabulating the returns.

Mllses Aellig and Jung were unable, for private reasons connected with their professional and family duties, to remain in constant contact with me while working; and they were also compelled, for the same reason, to work separately at a distance from one another. There is therefore an inevitable and more or less considerable difference in the use of the method and in the way of considering replies to the same questions. In order to reduce this inconsistency to a minimum, I adopted certain conventional rules which allowed us to place all the replies on the same plane, so that it was possible to compare them together.

The inaccuracy of certain replies and the possibility of the

(1) This question will be put only to students of the classes which give their replies individually (from the 7th to the 3rd class).
children using heterogeneous terms when answering certain questions, compelled me to have recourse to this standardization right from the time of the preliminary sorting of the answers; and I had merely to complete it for the final summing-up. The method that I made use of was as follows: I drew up, for the use of my collaborators, lists of stock words under which the replies obtained to each question were to be classed. Generally speaking, Mîles Aellig and Jung followed my indications; but in certain cases they omitted to do so, and therefore the statistics of Geneva, Lausanne and Neuchâtel are not always suitable for comparison.

I must add that since Mîles Aellig and Jung had but a limited time at their disposal for the work, they found themselves unable to tabulate certain questions while others they could do only summarily. As an example of the former case I may cite the question on parents’ professions, which figures in the Neuchâtel and Lausanne questionnaires, but is lacking in the questionnaires of Geneva. The summing-up of the replies to this question would have been very interesting if, after having classed and unified the replies, we had been able to consider them in relation with the replies given to other questions; showing, for instance, the difference existing in the various classes of society on the subject of frequenting the cinematograph, or even on the subject of the kind of films preferred by children. But this would have meant heavy work, and Mîle Jung was unfortunately compelled to renounce the idea of carrying it out. As an example of summary tabulation, I will mention the replies given by the scholars of Geneva to the question: «With whom do you go to the cinema?»

There is one more remark to be made.

In order to facilitate the task of the reader in comparing the replies given in the various questionnaires, I have adopted in the following pages a conventional numeration of questions which is always the same, whether it is a question of Neuchâtel, Lausanne or Geneva.

I have drawn up a table indicating the numbers attributed to each question in the present report and the corresponding numbers in the different questionnaires.
Comparison of the numeration of questions.

<table>
<thead>
<tr>
<th>Numeration used in the present report</th>
<th>Subject</th>
<th>Numeration of Neuchâtel</th>
<th>Numeration of Lausanne</th>
<th>Numeration of Geneva</th>
<th>Numeration of the questionnaire for adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Name) sex</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1a</td>
</tr>
<tr>
<td>2 Age</td>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1d</td>
</tr>
<tr>
<td>3 Nationality</td>
<td></td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1e</td>
</tr>
<tr>
<td>4 Do you go often?</td>
<td></td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5 With whom?</td>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6 When (week-day or Sunday?)</td>
<td></td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1f</td>
</tr>
<tr>
<td>7 When (afternoon or evening?)</td>
<td></td>
<td>7</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8 Do you like going there?</td>
<td></td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9a Why yes?</td>
<td></td>
<td>9</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>9b Why not?</td>
<td></td>
<td>9</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10 Subjects preferred?</td>
<td></td>
<td>10</td>
<td>10</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>11 Imitation at home</td>
<td></td>
<td>12</td>
<td>II/11 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Artistic emotion</td>
<td></td>
<td>II/11 (2)</td>
<td>II/12 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 New horizons?</td>
<td></td>
<td>III/6 (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 What do you think of the cinematicograph during war?</td>
<td></td>
<td>III/12 (3)</td>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>15 Parents’ profession</td>
<td></td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1e</td>
</tr>
</tbody>
</table>

(1) First questionnaire of Lausanne.
(2) Second questionnaire of Lausanne.
(3) Third questionnaire of Lausanne; it is identical with the questionnaire for adults.

III. THE RESULTS OF THE NEUCHATEL ENQUIRY

In January, 1914, M. Pierre Bovet, Director of the Institut J. J. Rousseau at Geneva, had suggested to his readers, in the Intermédiaire des Éducateurs, the organization of a small enquiry respecting the cinematograph. Five members of the teaching staff replied to him, four of whom belonged to the Canton of Neuchâtel: Mlle Hélène Evard (Elementary School of Locle, boys’ 6th. standard, 39 replies); Mlle Marguerite Evard (1st year of the Intermediary School for girls at Locle, 21 replies); Mlle Marie Rigoulot (1st year of the Higher Elementary School of Locle, 22 replies), and M. Georges Zwahlen (special class of backward children at La Chaux de Fonds, 28 replies). The material of this
small enquiry was obligingly put at my disposal by M. Bovet; it dealt with two important questions only: frequentation and the films preferred.

After I had begun my enquiry at Neuchâtel, I received, in response to the publication of my appeal in the *Feuille d'Avis*, two replies addressed to the *Séminaire de Législation Sociale* of the University, one of which came from Mlle Marie Tuetey, teacher at the elementary school of Couvet (15 replies) and the other from M. Ed. Haeussler, president of the Scholastic Commission of Peseux (15 individual replies and 141 collective replies).

At the time that I decided to limit my enquiry to the three towns of Neuchâtel, Lausanne and Geneva, I had to give up classifying the replies respecting the pupils of schools outside the territory of the town of Neuchâtel. I wish however to remark that the enquiries made at Locle, Chaux de Fonds, Couvet and Peseux, and especially the observations of schoolmasters and schoolmistresses accompanying the returns, afforded me valuable information, of which I should certainly have made use if I had been able to undertake the tabulation on a large scale, as I had hoped at the beginning of my enquiry.

In the schools of Neuchâtel, the majority of the children replied to the enquiries before the war; a small number were interrogated at the beginning of the war. The following total was obtained: 1836 replies, which were distributed as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual replies:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary schools</td>
<td>932</td>
<td></td>
</tr>
<tr>
<td>Commercial school</td>
<td>103</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1035</td>
<td></td>
</tr>
<tr>
<td>Collective replies, by class:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial school</td>
<td>151</td>
<td></td>
</tr>
<tr>
<td>Infant schools</td>
<td>650</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>801</td>
<td></td>
</tr>
</tbody>
</table>

We gave above, on page 547, the questionnaire fixed in common accord with M. Brandt, president of the *Société Pédagogique* of
the District of Neuchâtel, of which we have made use in this enquiry.

The summing up of the enquiry was made in the town of Neuchâtel by Mlle Rose Jung.

It has been possible to tabulate only the 932 individual replies obtained in the elementary schools.

First Question. Sex.

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls' classes</td>
<td>466</td>
<td>—</td>
<td>466</td>
</tr>
<tr>
<td>Boys' classes</td>
<td>—</td>
<td>358</td>
<td>358</td>
</tr>
<tr>
<td>Mixed classes</td>
<td>60</td>
<td>48</td>
<td>108</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>526</td>
<td>406</td>
<td>932</td>
</tr>
</tbody>
</table>

Of the children interrogated, 57.29% were girls, and 42.71% boys. If the mixed classes are deducted, the proportion of girls was 56.57%, and of boys 43.43%. (We note these proportions, because, in summing up the returns of the mixed classes, the replies were not grouped by sex, so that generally speaking, the statistics by sex relate only to the 824 children of the boys' classes and girls' classes.

Second Question. Age.

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 years</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>37</td>
<td>34</td>
<td>71</td>
</tr>
<tr>
<td>10</td>
<td>55</td>
<td>61</td>
<td>116</td>
</tr>
<tr>
<td>11</td>
<td>103</td>
<td>77</td>
<td>180</td>
</tr>
<tr>
<td>12</td>
<td>106</td>
<td>77</td>
<td>183</td>
</tr>
<tr>
<td>13</td>
<td>118</td>
<td>72</td>
<td>190</td>
</tr>
<tr>
<td>14</td>
<td>41</td>
<td>28</td>
<td>69</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>466</td>
<td>358</td>
<td>834</td>
</tr>
</tbody>
</table>

3rd Question. Nationality

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Swiss</td>
<td>825</td>
<td>(88.52%)</td>
<td></td>
</tr>
<tr>
<td>Foreigners</td>
<td>107</td>
<td>(11.48%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>932</td>
<td>(100%)</td>
<td></td>
</tr>
</tbody>
</table>

4-incl.
4th Question. Frequentation.

According to the answers given to the 4th. question:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Mixed Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to the cinema</td>
<td>390</td>
<td>305</td>
<td>77</td>
<td>772</td>
</tr>
<tr>
<td>Do not go to the cinema</td>
<td>74</td>
<td>45</td>
<td>31</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td>464</td>
<td>350</td>
<td>108</td>
<td>922</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>8</td>
<td>—</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>466</td>
<td>358</td>
<td>108</td>
<td>932</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Swiss</th>
<th>Foreigners</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to the cinema</td>
<td>682</td>
<td>90</td>
<td>772</td>
</tr>
<tr>
<td>Do not go to the cinema</td>
<td>135</td>
<td>15</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td>817</td>
<td>105</td>
<td>922</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>825</td>
<td>107</td>
<td>932</td>
</tr>
</tbody>
</table>

In order to be able to sum up the answers given to the question: «Do you go often to the cinema?» I adopted, as already stated, certain stock words, and requested my collaborators to use the same words when tabulating. The adoption of stock words was rendered necessary by the fact that the answers given by the children to the fourth question can have but a relative value. How does a child interpret the word, «often»? One will answer that he goes often when he goes to the cinema once a month, while another would think it proper in such circumstances to answer «rarely».

For lack of any better method, we adopted the following rules:

All answers to be classified under one of the following stock words: «often» «fairly often» «rarely» «never». We used the following «key» in the interpretation of these words:

- At least once a week - often
- At least once a month - fairly often
- Less than 12 times a year - rarely
The answers, when sorted, gave the following results:

<table>
<thead>
<tr>
<th>Girls</th>
<th>Boys</th>
<th>Mixed Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>51</td>
<td>25</td>
<td>133</td>
</tr>
<tr>
<td>67</td>
<td>61</td>
<td>3</td>
<td>131</td>
</tr>
<tr>
<td>266</td>
<td>193</td>
<td>49</td>
<td>508</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>390</strong></td>
<td><strong>305</strong></td>
<td><strong>772</strong></td>
</tr>
</tbody>
</table>

Swiss Foreigners Total

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>107</td>
<td>26</td>
</tr>
<tr>
<td>121</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>454</strong></td>
</tr>
</tbody>
</table>

Total | 682 | 90 | 772 |

Frequentation of the cinema, considered in relation to the ages of the children in the Neuchâtel schools, gives the following figures:

**Girls.**

<table>
<thead>
<tr>
<th>Age</th>
<th>Often</th>
<th>Fairly Often</th>
<th>Rarely</th>
<th>Never answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 years</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>14</td>
<td>1</td>
<td>18</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>9</td>
<td>40</td>
<td>3</td>
<td>55</td>
</tr>
<tr>
<td>11</td>
<td>10</td>
<td>9</td>
<td>63</td>
<td>21</td>
<td>103</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>59</td>
<td>20</td>
<td>106</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>28</td>
<td>59</td>
<td>17</td>
<td>118</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>6</td>
<td>24</td>
<td>8</td>
<td>41</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
<td><strong>67</strong></td>
<td><strong>260</strong></td>
<td><strong>74</strong></td>
<td><strong>466</strong></td>
</tr>
</tbody>
</table>

**Boys.**

<table>
<thead>
<tr>
<th>Age</th>
<th>Often</th>
<th>Fairly Often</th>
<th>Rarely</th>
<th>Never answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 years</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>4</td>
<td>15</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>6</td>
<td>36</td>
<td>6</td>
<td>61</td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>15</td>
<td>44</td>
<td>11</td>
<td>77</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>8</td>
<td>47</td>
<td>6</td>
<td>77</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>18</td>
<td>38</td>
<td>10</td>
<td>72</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
<td><strong>61</strong></td>
<td><strong>193</strong></td>
<td><strong>45</strong></td>
<td><strong>358</strong></td>
</tr>
</tbody>
</table>
Let me add, by way of comparison, the answers obtained in the two classes of the Peseux Elementary School (Canton of Neuchâtel) in March 1915. (M. Haeussler's enquiry).

In the first elementary year, where the average age of the children was 8 years:

17 pupils had never been to the cinema
16 pupils had been once
2 pupils had been twice
1 pupil had been thrice
2 pupils had been 4 times
3 pupils had been 5 times
1 pupil had been 7 times

25 Pupils

42 pupils

In the higher classes attended by boys of from 13 to 15 years:

6 pupils had never been to the cinema
4 » » been once
5 » » » twice
6 » » » three times
1 pupil » » 4 times
1 » » » 5 »
1 » » » 8 »
1 » » » 10 »
1 » goes every week (= 52 times)
1 » goes twice a week (= 104 times)

21 Pupils

27 Pupils

With regard to the boy who goes once a week to the cinema, the master remarks: «a very bad pupil», but he does not make a like comment on the child who goes there twice a week.

5th. Question. Accompanied by whom?

This question has not been examined from the statistical standpoint. An examination of the answers, however, leads to certain general conclusions. The children usually go to the cinema accompanied by their parents. The boys who do not go with
their parents, go there alone more frequently than with friends. The girls, on the other hand, are more usually accompanied by friends.

6th. and 7th. Questions: When?

Among the girls there is a slight tendency to go more frequently on week-days than on Sunday; the contrary is the case with the boys.

The children go to the cinema more frequently in the daytime than in the evening.

Some of the children answer that they go to the cinema when there are special shows for children; in this case they usually go with the school. Some children prefer rainy days for the cinema.

8th. Question: Do you like going to the Cinema?

Yes, there is no doubt the children do like it. This is shown by the statistics.

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Mixed Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoy going</td>
<td>296</td>
<td>225</td>
<td>69</td>
<td>590</td>
</tr>
<tr>
<td>Do not enjoy going</td>
<td>48</td>
<td>40</td>
<td>10</td>
<td>98</td>
</tr>
<tr>
<td>Indifferent</td>
<td>38</td>
<td>37</td>
<td>1</td>
<td>76</td>
</tr>
<tr>
<td>No answer</td>
<td>84</td>
<td>56</td>
<td>28</td>
<td>168</td>
</tr>
<tr>
<td>Total</td>
<td>466</td>
<td>358</td>
<td>108</td>
<td>932</td>
</tr>
</tbody>
</table>

The girls are in a slight majority among the affirmative answers (64 per cent) while there are 63 per cent of the boys.

We should add that some of the children who never go to the cinema say that they would like to go there.

9th. - Question: Why do you like going to the Cinema?

The answers are as follows:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Girls</th>
<th>Boys</th>
<th>Mixed Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because it is instructive</td>
<td>40</td>
<td>25</td>
<td>9</td>
<td>74</td>
</tr>
<tr>
<td>Because it is interesting</td>
<td>87</td>
<td>45</td>
<td>19</td>
<td>151</td>
</tr>
<tr>
<td>Because it is amusing</td>
<td>92</td>
<td>31</td>
<td>10</td>
<td>133</td>
</tr>
<tr>
<td>To pass the time pleasantly</td>
<td>20</td>
<td>22</td>
<td>7</td>
<td>49</td>
</tr>
<tr>
<td>Because it is beautiful</td>
<td>72</td>
<td>74</td>
<td>18</td>
<td>164</td>
</tr>
<tr>
<td>To look at the scenery</td>
<td>16</td>
<td>2</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>327</td>
<td>199</td>
<td>64</td>
<td>590</td>
</tr>
</tbody>
</table>

549 —
It will be noted that 28 per cent of the children go to the cinema because it is «beautiful», 23 per cent because it is «interesting», 22 per cent because it is «amusing».

It is the boys who most frequently make use of the expression «beautiful» or «pretty». The girls like the cinema first of all because it is «amusing», and in the second place because it is «interesting». Thus it is the educational side of the cinema that appeals more to the girls, while the boys go there mainly as a pleasant pastime.

Some of the children say they like going to the cinema because it is «thrilling», «exciting», «frightening», «sensational», «absorbing», «wonderful». One young boy likes going there in winter because it is warm, and another because one does not get so wet with the rain; a third very much likes to see the actors move and run.

9th. (b) Question: Why don’t you like going to the Cinema?

The answers to this question are given partly by children who don’t like going to the cinema at all and partly by children who don’t care to go under certain conditions. As a matter of fact, answers to the question: «Why don’t you like going to the cinema?» overlap the 10th. question bearing on the favourite subjects and answer this question in a negative manner. The children indicate the sort of shows they don’t like.

In all, 117 children have made criticisms of the cinema, which we may classify as follows:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cinema is bad for the eyes</td>
<td>24</td>
<td>26</td>
<td>2</td>
<td>52</td>
</tr>
<tr>
<td>Children don’t like drama or consider there is too much of it</td>
<td>4</td>
<td>14</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>«Sad»</td>
<td>8</td>
<td>3</td>
<td>—</td>
<td>11</td>
</tr>
<tr>
<td>«Uninteresting» or «I don’t like it»</td>
<td>14</td>
<td>5</td>
<td>—</td>
<td>19</td>
</tr>
<tr>
<td>«Not made for children»</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>56</td>
<td>5</td>
<td>117</td>
</tr>
</tbody>
</table>

It is probable, if not certain, that the statement, «the film is not made for children» expresses, in certain cases, not so much
the personal opinion of the child as one suggested to him by his parents.

Let us note among the answers given, the following: «it frightens me»; «it worries me»; «it makes me dream»; «it makes me cry and I feel ill»; «it gives me bad thoughts»; «one sees horrid things there»; «dramas lead one astray»; «one may become a thief or a murderer».

A child who had never been to the cinema, answers «it may drive one mad».

Among the children who have been to the cinema, there is one boy of 13 who answers that he «does not like dramas and love scenes»; one boy of 11 «does not like engaged couples». A girl of 12 who had only been to the cinema once «does not like war».

10th. Question: Favourite subjects.

A classification of the subject matter according to the order of preference shown in the answers gives the following table:

<table>
<thead>
<tr>
<th>Favourite subjects</th>
<th>Girls</th>
<th>Boys</th>
<th>Mixed Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comical scenes</td>
<td>240</td>
<td>151</td>
<td>43</td>
<td>434</td>
</tr>
<tr>
<td>Drama in general</td>
<td>131</td>
<td>101</td>
<td>33</td>
<td>265</td>
</tr>
<tr>
<td>Travel</td>
<td>145</td>
<td>75</td>
<td>26</td>
<td>246</td>
</tr>
<tr>
<td>Topical Films</td>
<td>90</td>
<td>60</td>
<td>13</td>
<td>163</td>
</tr>
<tr>
<td>Historical Films</td>
<td>67</td>
<td>34</td>
<td>7</td>
<td>108</td>
</tr>
<tr>
<td>Geography</td>
<td>69</td>
<td>38</td>
<td>—</td>
<td>107</td>
</tr>
<tr>
<td>Scenery</td>
<td>24</td>
<td>10</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>Battles</td>
<td>1</td>
<td>27</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Scientific or industrial films</td>
<td>17</td>
<td>8</td>
<td>—</td>
<td>25</td>
</tr>
<tr>
<td>Detective dramas and American</td>
<td>2</td>
<td>21</td>
<td>—</td>
<td>23</td>
</tr>
</tbody>
</table>

Total 786 525 126 1437

(1) It is hardly necessary to state that a number of pupils mentioned at the same time several subjects which «they liked». The number of answers consequently exceeds the number of children who answered the questionnaire.
The above table shows that the children enjoy comical scenes above everything else; out of 932 children, 434 say they like them. Drama and travel come next.

It will be seen that the order of preference does not differ much between the boys and the girls. The preferences expressed regarding certain subjects which obtained but few votes afford an exception to this rule; these exceptions are not without interest from the point of view of sex psychology.

24 girls (out of 526) like scenery, but only 10 boys out of 406.

48 boys (out of 406) but only 3 girls (out of 526) express a preference for battles, American dramas and detective dramas.

By reducing the enumeration of subjects given in the above table to five, we obtain the following results:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Mixed Classes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EDUCATIONAL (travel, geography, scenery, historical scenes, scientific or industrial films)</td>
<td>322</td>
<td>165</td>
<td>36</td>
<td>523</td>
</tr>
<tr>
<td>2. Comical Scenes</td>
<td>240</td>
<td>151</td>
<td>43</td>
<td>434</td>
</tr>
<tr>
<td>3. Drama</td>
<td>133</td>
<td>122</td>
<td>33</td>
<td>288</td>
</tr>
<tr>
<td>4. Topical Films</td>
<td>90</td>
<td>60</td>
<td>13</td>
<td>163</td>
</tr>
<tr>
<td>5. Battles</td>
<td>1</td>
<td>27</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>786</td>
<td>525</td>
<td>126</td>
<td>1437</td>
</tr>
</tbody>
</table>

(to be continued).

ANDRÉ DE MADAY
Professor at the Neuchâtel University.
COLOUR CINEMATOGRAPHY

THE PRESENT AND FUTURE OF THE VARIOUS PROCESSES
WITH SPECIAL REFERENCE TO THOSE
IN WHICH CHEMICAL PRINCIPLES ARE APPLIED

(From th Italian)

(Continued from No. 2)

Physics and the practice of tri-chromatic and bi-chromatic Selection. — The light filters used for selection must respond to certain specific requirements. White light passing through the three filters is split up into three coloured rays: upon recombining these three colours produce white light.

The red light filter must entirely eliminate green, blue, and violet, and allow yellow and red rays to pass through completely; the corresponding negative is called the blue negative. The green light filter must completely eliminate red and let yellow, blue, and green pass through; the corresponding negative is called the red negative. The violet light filter must completely eliminate yellow and green and let blue and violet pass through, the corresponding negative being called the yellow negative.

Notwithstanding the great improvements achieved in the chromatic sensitization of plates and films, of which we have already spoken, there are still deficiencies which, though they are not very apparent in connection with negatives produced through red and violet filters, are all too apparent in those obtained under the green filter, namely the red negatives.

Thus, while the print obtained through the green filter ought to give an excellent cover for yellow, green-yellow, green-blue and blue, in point of fact neither the spectral constitution of the pigments nor the chromatic sensitivity of the sensitive preparations now available allow of a sufficient covering to correspond to all the colours from yellow to blue.

A spectral examination of the white light reveals the fact that yellow is almost entirely lacking, being limited to a very
faint line corresponding to line $D$ of the spectrum; yet this same examination shows that yellow comprises a whole series of colours from orange-red to green.

Consequently, when the impression of yellow pigment, so abundant in nature, is required, the green filter must necessarily allow a zone extending towards orange to pass through, while at the other end it stops at blue-green and completely excludes blue. Thus blue is not at all impressed on the plate or only very faintly so.

It follows that the red monochrome obtained from the negative produced through the medium of the green filter is always false, because the red invades the blue. In three-colour photography and especially in mechanical three colour photography, this serious deficiency in the red negative, that is to say the negative destined to supply monochrome red, is overcome by means of retouching.

The operator so regulates the engraving of the plate used to print in red as to correct the invasion of the red to which we have referred.

To-day, however, an improvement has been introduced in three-colour selection which, though of the simplest kind, is effective in overcoming the deficiency in blue covering.

This consists in a very brief natural exposure of the negative after it has been exposed under the green-yellow filter. This very short exposure to white light produces a covering of the blue and violet, while it does not last long enough to produce any appreciable effect on the red, notwithstanding the panchromatic characteristic of the stratum.

The author's own experience has shown that much better results are produced by this method whenever violet does not play an important part in the picture, violet being a much less important pigment in nature than blue.

This method eliminates the invasion of red in the blue, which turns the blue of the sky and of water to violet and falsifies the colouring of foliage, which being dark green in hue in the summer, acts on the sensitive stratum much more by the white light irradiated than through the green rays it emits.
In the case of paintings or costumes in which violet plays an important part, this supplementary exposure is apt to do more harm than good.

In colour cinematography in the open air, supplementary exposure would generally be very advantageous, but recourse cannot be had to it owing to the peculiarities of filming on a continuous ribbon. This gave rise to the idea of supplying the green filter with a little colourless aperture, through which a regulated quantity of white light can pass, just enough to impress the blue sufficiently.

What we have said above will suffice to show that three-colour selection, though based on scientific principles, is an approximate process, in which the judgement of the operator plays no negligible part. Notwithstanding this, three-colour cinematographic projection appeals to the eye, any deficiencies in colour-rendering being overlooked owing to the rapid succession of the coloured images.

Two-colour selection is still less precise than three colour selection; this system also relies on the complementary principle for the two light filters; that is to say on the supply of rays of coloured light which combine to produce white light.

The light filters used are blue-green and orange, and the author's researches have proved that in two-colour cinematography the two dyes which correspond best by analysis and synthesis, are two tar dyes, the chemical constitution and spectral characteristics of which are well defined and constant: namely pheno-safranine and malachite green.

Pure yellows are lacking in the two-colour process and blues and violets are not faithfully reproduced.

The lack of yellow is made up for by the use of a yellowish light in the projection (incandescent electric light), it is always advisable in the case of staged scenes to bear in mind the limitations of the two-colour process and to adapt the colour of the scenery and costumes to its possibilities.

Thus two-colour cinematography, notwithstanding its serious deficiencies, may be very successful in delighting the eye,
while it demands, as we shall see, much less complicated apparatus and handling than the three-colour system.

The selection of colour in cinematography and the means whereby it is effected. — Hitherto all the processes suggested or applied to colour cinematography for public exhibition have been based on the principle of the selection of the natural subject in two or three monochrome images.

The only exception is offered by the process based on the use of lenticular films recently applied by the Kodak Co. in amateur colour cinematography, to which I referred in my previous article. It is, however, still extremely doubtful whether this process will be found practically applicable on a commercial scale, because it lacks a quality of prime industrial importance, that of the easy and perfect multiplication of copies.

Colour selection is fraught with much greater difficulties for the cinematograph than for photography. The impression of the three images selected must, in fact, be impressed on the same film by a rapid succession of exposures.

The application of three-colour selection, which is the process producing the most complete and perfect image, here becomes a very difficult matter.

The execution of three monochrome images successively on the same film, automatically changing the light filter, is undoubtedly the simplest system, but we must not forget that successive exposures imply differences in design and coincidence. This is remedied in part by doubling at least the speed with which the film is changed, this speed being, however, limited by the exigencies of exposure through the medium of light filters.

The simultaneous filming of the three monochrome images eliminates the disadvantage in question, but as this simultaneous filming necessitates three objectives, we are again faced with the drawback of faulty coincidence, not because of the subject moving, as in the instance just referred to, but by reason of the phenomenon of parallax, whereby the perspective, and consequently the form of the image, changes according to the angle of view.

Three objectives placed one above the other focus the subject
from different points; thus the flat images produced cannot be accurately superposed.

Optical means for overcoming this difficulty have been studied, and one of the most reasonable of these would appear to be the system devised by the Italian, General Russo, in which the three objectives are not arranged one above the other, but disposed in triangular formation, with a single objective in front.

In any case, it is clear that the simultaneous registration of three images through three objectives necessitates considerable alterations to both cameras and projectors.

To turn from the filming to the projection of the three monochrome positive images, it seems obvious that the successive projection of the monochromes must cause a serious strain on eyesight, because the retina has to take in, in rapid succession, the colours as well as the movement, and the redoubled or trebled speed with which the film is projected increases the jerky effect of the picture.

The method of three objectives placed one above the other makes the same demand on the eye as the ordinary cinematograph, but if the standard dimensions were maintained the ribbon would have to be shifted each time by 54 mm., which would be very inconvenient from the mechanical standpoint.

We should add, however, that both those who use the one-objective system and those who use the three-objective system have found considerable advantage in reducing the size of the images, getting at least three into the format of two standard images.

In General Russo's apparatus, three tiny selected images take the place of a single normal cinematograph image; this avoids any increased strain either on the sight or the apparatus.

The three-objective system can only be applied to the cinematograph by means of projection through coloured screens, that is to say by cumulative synthesis.

The successive filming process, on the contrary, allows the three partial images to be utilized for the purposes of subtractive synthesis, that is to say for the superposition of monochromes on
one and the same film, which can thus be projected by the ordinary apparatus. While, however, the superposition of only two monochromes is a relatively easy matter, the superposition of three monochromes presents serious difficulties and up to the present, notwithstanding the numerous patents taken out and the number of inventions put forward, trichromatic synthesis of the same film is not an industrially practical process.

On the other hand, by confining the selection to two colours, blue-green and red-orange, truly surprising results have been achieved; the same colours being utilized for the two monochromes whereby the image is recomposed. Thus, ever since its introduction, two-colour cinematography by the process of subtractive synthesis on the same film has entirely replaced the two-colour process of cumulative synthesis devised by Smith some twenty years ago, and more particularly applied in England. In the Smith process, the image was printed on the same film by the rapid alternation of the green and orange-hued filters. The same light filters used in selecting were made use of in projecting the positives, while doubling the velocity of the movement, so as to produce a correct sensation. But while this system, notwithstanding its unavoidable deficiencies, may have appealed to the eye by the colour effects produced, it nevertheless caused considerable strain on the sight.

Hardly a cinema hall or theatre could be found willing to transform its projection apparatus so as to render the projection of the Smith colour film process possible, and thus it died a natural death.

The author, who has had an opportunity to observe the Smith process, and who during recent years has watched two-colour process films made by the American Associated Artists’ Company, is in a position to affirm the enormous superiority of the latter.

Thus, after following the evolution of the processes of colour cinematography and himself contributing his share by chemical researches, which constitute at the present time the bases of the methods used for producing synthesis (as we shall show later), the author feels justified in formulating the following conclusions.
In the present stage of knowledge, the colour-cinematograph processes which present fewest difficulties and are most practical are the following:

1. Simultaneous selection and cumulative synthesis by the projection of black slides through the medium of coloured screens similar to those used for selection. Difficulties of an optical and mechanical order have so far impeded the practical application of this process, the fact of special apparatus being required for their projection having also proved a grave obstacle to its being widely adopted.

2. Successive selection, limited to two colours, and subtractive synthesis by special chemical process, producing two monochromes on the same film one beside the other. This latter process, as above stated, presents most practical advantages, and the author proposes to deal with it in detail in the next number of the Review.

Prof. Rodolfo Namias.

(to be continued)
THE RED CROSS AND THE CINEMA.

(From the French)

When the several national organizations of the Red Cross Society federated themselves in 1919 for the purpose of stimulating and developing Red Cross activities of a humanitarian kind in peace time, popular instruction in matters of hygiene at once assumed a leading rôle in the new programmes of work. This was largely due to the exceptional conditions prevailing at the close of the Great War. The scourges engendered by the war or aggravated thereby were so virulent and created such fearful ravages that the national Red Cross Societies were compelled to join their forces with those of the public administrations to wage war on disease: typhus, cholera, and influenza epidemics, the general recrudescence of tuberculosis and venereal diseases and the alarming increase in infant mortality.

Popular instruction in the elementary laws of hygiene was regarded as one of the most efficacious measures in this campaign against disease.

The Film, which the Cannes Medical Conference of April 1919 had already stressed as one of most powerful instruments of education and one too generally overlooked by teachers of hygiene, was recognized to be a most valuable auxiliary for the purposes of popular lectures on the subject.

The Secretariat of the League of Red Cross Societies, with the approval of its Board of Governors, thus undertook to organize a cinema service which was, in the first instance, placed under the direction of its Hygiene Section.

The first task of this service consisted in an examination of existing films, in order to determine which were those best suited to the purposes of international hygiene propaganda; the purchase of as many of such films as means would allow, and the distribution of them among the national Red Cross Societies.
In 1922 and 1923, the Secretariat of the Red Cross League collaborated in organizing travelling propaganda shows which, being furnished with moveable cinema material, either mounted on motor camions or conveyed by rail, travelled through a considerable area of Poland and Chekoslovakia, working their way into towns and villages to give popular lectures on hygiene illustrated by magic lantern slides and cinematic films.

At the present time all the technical sections of the Secretariat of the League of Red Cross Societies include films in their propaganda programmes, and the League's Film Archive counts over 200 films dealing with infant welfare, tuberculosis, venereal disease, epidemic diseases, personal hygiene, first aid in calamities, nursing, and the programme of the Yunior Red Cross.

These films are loaned to the different national Red Cross Societies and to organizations recommended by it to the Secretariat of the League. All such loans are gratis, cost of carriage alone being to the charge of the borrowers; they are made for a period of three months to European Countries and five months to countries in other parts of the world.

The judicious choice of these films, purchased in different countries, is often no easy matter; many of them have to be adapted in order to render their appeal as wide as possible.

The Propaganda Service of the Secretariat of the Red Cross League, which is responsible for the direction of its Film Collection, assists the various Societies in the purchase of films and projection apparatus by acting as intermediary with producers and manufacturers.

The production of new films for the purposes of social education owes much to the Secretariat of the League for the technical advice it gives to publishers on the scenarios submitted by them. Being convinced of the importance of providing public film collections and both official and private school collections with good films dealing with social education, in addition to their strictly educational films, the Secretariat of the Red Cross League has taken part in various international congresses dealing with questions affecting the production and diffusion of social education.
films and the uses to which they are put. It works in concert with the International Commission of educational and instructional films of which it was one of the earliest adherents.

At the present time, when official and private bodies in many countries are devoting their earnest attention to organizing National Film Collections, both local and regional, a new field of active and cordial collaboration with public services and private enterprise has been opened up in this domain to the National Red Cross Societies. For many years past the Secretariat of the Red Cross League has been preparing the way for this common effort in the important domain of the Cinematograph.

F. Royon

Propaganda Section of the League of Red Cross Societies.
THE FRANCHETTI EXPEDITION IN ETHIOPIAN DANKALIA

THE "LUCE" FILM RECORD.

The expedition organized and directed by Baron Raimondo Franchetti in Ethiopian Dankalia is undoubtedly one of the most important initiatives in the way of the discovery of unexplored regions whereby Italian enterprise has contributed something new to science. This expedition, which took place between November 1928 and June 1929 in unexplored territory and under conditions of great hardship, achieved some remarkable results.

After some months of patient and industrious preparation, Baron Franchetti, who had already travelled alone in the Dankalian territory, left the Italian Colony of Assab on the 3rd. March, 1929. Assab marks an outlet into the Red Sea from southern Dankalia. He set out at the head of a caravan consisting of 10 white men and an escort of 160 Ascari, accompanied by 156 camels, only 23 of which survived the fatigues of the journey.

It was in Assab that Giuseppe Sapeto, in November 1869, took over the coal depot, which marked Italy's first step in the conquest of her African colonies.

The Luce National Institute, realizing the noble patriotic and scientific aims of the expedition, sent the operator Mario Craveri along with it; Craveri carried through his task most successfully and took numerous photographs, which form an important historical record of the expedition.

The exploring party left Assab at 2 p.m. on the 3rd. March and made its first halt at Uacari, where there is a well of drinking water.

(Ed. Note). Right from the first issue of the Review, we have made a point of publishing contributions describing really interesting documentary films, and more especially those illustrating the exploration of unknown or little known lands. In this connection, we warmly welcomed Prof. Gabriela Mistral's article advocating the production of documentary films. Such films are undoubtedly one of the finest means of rousing public interest and popularizing educational cinematography among the masses of the people. And assuredly now that the film can be made vocal no less than visual, its dramatic possibilities are multiplied, and the documentary film should become as profitable to its producers as it is instructive.

We offer our readers herewith a narrative of stirring interest. This describes the great documentary film of the Luce Institute, whose operators accompanied the voyage of exploration led by that bold and resourceful explorer, Baron Franchetti.

We have pleasure herewith in extending to producers an invitation to send us articles of this kind, illustrated by photographs; we shall always be happy to publish these, provided they are of real interest and are in no way of a publicity character. Our one and only object is to demonstrate what an incomparable instrument the film offers us for the documentation and divulgation of science and civilization.
To give some idea of what a well of drinking water means in these inhospitable desert regions, scorched by the tropical sun, we will recall that the Franchetti expedition was compelled to endure seven-hour marches amid the burning sands, in squalid and parched regions, where not a drop of water was to be found. 133 out of the 156 camels that followed the caravan fell dead from thirst; a fact all the more impressive when it is remembered that the stomachs of camels are furnished with ample reservoirs in which to store water for many days, thus enabling them to cover 1000 km. without drinking.

The first days went by monotonously amid uninterrupted marches of 6 and 7 and even 8 hours, the anxious search for water, and halts for rest, which enabled Prof. Gilardi to carry out chemical and mineral researches and the indefatigable Baron Franchetti to push on alone towards the most perilous and inaccessible zones.

On the 8th. March, along the caravan road that leads to Afambó, the explorers came across native tombs, the style of which varied according to the cause of death of those within them: natural death; death at the hands of marauders; blood vengeance.

From the 8th. to the 17th., the party marched forward towards the regions of the Dankalian depression, pausing, for their daily rest, at Darrab Aura, a small basin hollowed out in the plain close to the Ashalè range, which Prof. Gilardi and the engineer Maglioni climbed, so as to make important chemical and geological observations, followed by the operator Craveri. and thence to Fura.

There is nothing very special about the aspect of the country traversed during this period, nor does it differ from that of the zone already passed through, except for the greater frequency of wells, from which the Ascari drew water for the camels, which were also able to feed in the meadows lying here and there along the route.

Dense flocks of vultures circle overhead, and descend threateningly to within a few metres of the earth.

The explorers' camp in these regions presents the double aspect of a military and a gypsy camp, owing to the military precautions taken in the event of possible attacks of marauders, and from the motley clothes with which the Ascari cover themselves to keep out the night cold.

At Galikona, reached on the 19th. March at 7 p. m., the Dankalian depression begins, and the rigors of its climate are at once felt. The heat is stifling, the monsoons raise sandstorms, which batter the explorers and smother them with the blinding particles. In this infernal region the nights bring no relief to the weariness of long marches, but are passed in nerve-racking vigils. After six hours of tiring march, the explorers perceive a white streak between two mountains, with a pyramidal peak in the background. The unexplored lake of Afrera lies on these heights; this water and the little island in its centre is a forbidden region to the
natives, by reason of the mystery that surrounds it and the strange and dark legends that are told of it.

The lake is surrounded by an oasis of palms and the waters near the banks are muddy. Baron Franchetti and the Luce operator venture on to it in collapsible boats, accompanied by an Ascaro guide, on a sam-buchi (small native craft).

The operator was compelled to return to land owing to a leakage in the boat, and was therefore unable to add the photograph of the little island to his cinematographic record.

This lake, which lies 75 metres below the level of the sea, and its lateral mountains, offer an opportunity to Baron Franchetti and the other scientists of the expedition to make observations of the greatest scientific interest. The photographs and films taken on the summit of the Afrera and the slopes of the pyramid show the exceptional character of this region, formed by lava streams and volcanic craters, and which many scientists regard as the most volcanic region in the world.

From Afrera to Macallè the march is particularly hazardous, owing to the asperity of the ground and the absolute lack of water, as also owing to the insidious attacks of the razziatori, those formidable Abyssinian marauders who spread terror among the inhabitants of Dankalia, and compel them to lead a nomad life owing to the constant menace under which they live — a menace that gives no respite to men or flocks.
In this zone, the hazards of the march are aggravated by the discovery of the Rhoro wells of water, on which the explorers, who have watched men and beasts fall during the hours of march under a sun at 69 degrees centigrade, fall with avidity; but the water is found to be undrinkable owing to the enormous quantity of salt that it contains!

At Dargahà, which the caravan reached on the 18th. April, worn out by a steep up-hill march through the Cohul and Ammulfaghè, a bloody skirmish with the razziatori took place. After an obstinate fight, the latter turned and fled, leaving several prisoners in our hands and several dead on the field. The caravan lost three Ascari.

During the night some envoys of the enemy came to our camp to request the return of a prisoner, the son of a village chief. Comm. Pol- lera emerged from the camp and signified his consent, on condition that three of the marauding band should act as guides to the party as far as Macalle. After recuperating a quantity of material and strayed camels, the caravan set out again for Macallè and, after a number of vicissitudes and crossing the Scechet zone, close to the Sugaladi Amantià torrent, where an escort sent by the Degiac Halelesslassiè Guga, of Macallè, was waiting for them, they at last reached Macallè. At the gate of the town a Copt priest presented the Cross for the Ascari to kiss, and the Degiac received the party very cordially on the afternoon of the 21st. April, and requested the operator to take certain photographs to send to his father, Ras Guga.

At Macallè the caravan was disbanded, and preparations made for the expedition to Golìnà, which Baron Franchetti was to undertake together with a small number of followers, among others the operator, Mario Craveri.

This second expedition, at the start, offered fewer hardships than the previous one, owing to the beauty and variety of the scenery that unfolded itself before the explorers.

After crossing Sciafft, where the explorers encountered the Fittaurari, Abascià, sent as a guide by the Degiac, the party entered Maramiti, with its neat villages constructed of white and yellow tukul on fortified mounds overlooking the plains cut across by streams.

The land of the razziatori begins here, the lairs of brigands, who spread terror among the inhabitants of Dankalia and throughout the districts occupied by Christians. And yet these savage peoples who, in the sultry African April night had turned their arms against the caravan party, now welcomed the explorers to their country most cordially, and even offered them chickens, milk, and eggs.

The razziatori do not deny, indeed they boast of, leading a life of continual fighting, a war-like life consonant with ancient tradition, which the Negus not only does not oppose, but does his utmost to perpetuate.

This proves that these incursions, far from being mere marauding
raids for the sake of loot, have a religious and political purport, ever present in the age-long and fierce struggle of the Moslems against the Christians. It is an instance of the Crescent once again armed against the Cross, with all the cunning and ferocity that have ever characterised the wars of religion.

In the ensuing villages and especially in Maicaia, the native territory of the marauders who fell on the exploring party at Dargaha, where the Ascari of our escort are regaled with the delicacy known as *ambascià* dressed with the *berberé* juice; at Adagudda, where the Ras Guga territory ends and the territory of Degiac Aberà begins, at Macmatur, at Ambalage, and at Biet Marà, the party was always made welcome, while the country was still as attractive as that just recently traversed.

At Macmatur, which the expedition reached on the Coptic Good Friday, the faithful were seen praying in front of a church. Major Galliani, who died fighting the *razziatori*, is buried in this village.

Through a fertile and flourishing region, in which small villages well built of *tukul* follow one on the other, and where the country stretches out in fertile plains, in striking contrast with the desolate Dankale wastes, the explorers came to the dominions of Degiac Abelé, known as Mai Cheu.

The Degiac was found here camping with his men, and the operator Craveri was able to film this most picturesque gathering, after lunching with the Degiac, to whom he offered, on behalf of Baron Franchetti a Terni model machine gun, which was greatly appreciated.

Our explorers were indeed most hospitably entertained by these tribes, commanded by the Abelé, who greatly enjoyed a lunch offered him by the Baron and served in European fashion.

From Mai Cheu, with its camp of over 2000 tents most beautifully
ranged, the party descended to the Azebū Galla plain, whence, under the guidance of the Fittaurari Igzan, they next set out towards Golima.

Dispatches sent by the Asmara Government discouraged the undertaking, but Baron Franchetti, firmly determined to carry through his expedition, was not to be deterred and, followed by his companions, he vigorously resumed the difficult march towards those desolate regions, inhabited by populations who for long years have been imbued with blind hatred of the European, and who were now at loggerheads and warring with one another, being divided into partisans and opponents of the Negus.

At Corbetà, a fortified village built of the trunks of the euforbia candelabra, and inhabited by razziatori who, no less faithful to age-long tra-

![Image](image_url)

dition, pursue the art of war, our explorers were carried in triumph by these fierce-looking men, who followed the party and the Fittaurari Igzam and Ghebre with war songs and acclamations of welcome.

After quitting Corbetà, another tiring march brought the party to Bula, and thence to Magala Afa, where the engineer Maglioni was seized with violent intestinal disturbances, caused by the fatigues of the march and the saltness of the water. This trouble, aggravated by violent fever, persisted throughout the journey and reduced the unlucky engineer to a very grave condition of health which made everyone fear irreparable complications at any moment.

It being impossible to stop long at a place without water, scorched by the burning sun at a temperature varying from 65° to 68° centigrade, the sick man was carried on a litter, turn by turn by 30 Ascari, and at other times he was carried on a deck chair fixed on a camel’s back.

The caravan, passing through desert and inhospitable lands, in a torrid climate, with a sick man who, racked by delirium and devoured by

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fever, groaned aloud and invoked help, had something of the epic and the legendary, and recalls to our minds the memory of the ancient migrations of the Arian peoples, flexible in body and in mind, of the Indo-Germanic and Persian peoples who came from the banks of the foaming Ganges, and the sacred banks of the Tigris and the Euphrates — the cradle of civilized mankind — and migrated westward.

After leaving Auidi, the caravan still pursuing its way through desert regions devoid of water, reached Ugub, where, in view of the very severe difficulties caused by the engineer’s illness, it was decided slightly to modify the itinerary, and to visit the Terù plain, which Baron Franchetti knew to be highly interesting in respect of mineral research.

At Maina, where the tents were put up in a locality close to a spring of sulphurous water, which gave out an unbreathable odour, the guide Ibrahim learnt that the bodies of the heroic explorers of the Giulietti expedition, who were assassinated by the natives in 1881, were buried in the neighbourhood.

Thanks to the gift of a handsome sum of money and the solemn promise that his name would not be disclosed to the natives, the Arab pointed out the spot in which the heroic pioneers who sacrificed their lives for science and their Country were buried.

At 8.30 p.m., as darkness descended with moist wings on the desert, Baron Franchetti went to visit the Egreri locality, where lies the little cemetery with its pyramid-shaped Arab tombs. In the midst of these were two small tumuli whose form proclaimed them to be exceptional. Under this sepulchre the mortal remains of the two heroes rested in the naked earth.

On the 24th May the exhumation was carried out with feverish haste
owing to the danger of reprisals on the part of the Arabs. The remains were found and lovingly deposited in an urn reconsecrated to brotherly love.

The caravan, which was encamped at Scipalù, near Gaballè Gudda, repaired to the scene of the touching ceremony.

The rites were simply and solemnly performed; the engineer Maglioni stood supported by two Ascari, another presented arms; all present bowed reverently.

On the tomb a stone bearing the following inscription was placed:

"Here perished the Giulietti expedition. 14 Italians were barbarously slaughtered. Christians, bear your heads; Moslems, pause and salute. Franchetti Expedition, 24 May 1929."

The travellers have here reached their goal; the cruel fatigues are drawing to a close and, now cheerful and agile, now panting under the sun’s pitiless rays, they march from Musallè towards Quia, where the Italian autocar is in waiting to bear them to Assab,
where the Baronessa Franchetti, surrounded by the authorities and the people, awaits the travellers, who are greeted on all hands with enthusiastic welcome.

The film of this expedition is a great success, both from the technical standpoint and the choice and coordination of the episodes, and also when considered as a geographical and scientific record, soberly and scientifically made. It is a film that deserves to rank beside that of the Duke of the Abruzzi’s expedition, taken in Uebi-Scelebi, that of the Indian expedition and the other splendid geographical productions of the Luce Co., which — animated by the policy and wishes of the Head of the Italian Government — devotes its energies to increasing the production of Italian educational films. In this domain Italy is indisputably conquering a first rank position.

The film is divided into six parts. In the first part, after showing the preparations for the expedition and giving a view of the Italian camp at Gaarre and the ceremony in front of the monument raised at Assab in honour of the murdered members of the Giulietti mission, a fine record is shown of the characteristic costumes of the Ascari and Arabs, and camp life. All this gives a clear idea of the preparatory work required for a scientific exploration of the inhospitable regions of the Black Continent.

The principal features of the second part consist in the journey from Gaarra to Afambo, and give a fine picture of the country, of the protection of flocks from the marauders, and the terrific sandstorms which the monsoons drive before them with alarming violence.

A fine pastoral touch is lent by the flocks which browse peacefully wherever there is any vegetation, or drink at the streams; a most refreshing spectacle, in striking contrast with the parched and desolate scenery of the desert parts.
The third part, in which we are shown the diverse forms of the Dankale and Abyssinian tombs, is mainly scientific in character, and displays the first results obtained by the expedition in the domain of geology, mining, and chemistry. We are shown the strange and original features of the country and the extraordinary density of the salt water lake.

The fourth part is of special interest as showing the vicissitudes of the exploring party in the regions of the Dankalian depression; it is also a striking record of the bloody encounter between the explorers and the brigands.

In the fifth and sixth parts, which are of the greatest interest owing to the beautiful panoramic views and as a scientific and folklore record, we are shown the closing phases of the expedition, from Makallè to Assab, through the country of the marauders. We are also shown the simple and touching scene of the last honours paid to the dead heroes of the Giulietti mission.

This splendid cinematographic vision, which cannot fail to arouse in the people the wish to expand towards the distant lands lying under unknown skies, with dawns and sunsets blazing with purple and gold that fade into violets and blues of an intensity new and strange to our eyes, recalls to our lips the words of the divine Poet:

«Io e i compagni eravamo vecchi e tardi,  
Quando venimmo a quella foce stretta,  
Ov’Ercole segnò li suoi riguardi,  
Acciò che l’uom più oltre non si metta»

From the Luce Institute.
The Governing Body of the International Educational Cinematographic Institute met in Rome during the first week of October.

The Council expressed much satisfaction at the reading of the long and circumstantial report which Marquess Guad-el-Jelî had drawn up on behalf of the Permanent Executive Committee of the Institute, illustrating the work it had done up to the present.

The Director read a detailed report on the activities of the Institute, on its organization and the programme of work in hand and formulated certain concrete proposals which the Governing Body fully approved.

In view of the fact that all the decisions and suggestions of the Governing Body of the I. E. C. I., must be submitted for definitive approval to the Council of the League of Nations, we defer to our January number an account of the detailed work of the Council and of the practical proposals put forward.

The Governing Body committed to the German member, Dr. Hugo Krüss, the task of drafting the report to be submitted in January to the Council of the League. In due course we shall publish this report together with the resolutions passed and the various suggestions that were approved.
INSTITUTE TOPICS

LEGISLATIVE ASPECTS OF THE CINEMA

FILM CENSORSHIP IN BRITISH INDIA

It is evident that the peculiar character of the populations of India is such as to render it impossible for the present to adopt extremist views on the censorship of films; that is to say, to suppress all forms of revision and control, leaving it entirely to public opinion to judge whether a given film may prove harmless or otherwise.

Apart from any consideration of the level of education of the spectators, the possible risk of creating a conflict between western civilization and the Indian mentality renders some form of censorship necessary.

This problem has to be faced in all countries that have not fully entered into western ideas, but persevere in their own way of life, culture, thought, and religion. A certain uniform standard of life exists in all western countries. It may differ somewhat from one State to another, but always in a minor and contingent degree. But in the eastern countries, there is a continuous conflict between the two forms of civilization in respect of all manifestations of life.

Hence, it is incumbent upon the authorities responsible for the protection and government of the country to take all the requisite measures to avert the possibility of moral and intellectual conflicts which, arising out of some misunderstanding, are apt to lead to serious consequences.

So far, the cinema has hardly reached the rural population of India, which forms the great majority of the Nation. It is mainly the town dweller who frequents the cinema halls, while the rural masses are acquainted with the screen solely through the casual and fragmentary efforts of travelling cinemas. It may indeed be taken that the intellectual and semi-intellectual classes form the great majority of the film audiences in India, while the illiterate are in the minority. In like manner, Indian women do not usually frequent the cinema and are only to be found in any number when religious or mythological films are being shown. The Islamic element again, and especially the Moslem women, are not addicted to the cinema owing to the anti-cinema propaganda carried on by many Moslem committees in Northern India.

All this tends to increase the potential, if not the actual, risks of misunderstanding, and the danger of allowing the uncontrolled entrance
into India of films which have not been carefully selected and passed as suitable to the diverse and peculiar public for which they are intended, and demonstrates the absolute need under present conditions for some rigorous form of control and censorship.

Existing Censorship: The present system of censorship in India is based on the Indian Cinematograph Act of 1918. Prior to this Act some form of film control had been attempted by organizations and groups interested in the education and protection of the young. These, however, were merely sporadic efforts, of a purely voluntary kind, which did not make much headway, but made room in time for a definite legislative system.

The 1918 Act, the main objects of which were to provide for the safety of audiences and to prevent the exhibition of objectionable films, was amended by the Cinematograph Amendment Act of 1919 and the Devolution Act of 1920, whereby certain powers given by the original Act to the Governor General in Council were devolved upon the Provincial Governments.

The Cinematograph Act provides that no cinema exhibition shall be given except in a place which has been licensed. Such licenses are to be granted by the District Magistrate, or, in a Presidency Town or in Rangoon, by the Commissioner of Police, unless the Provincial Government appoints some other authority. The Act further provides that no film shall be exhibited, unless it has been certified by the proper authority as suitable for public exhibition. Section 7 of the Act provides that any Provincial Government authorized in this behalf by the Governor General in Council may constitute such authorities as it deems fit for the purpose of examining and certifying films as suitable for public exhibition. If such authority consists of a Board of two or more persons, not more than one half of the members shall be persons in the service of the Government.

Under the said Section 7, Boards of Censors have been constituted at Bombay, Calcutta, Madras, Rangoon, and the Punjab, which have made rules under the Act regulating the certification of films and prescribing the conditions of licenses.

A certificate granted by any of these Boards of Censors is valid throughout British India, subject to the following conditions:

1. A District Magistrate or, in a Presidency Town, or Rangoon, the Commissioner of Police, is empowered to suspend at any time the favourable certificate of any film pending the orders of the Provincial Government, which can then declare it to be deemed uncertified if it sees fit;

2. In like manner, a Board of Censors can examine a film that has already been passed and certified by a different Board, so as to judge
whether the views expressed on it in a particular Province are applicable elsewhere.

Under Section 7 of the Act, there is an appeal from the decision of the Board to the Provincial Government, whose decision is final and without appeal.

Films of an educational tenour are subject to the usual censorship regulations and, in the absence of any special exemption on the part of the Provincial Government, Section 9 of the Act provides that the exhibition of films in educational institutes shall be subject to the same rules as those applying to public halls.

The general censoring fee amounts to five rupees for every thousand feet, or fraction thereof, the proceeds being distributed in varying proportions between the members of the Board, in the shape of attendance honours, and on the salaries of the staff and upkeep of the offices.

The Bombay Board consists of the Commissioner of Police and the Collector of Customs, who are *ex officio* members, a member of the Indian Educational Service, and three prominent native citizens, of whom one must be a Hindu, one a Moslem, and one a Parsee. All are appointed by the Government of Bombay. No European is appointed as such, as European interests are considered to be adequately guarded by the official members. The Board meets twice a month to view the films and consider the preparatory work done by the salaried staff and the Indian Inspectors appointed to supervise the observance of the provisions of the Board in the cinemas.

It should be noted that only Indians who possess a good university degree and who have travelled in the west are eligible as Inspectors.

The Bengal Board consists of the Commissioner of Police of Calcutta and the Station Staff Officer (*ex officio* members), a lady representative who is a European, representatives of the Bengal Chamber of Commerce and of the Calcutta Trades Association, a Jewish Merchant, a Moslem Principal representing the Education Department, and a Hindu Lawyer representing the Corporation; namely eight persons in all.

An Indian Inspector is also appointed to this Board.

The Rangoon Board likewise consists of eight members, namely, the Commissioner and Assistant Commissioner of Police (*ex officio* members), a military representative, a European medical man representing the Vigilance Society, three Burmese gentlemen and one Burmese lady.

The Madras Board consists of six persons, namely, the Commissioner of Police, who is President *ex officio*, a military representative, and four Indian gentlemen, one of whom is a Moslem.

Precise particulars regarding the membership of the Punjab Board of Censors are not yet available.

There are no hard and fast rules for the functioning of the several
Boards of Censors. Regulations are fixed by the different Provincial Governments in accordance with Section 8 of the Act. As a general rule application for a film to be viewed must be sent in by the interested party to the Board, which delegates an Inspector to examine it and report to the Board at its next meeting. The members of the Board are entitled to ask for a fresh examination of the film before granting a certificate for its exhibition. In Burma (Rangoon Board of Censors) the films are examined by a sub-committee consisting of two members. In Madras the President of the Board delegates to a member of the Board the task of inspecting films submitted to it.

Apart from the Boards of Censors described, the right to control and veto films in the other territories of British India devolves on the respective Provincial Governors, pending the appointment of regular Boards of Censors.

_How the Offices function._ Official statistics give the number of the films examined by the several Censorship Boards from 1921 to the present time.

In general the number of the films submitted for revision has not varied in any marked degree, although there is a considerable increase in footage. We have the following returns for the first four offices that were functioning regularly:

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<tr>
<td>1921-1922</td>
<td>1762</td>
<td>5,112,168</td>
</tr>
<tr>
<td>1922-1923</td>
<td>2045</td>
<td>5,991,136</td>
</tr>
<tr>
<td>1923-1924</td>
<td>1536</td>
<td>5,111,438</td>
</tr>
<tr>
<td>1924-1925</td>
<td>1353</td>
<td>4,779,104</td>
</tr>
<tr>
<td>1925-1926</td>
<td>1647</td>
<td>5,302,280</td>
</tr>
<tr>
<td>1926-1927</td>
<td>1716</td>
<td>6,666,220</td>
</tr>
<tr>
<td>1927-1928</td>
<td>1696</td>
<td>6,293,769</td>
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(up to the end of February 1928).

There are considerable differences from one province to another. During the last year under consideration 883 films were examined in Bombay, 663 in Calcutta, 8 in Madras, and 142 in Burma. The footage also varies from 3,322,564 in Bombay to 1,842,938 in Calcutta, 44,037 in Madras and 1,084,230 in Burma.

The different Boards of Censors, and, in the absence of these, the several Provincial Governments, have the right altogether to refuse exhibition certificates, where they consider the film as unsuitable or dangerous, or to require excisions and emendations, so as to eliminate particular scenes of which they disapprove.

In general the number of films altogether rejected has been very small. During the last four years they numbered in all 8 in Bombay (1 during the last year under consideration); 4 in Calcutta (none during the last
year); 9 in Burma (2 during the last year); none in Madras. The number does not vary when we consider also the films declared unfit for exhibition by the Provincial Governments in virtue of the powers described. The Provincial Governments have exercised their right of veto during the four last years on 36 films in Lahore, (13 during the last year), 29 in the United Provinces (7 during the last year), 19 in the Central Provinces and Berar, (5 during last year), 37 in Bihar and Orissa (8 during the last year), 7 in Assam (one during the last year) and lastly 35 in Delhi (9 during the last year).

From the figures given, and while it is only possible to guess at the differences in the standards of censorship from one province to another (e.g. the prevalence of the Moslem, Hindu, or Parsee population, the urban or rural character of the inhabitants, etc.), it would appear that the work carried out under the direction of the Provincial Governments has in general been of a much severer kind than that of the Boards of Censors; this may perhaps be due to the greater sense of responsibility deriving from a direct vision of the films.

Reasons for Censoring. Particular interest attaches to an examination of the motives for censoring films. These reasons do not vary substantially from one region of India to another. They are not laid down in any definite legislative form, but may be gathered from the circulars, measures, and regulations which the Boards of Censors issue for the use of their inspectors, which form, in fact, a minute and precise list of instructions.

First of all, I would call attention to the circular of the Bombay Office, which shows a fine appreciation of the difficult problem; it enunciates the following principles.

a) No generally and rigidly applicable rules of censorship can be laid down. It is essential to be consistent, but impossible to aim at strictly logical decisions; hence it is necessary that each film be judged on its own merits.

b) Nothing should be approved which in the Inspector's honest opinion is calculated to demoralize an audience or any section of it;

c) Inspectors should consider the impression likely to be made on an average audience in India, which includes a not inconsiderable proportion of illiterate people or those of immature judgment;

d) Inspectors should remember that a film may be in itself innocent, yet dangerous because of the bad reputation of the book it reproduces, and that a book may be harmless but a film of it dangerous.

Besides these general principles, the particular points demanding censoring are listed. The first are of a purely suggestive character, and of a kind to awaken the inspector's conscience and sense of responsibility; the latter lay down the actual kinds of films and subjects which are to be regarded as reprehensible.
a) Religion. The irreverent treatment of sacred subjects or the actual and realistic representation on the screen of the founder of any religion are in general disapproved.

b) Politics. All reference, even though vague and indefinite, to domestic or foreign political controversies, scenes likely to arouse the feelings of the audience against a foreign nation, scenes likely to bring discredit on the British Empire or to foment a breach of the law in any of the States.

Among the reasons of a domestic political character, all scenes likely to bring into contempt public characters or institutions, or to foment the conflict between Capital and Labour, are mentioned.

c) Military subjects. All scenes that may bring the British uniform into ridicule or contempt are rigorously forbidden, or scenes that place British or Indian officers in a bad light; scenes exploiting the tragic incidents of war, or which show realistic and terrifying pictures of it; and lastly, espionage incidents.

d) The Administration of Justice. Scenes of executions are strictly prohibited as being liable to produce a disagreeable impression of what is done for the ends of justice.

e) Social Questions. The work of film censorship in the social domain is summarized in a series of prohibited subjects — susceptible of being indefinitely added to — touching on the most painful or reprehensible aspects of social life.

Some of these prohibited subjects are of a purely local character, such as those referring to racial conflicts; the "white slave traffic" is also taboo as showing white women in a position of moral degradation and inferiority.

Scenes of drunkenness carried to excess, unnecessary exhibition of feminine underclothing, nude figures of actors or actresses, indecorous dancing, excessively passionate love scenes, indecorous bathing scenes, scenes of seduction, "First Night" scenes, illicit sexual relationship, scenes of prostitution and procuration, men and women in bed together, and in general all scenes of a crude or immoral character are prohibited.

The indecorous treatment of delicate, passionate, or painful family scenes is precluded as being anti-social, as also scenes depicting in a crude or offensive manner the effects of venereal disease, inherited or acquired.

f) Crime. The Boards of Censors exclude all scenes that extenuate crime or familiarize young people with crime. The modus operandi of criminals, cruelty to children or to adults, especially women, scenes of strangulation and excessive violence, "dope" scenes, incest, violence to women, prison scenes, etc., are prohibited.

g) Acts of Cruelty and vulgarity: Scenes of cruelty in general, and especially to children and animals, are considered objectionable, as also
scenes or offensive vulgarity, either in the staging and accessories or in the action; impropriety in conduct and dress, etc.

h) Titles. Captions are subject to the Board's censorship; all indecorous, ambiguous, or irreverent titles and sub-titles being prohibited.

The Boards very logically consider the titles as an integral part of the film and that it is not possible to differentiate in any absolute way between the one and the other, since the two things are interconnected, and the description of the films must be considered together with the film itself.

Criticism of the present System of Censorship. One of the principal criticism of the present form of censorship in British India touches on the methods of film revision. The systems adopted in Bombay and Calcutta, on the one hand, and in Burma, Madras, and the Punjab, on the other, are in fact entirely different.

In the first two, the films are revised entirely by the inspectors delegated by the offices concerned, while in the latter centres the very delicate work of revision is entrusted to the actual censors.

In the first case, the Censors are not closely enough in touch with their subject, since they are called upon only in exceptional instances to view and judge the films submitted to them, while the actual responsibly devolves upon paid or salaried officials. The latter often lack a broad and elastic understanding of social life, of which the censor is the potential representative, and tend to a mechanized attitude of mind, produced by bureaucratic life.

The returns published by the Report of the Indian Cinematograph Committee (Table 18) dealing with the Boards of Censors of Bombay and Bengal are of interest in this connection. This table gives the following figures for 1927-28.

<table>
<thead>
<tr>
<th></th>
<th>Total number of films examined</th>
<th>Films examined by the Censors</th>
<th>Total number of Films examined</th>
<th>Films examined by the Censors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombay</td>
<td>883</td>
<td>39</td>
<td>3,322,564</td>
<td>273,707</td>
</tr>
<tr>
<td>Bengal</td>
<td>663</td>
<td>26</td>
<td>1,842,938</td>
<td>184,595</td>
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</table>

The censorship in India was the subject of lengthy and animated discussions on the part of such bodies as the British Social Hygiene Delegation, which visited India in 1926 and 1927, the National Council of Women in Burma, and the Legislative Assembly and Council of State. The principal contention was that the cinema exercised a deleterious influence on the Country. Although no definite evidence was brought forward on this subject and merely theoretic considerations were expressed, the Council of State approved a resolution for the appointment of a Commission of Enquiry into the system of film control in the territory of British India. The amplest powers were granted to the said Commission.
The work of the Commission was set forth in a valuable Report and the Indian Government, in reply to an official enquiry by the International Educational Cinematographic Institute, stated that the present censorship regime would be modified in conformity with the suggestions and specific proposals contained in the Report.

The main criticisms made by the Commission are the following:

a) There is no doubt that the greater part of theatrical films do not give a real picture of life; if they represented real life their plots and dramatic value would fail. This may be of relatively small danger when the films are shown to audiences and individuals accustomed by life-long experience to judge and discriminate in such matters. But in the case of the populations of India, it has been noted that a falsified representation of life tends to blind them in regard to the finer aspects of western life and to urge them to emulate the worst side. Moreover, the conservative element in India holds that European films, if not carefully selected, whether they be realistic or mere caricatures of life, are apt to lead the new generations astray from the beaten path of custom and civilization.

b) The Indian people is indifferent towards social dramas. It fails to understand these and regards them as false and dangerous. The public abandons the halls when such films are shown.

c) It does not appear to be true, at least in respect of Indians, that films arouse dormant criminal tendencies in the audiences by the representation of scenes of crime and the behaviour of criminals.

Persons who have criminal propensities, according to the Report, learn much more from actual life than from the film. An enquiry carried out at the several Police Stations of the different Provinces found that there was no connection between the cinema and crime or the means of the commission of crime. It is true that a potential criminal might pick up an idea from a film, but his native knowledge of the ways of transgressing and his natural abilities would be much more likely to serve him as a practical guide.

In any case the exhibition should be definitely banned of films that illustrate realistically the modus operandi of criminals or which are of a kind to familiarize the young spectator with crime and to suggest to him that robbery, deceit and violence are normal incidents of life and not excessively reprehensible.

d) It has been suggested that passionate love scenes on the film might be liable to have a tendency to demoralize the youth of the country. It might be well to urge upon the censors the necessity of greater stringency in the enforcement of the regulations in this regard.

e) It would be desirable that the police authorities and magistrates should exercise a kind of pre-censorship in regard to advertisements, posters, leaflets, and other forms of film publicity, in order to make sure
that these did not contain words, phrases or illustrations that had been banned, and that they stressed the better aspects of the films that were to be shown.

f) Special attention should be paid to censoring old films and inferior films that were still being circulated in India. Every film has a limited term of natural life, whether regarded as raw material or as a picture. The showing of out-of-date and inferior films should be discountenanced.

g) The work of the censoring boards should be completed by the control of the actual exhibition of the films, so as to make sure that, after certificates had been granted, unscrupulous speculators and renters should not introduce additions or make cuts in them.

h) The public ought to be called upon to cooperate with the censorship, as is the case in Bombay, where notices invite spectators who have any complaints to make of films, to address them to the appropriate authority.

i) The Censors should in all cases see that children are not allowed to be present when unsuitable films are shown. Children are probably more injured by watching films of doubtful morality than by scenes of a sensational or violent character, which are undoubtedly more injurious to adolescents.

On the other hand, the issue of certificates stating that certain films are suitable for exhibition to children would cause the public to quit the halls and would check all spontaneous effort at improvement on the part of the industry.

The Commission of Enquiry therefore recommended, by way of experiment, the English system of issuing two types of certificate, authorizing «universal» or «public» exhibition. The first certificate implies that, in the opinion of the censor, the film contains nothing that could be deleterious to children, and the second that the film, though suited to public exhibition, might be harmful or disturbing to children.

Proposed Amendments. The ideal system of censorship, according to the Report (N. 253) would be a Central Board of Censors for the whole of British India. This would be in close and continuous touch with the Government of India, and through the said Government, would be better able to get into touch with the several Indian States when necessary.

This Central Office could act in the different Provinces through the medium of separate offices and censors delegated to represent it.

As regards the validity of certificates for exhibition — a point which as already said, requires regulating and revising comprehensively, so as to avoid the showing of films that are no longer suitable for public exhibition — general rules for the granting of certificates would have to be fixed for the whole of India, with special consideration of the needs of the different provinces.
Public utility films, made with the object of opening the eyes of the masses to the advantages of better sanitation, education, cooperation, agriculture, and the like, ought to be exempted from certificates; they should be allowed to circulate throughout India freely without being subject to any form of taxation.

A Film Collection ought to be formed for educational and scientific films; this should not contain only imported films, but also and especially films produced in India, in accordance with the rules to be laid down by the Central Office and Advisory Committee. This Collection should operate not in India alone, but also beyond her frontiers, so that the culture, science, and learning derived from India during long ages of study and religious and philosophical research, should be made known to the world.

The Report (No. 110), refers understandingly to the creation of the International Educational Cinematographic Institute, under the auspices of the League of Nations, with which the Central Office and Advisory Committee should act in concert for the achievement of their common aims.

At its meeting last October the Governing Body of the I. E. C. I in Rome approved unanimously two reports which we shall speak of in due course.

The first called attention to the need of freeing the educational and scientific film from all fiscal impediments and granting it full rights of citizenship in the different countries.

The second, on the proposal of the German delegate, Dr. Cürlis, suggested that, subject to such conditions as might in due course be deemed expedient, censorship of educational films should be centralized in the Rome Institute.

The proposal put forward in the Indian Committee's report, which is so consonant with the wishes and aims of western countries, is all the more significant.

Once again light reaches us from the East, and India, the ancient Mother of peoples and civilizations, is found in the vanguard of progress and culture.
THE CINEMA IN THE SERVICE OF HYGIENE AND SOCIAL WELFARE.

Systematic hygiene propaganda by the film is steadily developing in Italy. Ever since 1919 the General Direction of Public Health attached to the Ministry of the Interior, has had recourse to the cinema for hygiene propaganda and for a comprehensive campaign of an evidential and persuasive kind. Some films have been published directly by the Ministry, under the guidance of a competent medical staff assigned to the purpose. Malaria is one of the subjects most successfully, comprehensively and persuasively dealt with. A number of other films have been published in concert with the Italian Red Cross Society, particularly so as to illustrate the widespread work and fine institutions organized in the different regions of Italy for the prevention of tuberculosis and to fight contagious diseases.

A great impulse was given to hygiene propaganda by the foundation of the Luce Institute and the formation, by the wish of the Head of the Italian Government, of its collection of films for educational and hygiene propaganda. Since 1924, this propaganda has developed steadily. A number of films released in the Kingdom were purchased from abroad, especially in France, Germany and the United States; a still greater number were produced in Italy: these comprise films on Tuberculosis, Open-air life, Health Education for Children, Sanatoriums, Modern Towns, Healthy Dwelling Houses, Food Hygiene, Town and Country Life, etc. All the above films were produced by the Luce Company under the direction of a special technical Committee, of which the Director General of Public Health was President. We wish, however, to call particular attention to three forms of activity:

a) Sunday propaganda lectures;
b) Documentary films on behalf of the League of Nations;
c) The organization of Hygiene Film Archives for the use of Elementary Schools.

In 1925, on the initiative of the Film Archive of the Rome Governatorato, which was organized in consultation with the Luce, Sunday Hygiene Film shows were started in the Capital. The owners of district Cinemas placed their halls at the disposal of the Governatorato every Sunday morning, free of all charge. The Rome Health Office sent doctors to all the cinemas to address the people, to explain hygiene films,
and to carry on a systematic work of propaganda. No entrance fees were charged. The enormous success of the enterprise was evident right from the earliest weeks. It was estimated that over 15,000 persons—men, women, and children—were present at the twenty to twenty-five contemporaneous Sunday shows. It was found necessary to intensify the work, and special shows, illustrated by lectures, were organized for women, showing films dealing with the feeding of infants, puerperal care, etc. Lastly, shows were organized for soldiers resident in Rome, dealing more particularly with contagious diseases.

This is, undoubtedly, an initiative deserving of the widest notice.

In 1928, the Health Section of the League of Nations having planned an exchange of doctors between different countries, in order to observe the progress made in hygiene propaganda and in works designed to prevent the worst social evils, the Luce was able, with the help of data furnished by the Health Section, to get ready some thirty films illustrating the great work accomplished by Italy during the last ten years for the direct and indirect improvement of public health: the big aqueducts, industrial hygiene works, the demolition of slums in the old quarters of our cities, building new quarters, the construction of new docks, the organization of new roadways to obviate the bad effects of dust, great mountain basins, the physical education and training of the young, open-air schools, new school buildings, etc. Having completed this film collection, the Luce Institute was requested by the Hygiene Direction of the League of Nations to send its own experts along with the medical missions going to Belgium and Holland. In these countries films of great interest were likewise taken, under the direction of local experts. Lastly, the Luce turned a long and complete film in Copenhagen under the guidance of Prof. Madsen, on the occasion of the Serological Conference on the methods of floccology practised by the specialists of different countries.

The organization of School Hygiene-Film Archives is a further work organized by Italy that deserves our notice. 75 Provinces have so far set up in the elementary schools appropriate film collections of from 20 to 30 films, dealing with social hygiene. These films are distributed to all the provincial schools, together with the requisite apparatus, free of all charge. All that is required is that application be made in due time.

In one of our forthcoming issues we shall call attention to what has been done in the domain of industrial hygiene and the prevention of accident. In this field also the work done by Italy deserves to be widely known.
Among the innumerable uses of the film for instructional purposes, one is deserving of very special attention: namely its use for illustrating the complex problems of geometry.

By means of animated drawing cinematography, students can follow the gradual development of figures on the great luminous screen, while descriptive and cinematic geometry more especially, by means of illustrations in motion, afford much more lucid and efficacious explanations than any kind of diagram.

Certain cinema publishers have brought out films the purpose of which is to elucidate, by the medium of animated images, some of the hardest problems of geometry, which have hitherto been explained axiomatically by exact formulae, but have always been very difficult to grasp and often left students sorely perplexed after long study of the stationary figures.

As an example, we may cite the famous theorem of Pythagoras, which most of us have studied, but few remember, because it has rarely been properly understood. By means of animated drawings, the lines of this figure are seen gradually developing till they form the entire problem; they split up into its essential elements, and are then superimposed so as to give the clearest possible vision of what otherwise would have had to be propounded by formulae and the inadequate help of diagrams on the slate.

The engineer, F. Cisar, Professor at the Pilsen School of Arts and Crafts, has produced a series of films for the illustration of diverse geometrical problems, which, owing to their complexity, are not easily grasped by young students. We, who are zealous advocates of the great use of the cinema in the vast field of education, have much pleasure in illustrating herewith some of the phases of the development of the geometrical problems illustrated in Prof. Cisar’s films. The figures we publish may be compared with the diagrams commonly used; the exhibition of the whole film of course shows all the stages of the development of the diverse problems with a lucidity that makes them much more easily understood.
SERIES A] Nos. 1, 2 and 3

A) PLANE GEOMETRY. Pole and Polar. Conjugate diameters in ellipse.

The movement of a point on the given polar can be observed and the known theorem followed on the pole and polar. The polar, from all points of a straight line, passes by the pole from the straight line and inversely. This theorem is used to derive the origin of conjugate diameters.
B) DESCRIPTIVE GEOMETRY. The section of a pyramid by a plane. In axonometric projection we see the triangular pyramid cut by a plane, which moves in rotation round the track. The formation of the triangle by the section can be followed; it is also possible to observe the correspondence of the perspective collinearity.
SERIES C) Nos. 1, 2, 3, and 4

C) DESCRIPTIVE GEOMETRAX. The intersection of the pyramid with the prism in axonometric projection. Given prism and regular pyramid. The pyramid moves continually along the axonometric axis. One can observe the intersection of two geometric bodies, first partial, then total, then again partial; at the same time the different forms of the polygon of the intersection can be observed.
SERIES D) 1, 2, and 3

D) CINEMATIC GEOMETRY. The triple formation of the curve of a connecting-rod. The articular quadrilateral. The plane represented by a triangle makes a movement like the connecting-rod of a machine. The two vertices of the triangle form the ends of the crank, while the third vertex describes the curve of the connecting-rod. The two other articular mechanisms having a common triangle are added to the mechanism above mentioned; and from which the same curve of the connecting-rod can originate. The three mechanisms are moving simultaneously, and the vertex of the common triangle can be seen describing the same curve of the connecting rod. (Robert Cayley's theorem).
THE USE OF EDUCATIONAL MOTION PICTURES BY THE UNITED STATES DEPARTMENT OF AGRICULTURE

(Compiled largely from official publications by Josiah C. Folsom).

The educational motion pictures available from the United States Department of Agriculture are offered for use by the general public as well as by officials and employees of the Department and related institutions.

These films have been produced and are circulated primarily by the Department. They deal with important lines of work in which the Department and cooperating State institutions are engaged. They are planned to acquaint the public with the methods and significance of important activities, to gain public cooperation, and, through making common property of the results of scientific investigations, to spread knowledge of improved methods in agriculture, forestry, rural engineering, and kindred pursuits.

Prior to 1913, individual bureaus of the Department of Agriculture had made sporadic use of motion picture films taken either by their own photographers or procured from commercial companies. These experiences showed that the use of motion pictures stimulated attendance at meetings, increased interest in and understanding of the work of the Department and were a valuable adjunct to diffusion of agricultural information.

On September 12, 1913, the Secretary of Agriculture appointed a temporary committee to investigate the possibilities of the motion picture as a medium of publicity in its educational field work, and if entrance to the field seemed desirable, to report plans whereby the use of motion pictures in agricultural education could be placed on a stable basis as a Departmental project.

The committee reported that while the direct educational value of motion pictures could not be definitely predicated, the employment of films offered other advantages which warranted the Department in using them in its extension work.

Lacking its own facilities for making films, the committee endeavored to establish satisfactory cooperative relations with commercial film companies, with the object of having them do the actual photography and furnish the Department under reasonable financial arrangements with such positive copies of films as it might care to purchase and use.
one or two fairly satisfactory films were produced under this arrangement, and it soon was apparent that the Department could not, under this arrangement, establish adequate criticism over its own subjects or make satisfactory financial arrangements covering the purchase of films made with its cooperation.

Accordingly, the temporary committee asked to be discharged and recommended that a permanent committee be appointed, and that the Department at once install in the Division of Publications, as a feature of the Section of Illustrations, a complete laboratory for the taking, developing and printing of its own films. This was done.

The laboratory at once made a very efficient showing, and was able to produce excellent films at costs much below those of films produced with the cooperation of commercial companies. The production of its own films gave the Department complete criticism control over all material shown with its official title, ownership of the negatives and ability to make, at actual costs for material and labor, as many copies of positives as it needed.

From December, 1913 to November 30, 1914, the newly organized laboratory photographed for the Department and another Government organization 27 subjects, aggregating 46,775 ft., of negative films and from it printed 20,075 ft., of positive films for public projection purposes. It also printed or developed for another Government organization 10,400 ft., of films on subjects photographed by others.

Up to the fiscal year beginning July 1, 1917, the use of motion pictures was on an experimental basis only. In that year, the Department was enabled to begin the systematic development of the work by the fact that Congress gave a definite allotment of $10,000 for it. During that year films prepared by the Department were used very effectively in connection with its efforts to recruit farm labor, encourage preservation of perishable fruits and vegetables, prevent forest fires and stimulate agricultural production. The largest campaign dealt with farm labor, making appeals for the enlisting of city people in farm work. Much farm labor was recruited as a direct result.

During the fiscal year ending June 30, 1920, the motion picture work was placed under the direction of the Chief of the Division of Publications. Marked advances were made in the production and distribution of the Departments' films. There was now no doubt as to the usefulness of motion pictures in agricultural extension work, and the need for their wider distribution in response to demands.

On July 1, 1923, the Office of Motion Pictures, a separate unit, was established to conduct the motion picture work of the Department. This organization still functions.

During the fiscal year ending in 1920, arrangements were made by which persons and institutions not directly connected with the Depart-
ment of Agriculture could purchase, under certain restrictions, positive prints of the Department's motion pictures. This resulted in substantial increase of distribution of those films.

A good educational motion picture should teach a worthwhile lesson clearly and efficiently, present facts correctly, be interesting enough to arouse and hold interest, and be representative of the institution which is responsible for it.

Since 1920 there has been considerable improvement in the subject matter content and the photographic quality of the motion picture films issued by the Department of Agriculture. Emphasis is laid upon quality rather than quantity. This has been secured in part by the constantly improving system of criticism of scenarios and review of finished pictures. This ensures careful criticism as to subject matter and motion picture technique before production is begun. Upon completion, the films are projected for review and criticism before meetings to which all bureaus in the Department are requested to send representatives.

Use of motion pictures by the United States Department of Agriculture have been found to stimulate interest in the subjects discussed, to give clear conceptions of unfamiliar ideas, to show in a part of an hour what otherwise would have taken much longer to demonstrate to a far smaller audience, and to furnish inspirational impetus to campaigns for community betterment.

A large part of the audiences to which these pictures are shown may be regarded as specialized, and especially interested in the subject matter of the films. Better results are secured than if they were shown to general audiences.

They are viewed by all classes of the farm population, but doubtless the farm operating classes make up the larger parts of the audiences.

Films circulated by the Department of Agriculture have been shown in every State, and in practically every important agricultural country. It is estimated that at least 10,000,000 persons see these pictures every year. Additional millions see copies of parts or the whole of these films which are circulated by other agencies, such as news weeklies in this country.

The Department has now approximately 2,500 copies of its films available for circulation. An equal number have been sold to outside agencies. Some have been sold to foreign purchasers.

In the fiscal year ended June 20, 1928, 7,653 shipments of films were made, of which 4,814 were to the general public, and 2,839 to extension workers. The Department was unable to fill more than 600 applications for films.

Individuals or organizations may be authorised by the Department to buy prints of its films from a commercial manufacturer at contract prices, the result of competitive bidding. Costs vary with length. Purchasers are required to pay transportation, and sometimes other small
additional charges. The conditions governing such purchases are that no changes be made in the subject matter of the films without approval from the Department, that credit to the Department be retained, and that no commercial advertising matter be added to or inserted in the films.

Outstanding needs for this work are for more prints of films and for easier and quicker distribution, which can best be supplied by the State institutions cooperating with the Department. Establishment of distributing centers in the State agricultural colleges has been begun, and this course is recommended for such institutions in all States. To them and other distributing agencies, including public schools, farmers' organizations, development associations, and boards of trade — to reputable organizations of every sort — is offered opportunity to purchase prints, as outlined elsewhere. The increase of distributing centers would help reduce transportation charges, make films more available on short notice, and give local needs better consideration.

Although available to the general public, the films are designed to aid in the work of the extension and field workers of the Department and cooperating State institutions, and their primary use is by or under supervision of such workers. The number of copies of films which the Department is able to supply is at present inadequate to meet all other requests. However, farmers' organizations, schools, colleges, churches, theaters, and other agencies or persons desiring to borrow them may apply for films through proper channels, and the films will be furnished if available. Films are furnished free of charge except that the borrower must pay transportation both ways, and a responsible person must assume responsibility for such charges, as well as the safekeeping, proper use, and prompt return of the films.

All films distributed by the Department of Agriculture are of standard or theatrical width. About two-thirds of the available prints are on slow-burning film stock, and this stock is being used for all new films.

The production of « talking » motion pictures will be undertaken by the Department of Agriculture this year, and if present plans are carried out one or more « all talkie » short features will be ready for presentation at the big livestock shows of the winter of 1929-30. For the present the production of talking pictures will be limited to short specials for such occasions as the National Dairy Show, where facilities for reproduction can be provided. As soon as portable equipment for sound pictures is available at a cost lower than now the production of talking films for general circulation will be undertaken.

The Department sees a special advantage in vocalizing films which deal with economic phases of farming. It believes that the exhibition of sound pictures on the agricultural outlook, for example, would greatly aid in efforts to induce farmers to study prospective demand for their products in adjusting production activities.
THE CINEMA AS AN AUXILIARY TO THE SCIENTIFIC ORGANIZATION OF LABOUR

From among the copious and diverse material bearing on the use of the film for the purposes of scientific management, which reaches us from all quarters, we have selected a film illustrating the modern organization of a big bank, which is fully described hereunder.

This remarkable film is published on account of the Rotterdamsche Bankvereeniging of Amsterdam, and affords a clear vision of the systems adopted in the scientific management of its offices and its working methods.

We are confident that our readers will be interested in this description, as it not only shows what is actually being practiced in this domain in certain countries, but also gives a very clear notion of the practical service that the film can render in illustrating and popularizing modern ideas and systems of work and production.

THE UP-TO-DATE ORGANIZATION OF A BANK.

Part I. Dictation.

The first picture shows the office of a manager of one of the departments, who is composing a circular. The manager is at his table reading a letter. After a few moments, he picks up a microphone, presses a knob and dictates the text of the circular into the receiver.

The spectator sees the disc move and the track of the wire on which the dictation is impressed.

The upper part of the apparatus is shown for some further moments, while the attention of the spectator is drawn to the wire which shows the blank spaces between the different words.

The manager is seen finishing his dictation.

He makes a note on the customer's letter to indicate that the matter has been dealt with and puts the letter aside.

THE WORDS ARE MARKED BY A MACHINE ON A ROLL OF PAPER

(perforation system).

Part of the typewriting office is shown. An automatic perforator is shown in the foreground.
A typist enters and glances at the machine and the block which is connected with the registering microphone.

She notes that the block has been marked during her absence, and the following caption is projected on to the screen:

THE DICTATION IS ENDED.

The block is shown closer up, and the typist seats herself behind the machine. She places a head-phone over her ears, listens to the dictation, and starts to perforate the roll of paper. When the perforation is finished the operator displays the roll of paper on which the text is perforated.

The perforated roll is shown enlarged. Holes are seen on its sides which serve in turning the roller, while the perforations corresponding to the text of the circular are shown in the middle.

After the typist has started the second dictation, the following caption is shown:

THE AUTOMATIC TYPEWRITER

and next:

THIS MACHINE, BY MEANS OF A ROLL OF PERFORATED PAPER, WRITES AN UNLIMITED NUMBER OF LETTERS

The silhouette of the typist is seen behind the automatic typewriter, with a table on her left hand on which there is a loose-sheet address register. The typist looks up the address required and types it on a circular. The addresses are written by the automatic typewriter, which goes on working without the help of the typist. After again showing the machine enlarged, it is shown in its normal dimensions; the typist then presses a button, the machine starts working, and the circulars are typed automatically. The typist marks the number of the circular and the date it was mailed beside the customer’s name on the address list, so as to be able to check what circular letters have been received by each customer. She displays the card on which she has made these notes while the machine goes on working automatically. When the letter is completed the machine stops and it is taken out.

PRESENTING A CHEQUE FOR PAYMENT.

The counter is shown in the foreground; a man walks up to it and hands over a cheque. The clerk at the counter receives it, sticks on to it a perforated slip of paper bearing a number, detaches the part of the slip intended for the customer (upon presenting which he will later on receive payment of his cheque), notes thereon the time at which the cheque was presented, and hands it to the customer. The time is similarly noted on the back of the cheque, and it is placed in the basket.
PASSING THE CHEQUE FOR PAYMENT.

The cheque is received in the office where the pass-books are made up. A clerk verifies the drawer's balance by consulting cards arranged on a revolving stand; he compares the signature on the cheque with the specimen held by the bank, notes his approval on the cheque and passes it on to the cashier.

THE MONEY IS COUNTED BY AN AUTOMATIC PAYING MACHINE.

The inside of the cashier's office is shown. The cashier takes the cheque, picks up some bank notes, counts them out by the automatic paying machine, and deposits the cheque on the counter.

The clerk pays the cheque against delivery of the section of the slip of paper that was handed over to the customer when he presented his cheque.

The machine is then shown close up, and the spectator reads:

AUTOMATIC MACHINE FOR COUNTING OUT COINS AND MAKING THEM UP IN ROLLS.

The coins are seen dropping into a box. They are gathered up by the machine, which counts the number of the coins, and arranges them in a roll of paper which bears the name of the bank and the indication of the number of coins contained in the roll, which is so disposed as to show from the outside the denomination of the coin within.

The clerk shows the box with the coins inside it and then a made-up roll of them.

The attention of the spectator is next called to the following caption:

THE SYSTEM OF DUPLICATES
AVOID TRANSCRIBING: A Duplicating system ensures economy and avoids mistakes.

Next is shown:

THE TRANSMISSION OF BILLS FROM THE BANK TO ITS AGENCIES AND VICEVERSA
ALL THE DOCUMENTS NECESSARY TO THE BANK AND ITS AGENCIES ARE MADE OUT SIMULTANEOUSLY WITH CARBON SHEETS.

The spectator reads further:

THE PAPERS COMPRISE:

1) COPY FOR THE BOOK-KEEPING DEPARTMENT;
2) FIRST NOTE FOR THE HEAD BANK;
3) REGISTER OF THE BANK'S BUSINESS;
4) COPY FOR AGENCY'S BOOK-KEEPING DEPARTEMENT;
5) FIRST NOTE FOR THE AGENCY;
6) AGENCY'S REGISTER OF ENTRIES.
NOS 1 TO 3 REMAIN AT THE BANK, WHILE THE BILLS ARE SENT WITH THE LAST THREE DOCUMENTS TO THE AGENCY CONCERNED. IN THIS MANNER THE DOCUMENTS REQUIRED BY THE AGENCIES ARE ENTIRELY DRAWN UP AT THE HEAD OFFICE. THIS PRECLUDES THE RISK OF DISCREPANCIES BETWEEN THE BOOK-KEEPING OF THE HEAD BANK AND THAT OF ITS AGENCIES.

The picture shows a section of the Bank's bills' service. In the background the typist is seen preparing the memoranda and in the foreground a clerk stands in front of a calculating machine classifying the copies to be placed in the machine. Another clerk appears and gathers together the typed memoranda, he takes them over to a third clerk to be classified and displays one of the printed memoranda opened out. The six pages of the document are shown in turn, enlarged, on the screen.

The clerk detaches the note while one of the typists demonstrates how one of these documents is folded and placed in the machine. Meanwhile the clerk who classifies the various copies and the typists continue their work, while it is shown how, after being filled in, these papers are opened out and shaken to get rid of the carbon papers. The carbon sheets are placed in position not by the clerks, but by porters, messengers, or messenger girls.

**DIVISION AND CLASSIFICATION OF THE SEVERAL PARTS OF THE DOCUMENTS TO BE DUPLICATED**

The typist goes over with the classified copies to the clerk who attends to further operations.

**THE COPIES ARE GATHERED TOGETHER**

**THE BALANCE-SHEET OF THE SECTION IS COMPLETED.**

The typist comes up with the copies classified and places them beside one of the clerks. The latter starts to check them on a counting machine; thus completing the balancing of the section. A clerk walks up, takes the register of the bills section and displays it to the public. The register is then shown enlarged. The provisional balance-sheet prepared by the same machine is also shown. This also is shown enlarged. The clerk goes out and the following caption is shown on the screen:

**THE CURRENT ACCOUNTS ARE MADE OUT ON CARDS**

(by the help of copies).

A cashier is shown noting the several operations on account of the customers by means of a typewriter specially adapted for this work.

A clerk brings in the classified copies. The cashier types out the current account and at the same time a duplicate, after which the clerk returns, takes the two documents and shows them to the public.

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The pass book is shown enlarged and the cashier goes on quietly with his work until the caption shows:

A DAILY REGISTER SUMMARIZING THE SEVERAL CURRENT ACCOUNT OPERATIONS BY MEANS OF A CARBON SHEET.

The clerk extracts the daily account from the machine, this is displayed by another clerk to the public, and is next shown enlarged on the screen.

CHECKING THE COMPUTATION OF INTEREST

Two clerks are seen intent on checking the calculation of interests by means of a multiplying machine. This machine is worked by electricity and seems to work very easily, to judge from the projection on the screen. Two clerks attend to it, one of whom gets out the calculations while the other checks them, extracting the totals from the machine by means of which the calculations are made. The attention of the public is next called to:

AN ADDRESS-WRITING MACHINE

This caption is shown:

THE ADDRESSES ARE WRITTEN AT THE TOP OF THE NOTES TO BE MAILED.

These pictures were taken in the mailing section of the Bank.

One of the clerks is intent on printing the addresses with a special machine that works in the following manner:

By means of an accessory machine which is seen on the right of the film, the plates are prepared with the names and precise addresses of the customers; these plates are placed in order in a kind of uncovered box, which fits precisely into a special sector of the main machine. This, as also the accessory machine, are worked by electricity and the printing of the addresses is the matter of a few seconds only.

At this juncture a clerk turns up who first displays the note on which the address is to be printed and then the same note with the address. This latter is next projected on the screen enlarged.

There is next shown on the screen:

A CYCLOSTYLE

followed by the caption:

CHEAPLY PRINTED FOR THE INTERNAL SERVICE OF THE BANK

The cyclostyle is shown on the film. A clerk comes in and displays the sheet to be printed. By pressing a button, he sets the machine going and the printed sheets are seen dropping on the other side of the machine. The clerk holds up a printed specimen, which is next shown enlarged. The clerk goes out.
PHOTOGRAPHING A CONTRACT

The interior of the photographic studio of the bank is shown.
The clerk places the contract in position, it adheres automatically
and perfectly, thanks to an aspirator apparatus. The operator uncovers
the objective and the paper to be photographed is printed direct on the
sensitized paper. The objective is now covered and the contract removed;
the operator carries off the printed sensitized paper to the dark room,
to develop it. This, after having been cut off, rolled itself up and
dropped automatically into a container.

PHOTOGRAPHING SEVERAL CURRENT ACCOUNTS AT A TIME

Two clerks come in with several current accounts which they place
in position; they are photographed as in the preceding instance. Mean-
while, there is shown on the screen:

THE DEVELOPED PHOTOGRAPH OF THE CONTRACT.

The clerk returns to the dark room, bringing with him the photo-
graph of the contract which he displays to the public; he then goes out
together with the current-accounts clerk, who takes the photographed
documents with him.
NOTES TAKEN FROM REVIEWS AND PAPERS

CULTURAL FILMS

The Egyptian Ministry of Agriculture is setting up cinemas in the oases for the presentation of educational films, especially those dealing with agriculture. (Frankfurter Zeitung, Frankfurt).

The possibilities of the practical application of the cinema to agriculture are dealt with in the light of the views of several prominent persons. (Cinéma, Paris).

Referring to an article which appeared in the Figaro, a contributor stresses the necessity of checking the steady exodus from the land of peasants attracted by the lure of the towns. Attention is called to the efficacy of the cinema as a factor in rural and agricultural propaganda. (Comoedia, Paris).

In 1930, the Soviet Cinematographic Societies will produce at least 50 films of an agricultural character, 7000 travelling cinemas will be equipped for touring the provinces. (Deutsche Filmzeitung, Munich).

The Wirtschafts-Verband Bayer Filmfabrikan ten, of Munich, makes an exhaustive study of the actual production of educational films in Bavaria. (Der Film, Berlin).

According to recent statistics, it would appear that there has been a marked diminution in the production of educational films in Germany (Film Kurier, Berlin).

Dr. H. D. Kitson, Professor at the University of Columbia, has produced, on account of the educational section of the Western Electric Corporation, the first talking film of an educational character. (Film Kurier, Berlin).

The V. O. K. S. has examined the various proposals submitted to it by Austrian, Swiss, and German organizations for an exchange of cultural films. Recognizing the urgent necessity for a wider diffusion abroad of Russian cultural production, it has asked each of the cinema organizations of the Soviet Republic to forward 5 films. (Bulletin d'Information, Moscow).

A list is published of the films which the German Ministry of Culture describes as «cultural films». (Neuer Berliner, Berlin).

The Engineer, Johann Weil, dealing with the film as a means of propaganda, draws attention to the great assistance it can render in the sale of manufactured goods. (Kinematograph, Berlin).

The State Museums in Germany make use of films for the purposes of propaganda. (Dresdener Nachrichten, Dresden).

The Universal Film Co. of Berlin has produced a film on carburettors for the purposes of mechanical locomotion. (Bildwart, Berlin).

The «Pathéscope» Co. of New York has produced a film dealing with the more interesting aspects of American industry. (Bildwart, Berlin).

In North Canada, films have been taken from aeroplanes in flight. These films reveal the existence of numerous
hitherto unknown lakes. (Berliner Borsenzeitung, Berlin).

A film taken by F. E. Pankhaus, reproducing life and customs in Sierra Leone and the Gold Coast, shows the headway made by European civilization in those countries. (Film Kurier, Berlin).

The « Woskok » Co. is turning a synchronized film in Russia, illustrating the geographical and ethnographical conditions of the Yamal peninsula. (Licht-Bild-Bühne, Berlin).

Dr. Martin Rikli contributes an article on the cinematographic expeditions made in far-off lands and calls particular attention to a film reproducing life in the city of Medénin in Southern Tunis. (Film Kurier, Berlin).

Mr. Arthur Blake is making a tour of the world on behalf of the Fox Film, accompanied by two operators, and is preparing a splendid documentary film of the scenery, habits and customs of the various countries visited. These films will be taken with a Movietone apparatus. (Le Cinéma Suisse, Montreux).

Dr. A. W. Baessler, of Berlin, has undertaken an expedition in South America for the purpose of taking a film in the Chaco territories, where the natives still live in a state of cannibalism. (Kinematograph, Berlin).

The « Ufa » will be publishing in 1930 a film entitled « The Hindu Song ». This film, which is interpreted entirely by Indians, has been taken in the most picturesque regions of India and in the sumptuous palaces of the Maharajas, who have given every kind of facility for the filming of their fabulous treasures. (Arte y Cinematografía, Barcelona).

Messrs. Cooper & Schoedsack have returned to Hollywood after having lived for over a year in the heart of Africa. During this time they have gathered the material for a great new production, which will be entitled: « The Four Feathers » and will reproduce the life of the animals and the savage tribes of the so-called Black Continent. (Popular Film, Barcelona).

The « Hamburger Filmarchiv » of Hamburg has produced a film entitled « Through war-like Arabia ». This film was taken in the course of a voyage of exploration by Dr. Rathens, on account of the World Economic Institute of Hamburg. (Bildewart, Berlin).

The German central association of Disabled Workers and Widows has had a documentary film taken to illustrate the activities of the Association. (Kasseler Volksblatt, Kassel).

The Berlin Institute of Cultural Research, directed by Dr. Hans Cürlis, has taken a documentary film, entitled: « The Danube from the Black Forest to the Black Sea ». (Württemberger Zeitung, Stuttgart).

The « Wufka » has turned a synchronized film on the occasion of the Jubilee fêtes for the tenth anniversary of the Tartar Republic. (Licht-Bild-Bühne, Berlin).

The « Wufka » is preparing a new film of a political character entitled « Youth must be healthy to grow up into the future governing class ». (Kino, Kiew).

The Ministry of Public Education is studying the best way of creating a Higher School of Cinematography in Berlin. In this connection it has sent Mr. Widolski, Director of the principal Soviet Cinematographic School at Moscow, to Germany. (Le Courier Cinématographique, Paris).

The Arnold Kahnhnemann Co. of Berlin has produced on account of the Prussian Ministry of Agriculture a film entitled: « Rabes in Dogs ». (Berliner Morgenzeitung, Berlin).

Dr. P. Martell, of Berlin, dwells on the importance which scientific films
are assuming in general education and gives a list of a number of films dealing with medicine, surgery, pathology, tuberculosis, bacteriology, psychiatry, etc. (Der Film, Berlin).

Dr. Kaufmann contributes a study on the development of the cultural film from 1919 to the present day, and devotes particular attention to the film as applied to medicine. (Tremonia, Dortmund).

Herr Erwin Wolfgang Nack, in a long article entitled « The Film applied to Medicine » deals with various films taken in the operating theatre. He also describes a sound film that reproduces the beating of the heart. (La Germania, Berlin).

The « Ufa » of Berlin has produced an interesting scientific film entitled: « Evolution and Metamorphosis », showing the different phases of the life of aquatic animals. This film was directed by Dr. Ulrich Schulz and Herr Wolfram Junghans. (Comoedia, Paris).

The operator Kaufmann has turned a film entitled « The Crèche » dealing with the care of children's health. (Kino, Kiew).

The Emsch Genossenschaft of Essen has produced a hygiene film on the biological purification of sewage. (Bildwart, Berlin).

The Bochner Co. of Dresden has produced a film on stomatic and dental hygiene. (Bildwart, Berlin).

Herr W. Haack, of Magallanes, publishes an article giving the statistical returns of the number of cinemas existing in Southern Patagonia, and recounting the artistic and educative productions so far shown in the schools and public halls of that country. (Bildwart, Berlin).

The President of the German Miners' Corporation has produced, with the assistance of the Mechanical and Electrotechnical Corporation, a film entitled: « Accidents caused by electric current ». (Halleische Nachrichten, Halle).

The Häussler Allgemeine Film Union, of Berlin, has released a film entitled: « Measures to prevent accidents in workshops ». (Reichsfilmbatt, Berlin).

Herr Hans Spielhofer deals at length with the problem of psycho-analysis in filming. (Deutsche Film Zeitung, Munich).

Herr Ernst Yäger considers the problem of the vanguard film, and maintains that it is necessary as the exponent of the « universal conscience » of the cinematographic industry. (Film Kurier, Berlin).

M. Chemin delivered a lecture at the Pedagogic Museum of Paris on the part played by the cinematograph in the teaching of natural sciences. (Bulletin du Musée Pédagogique, Paris).

Herr H. Dollinger states that 762 schoolmasters in Saxony have taken out licenses as cinema operators. (Film Kurier, Berlin).

During the annual meeting of the Société Vandoise des Maîtres Secondaires, the utility of the cinema for education was discussed. M. Secrétan made a lucid speech on the question and concluded by showing that the only proper use of the cinema in teaching consists in short shows given in the schools themselves. (La Gazette de Lausanne).

The Rome Agency sends information regarding the progress of the film as a means of teaching in Italian elementary schools, and gives a list of the number of projection apparatuses actually in use in the several schools of the Kingdom. (Il Corriere della Sera, Milan).

M. Laurent, in a study of the diverse impressions made on the pupils of
school in which a sub-marine film had been shown, cites some of the considerations expressed by the pupils themselves. He concludes that the film is the best means known to teachers of arousing the emotions in such a way as to develop effectively the artistic sense. (*Le Populaire*, Paris).

TECHNICAL ASPECTS OF THE CINEMATOGRAPH

Dr. P. Lob and Dr. W. Ewald, of the Askania-Werke of Berlin, have been studying the problem of the use of colour filters in orthochromatic cinematography. (*Kinotechnik*, Berlin).

Mr. Lloyd A. Jones, dealing with the question of colour cinematography, dwells on the objective and subjective association of colours, the characterization of the colours and the use of correct hues in films. (*Film Technik*, Berlin).

The first school for teaching how to project talking films has been opened at Hollywood. (*Kinematograph*, Berlin).

The Klangfilm Co. has equipped several autocars with sound apparatus to operate in the several provinces of the Reich. (*Lichtbildbühne*, Berlin).

An interesting article describes the manner in which talking films are turned at present in view of the latest problems that have arisen in connection with sound films. (*The Daily Telegraph*, London).

The Paramount Co. has equipped some extra rapid autocars fitted with synchronized filming apparatus intended for taking topical films. (*Comœdia*, Paris).

Dr. Bruno Wendt of the F. G. Farbenindustrie of Frankfort has invented a new method for the desensitization of emulsions of panchromatic strata of allogenous silver. (*Kinotechnik*, Berlin).

Herr Paul Scholz has invented a new device for concentrating the ultra-violet rays of quarz lamps. (*Kinotechnik*, Berlin).

The National Theater Equipment Co. is exploiting a new invention to be applied to the projection apparatus of synchronized films. The invention consists of a kind of metallic net by means of which the projection of the sound may be interrupted as desired. (*Film Daily*, New York).

Mr. Harry Fischbek has invented a new objective that reproduces the first plane of the convex parts of the face. (*Comœdia*, Paris).

The Sirius Kleuren Film-Maatschappij Bosh en Duin (Holland) has patented a new apparatus for the automatic copying of 2-colour films. (*Photographische Industrie*, Berlin).

The third article by M. Henry Favre on the new optical method for determining internal tension appears in this issue. (*Revue Optique*, Paris).

A new apparatus for talking cinematography has been invented in England, called the «At Home». This apparatus is used for the reproduction of sound by means of disks and with 16 cm. films. (*Hebdo Film*, Paris).

The Bell & Howell Co. has constructed a new film camera called the «Filmo». This camera can be worked at 7 different speeds; so as to film 8, 12, 16, 24, 32, 48, or 64 images per second. (*Film Technik*, Halle).

The «Consolidized Film Industries» of Hollywood has devised a new method for preserving films. This consists in placing a layer of specially fine grain on the film; thanks to this method the life of films is prolonged 50%. (*Film Kurier*, Berlin).

A new lamp with special re-inflation system causes the precipitation of the Wolfram powder which usually forms in the lamp. (*Film Kurier*, Berlin).
The Baird Television Development Co., is making some interesting experiments in television thanks to the special facilities available to it. (Daily Telegraph, London).

A technical contributor writes a long article on the problems of television and the progress realized therein during 1929. (Lichtbildbühne, Berlin).

An interesting illustrated article by Dr. W. Friedel deals with the problem of electrical television and long distance cinematography. (Kinematograph, Berlin).

The German Television Association has been founded in Berlin under the presidency of Herr Leopold Lehmann. (Lichtbildbühne, Berlin).

In a long study on talking and natural colour television, it is stated that the Bell Telephone Co. has succeeded in transmitting a natural colour talking film at a distance. (Dresdener Nachrichten, Dresden).

A television service applied to the telephone will soon be functioning between Turin and Milan. (Il Corriere della Sera, Milan).

An article by Messrs. J. L. Crabtree and H. A. Hartt, deals with certain peculiar properties of fixing baths. (Science et Industrie Photographiques, Paris).

Mr. Paul Hatschek deals in an interesting article with the problem of transverse projection. (Kinotechnik, Berlin).

Dr. Thun of Berlin writes on the studies carried out with regard to extra rapid speeds in filming, and devotes special consideration to the auxiliary means of existing cinematography. (Kinotechnik, Berlin).

An interesting article draws a comparison between the talking film and radio telephony, and examines the different aspects in which the former is inferior to the latter. (The Daily Telegraph, London).

An article deals with the question of speed in filming, and considers the economic advantages of 60-ft. per minute films over the usual speed of 90 ft. per minute. (The Film Daily, New York).


M. George Poirier contributes an article on colour photography by analysis and synthesis, by means of achromatic lenses. (Bulletin de la Soc. Franç. de Phot. et Cinématographie, Paris).

An article by Dr. Hans Böhm, of Berlin, deals with the problem of the taking and reproduction of talking films according to the Tobis method. (Österreichische Film Zeitung, Vienna).


An interesting article analyzes film projection from the technical standpoint, and gives full details of the various phases of the process. (Charlottenburger Neue Zeit, Charlottenburg).

Useful technical hints are given in a note on the preservation of films and the means of prolonging their life. (Bulletin du Musée Pédagogique, Paris).

Herr Walter F. Erig contributes an interesting article on the plastic film, the creation of the new German Cinematograph Academy, and on the new lines that cinema technique should pursue. (Pfälzische Volkszeitung, Kaiserslautern).

This issue contains a study on mercury vapour lamps, which are the kind
best fitted for the Panfilm, owing to their great powers of diffusion without developing excessive heat. (*Film Technik, Halle*).

Dr. Max Wolff in an interesting article examines the problem of microcinematography. (*Photographische Korrespondenz, Vienna*).

Herr Leopold Kützleb analyzes the problem of large size films and points out how important it would be to produce these perfectly. (*Reichsfilmblatt, Berlin*).

Stereoscopic, synchronized and colour films will be shown in London during December, in which Mr. Spoors’s apparatus will be used. (*Kinematograph, Berlin*).

SOCIAL ASPECTS OF THE CINEMA

Fraulein Schümker delivered a lecture at the Munich Congress on the question of Children and the cinema, in which she dealt with the influence of the film on the child mind. (*M. K. B. Film Rundschau, Essen*).

Mr. A. F. Stenzel maintains that it is absurd for grown-ups to act in films intended exclusively for children. (*Deutsche Filmzeitung, Munich*).

Prof. R. S. Woodworth of the University of Columbia has made an exhaustive study of the influence of the cinematograph on the mind of children and endeavours to solve the problem by examining what proportion of a film is really seen, taken in, and remembered by children of different ages. The study is supported by statistical data on the frequentation of the cinema by children. (*L’Ambrosiano, Milan*).

In consequence of the thousands of protests received from spectators, the Director of the London Tivoli Cinema Theatre has decided to reinstate the orchestra which he had dismissed in consequence of the advent of sound films. (*Hebdo Film, Paris*).

An article entitled «The Film in the service of Workers’ Unions» deals with the problem of educating the workers by means of the films produced by the trade unisons. (*Der Deutsche, Berlin*).

The «Childrens’ City» is about to be opened at Madrid. This new institution created for the protection of childhood will be equipped with a cinema hall in which educative films will be shown. (*El Imparcial, Madrid*).

Sig. G. Nelli devotes an article to studying the ill effects both physical and moral, produced on children by films. He cites the laws enacted in the several European countries to regulate the admission of children to cinemas and points out the kind of film that is beneficial to children. (*Scena Illustrata, Florence*).

A Central Cinematograph Office is about to be founded in India, wherein film censorship will also be centralized. (*Lichtbildbühne, Berlin*).

An article published in an English periodical under the title of «Film Censorship» deals with the diverse influences the cinema can exercise on different races and especially on the negro race. (*M. K. B. Film Rundschau, Essen*).

A new law on film censorship is being officially considered by the Irish Authorities. (*Lichtbildbühne, Berlin*).

Dr. Robert Bolz examines the new German censorship laws, and dwells more particularly on the protection of children. (*Deutsche Filmzeitung, Munich*).

The British Board of Film Censors has prohibited the showing of the Film
The New Babylonia », because it glorifies the Commune of Paris. This film is regarded as one of the finest Russian productions. (Comœdia, Paris).

During the first six months of the censorship of film advertisements in Canada, fully 17,865 advertisements have been examined. (The Film Daily, New York).

Spain boasts the largest number of cinema seats as compared with population, namely one seat per every 14 inhabitants. In England there is one seat per 15 inhabitants; in Albania one seat per 363 inhabitants, and in Turkey one seat per 348 inhabitants. (The Film Daily, New York).

During the meeting of the « Socialist Cultural League » held at Frankfort on Main, interesting lectures were delivered on the following subjects: « The technical and cultural possibilities of the Film » - « Sound Films and cinema music » - « The New Cinema Law » - « The importance of the Film and the Radio for the working masses ». (Münchener Post, Munich).

The Spanish Council of Ministers has approved the Bill on the cinematograph industry. The protection of the industry will be committed to the care of a « Cinematograph Office », consisting of persons of special competence and who have no interests in the industry. The declared capital of cinematographic enterprises will be charged with an increased tax of 1 %, the proceeds of this new tax being devoted to the upkeep of the committee and payment of the staff employed by the new department. (Arte y Cinematografia, Barcelona).

Dr. Kühnast deals exhaustively with the question of inventions made by employees who are bound by the terms of regular labour contracts. (Photographische Industrie, Berlin).

A long article is devoted to the international problem of copyright and the period of its duration in different countries. (Photographische Korrespondenz, Vienna).

The question of the insurance of the employees in cinematographic studios is dealt with at some length. (Film Atelier, Berlin).

The Wuiku Co. is preparing a new film of a social character entitled « The Laws of Delinquency ». (Kino, Kiew).

The Argentine Cinematograph Censorship authorities have authorized the educative scientific film: « Modern Degenerates », while forbidding its exhibition to children. (La Película, Buenos Ayres).

An article published in the « Täglichem Anzeiger Holzmunden » considers the educative and artistic influence of films on the mass of cinema spectators in the provinces. (Der Film, Berlin).

Herr O. Skalberg contributes an article on the exhibition of films in little villages scattered beyond the arctic circle. (Kölnische Volkzeitung, Cologne).

President Hoover, in the course of an interview which he recently granted to Mr. Louis B. Mayer, declared the film to be the most effective of all national trade propaganda agencies. (Lichtbild-bühne, Berlin).

An article by Sig. A. Cecchi entitled: « The cinematograph as social propaganda » deals with the possibilities of the cinematograph and the causes that have contributed to the diverse quality of the production of different countries. (Politica Sociale, Rome).

An article is devoted to the utility of organizing cooperative cinematographs in the provinces for the greater diffusion of the film among the Russian peasantry. (Kino, Kiew).
A long article deals with the question of the union of all the Catholic cinematographs dependent on the various Catholic associations in Germany. (M. K. B. Film Rundschau, Essen).

A special mission has taken a film of the Holy Land with the assistance of the Missionary Congregations. (Daily Telegraph, London).

M. Maurice Charny devotes a long article to the study of the question of what has already been done and what ought still to be done in the way of organizing Catholic film production.

The first sound film has been turned in Ireland and deals with the Irish Catholic Emancipation Fête, in which 400,000 of the faithful took part. (Film Kurier, Berlin).

At the meeting of the Diocesan Secretaries for morality in Rome, the question of moral and religious defence with respect to the cinematograph was discussed at length, the hope being expressed that a priest would be appointed as one of the members of the Government Censorship Commission. (L'Oservatore Romano, Rome).
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THE EVOLUTION OF THE EDUCATIONAL FILM IN GREECE.

(From the French)

It is no exaggeration to state that the educational film was practically unknown in Greece prior to 1915. It never received the attention it deserved, despite the fact that a number of authorities on education and hygiene recognized its utility and carried on an active campaign in its favour.

The film was used for the purposes of instruction only in the faculty of medicine and school of physics of the University and in a few private institutions. But such isolated experiments were far from being sufficient to bring out the value of the cinema and the necessity for its general utilization for educational and didactic purposes.

Police regulations in respect of the cinematograph were, moreover, inadequate and difficult to enforce. Cinema hall managers were required to submit films for revision before showing them. It was found difficult to exercise any proper control over them in this manner, and on more than one occasion the incompetence of the persons acting on the censorship committee gave rise to criticism. The practical result was that there was no proper check on the cinema, and that children, without distinction of age, including mere babies, could watch immoral and indecent films.

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In 1915, when acting as Head of the Central Service of School Hygiene at the Ministry of Public Education, I laid a special report before the Minister, in which I called attention to the measures which it would be advisable for the competent education authorities to take in concert with those of other government departments with a view to safeguarding the family against the dangers of the cinema and preventing children from being present at spectacles.
that are offensive to morals and decency. This report was, in fact, the first study of its kind made in Greece. It was published and gave rise to considerable discussion, as a result of which the Ministry addressed to all the members of the public school teaching staff a circular bearing on the moral education of their pupils (1917).

The following is a summary of the measures suggested:

1. That School teachers and school doctors should point out to parents the risks to which their children are exposed by frequenting cinema theatres;

2. That school teachers and school doctors should explain to the pupils the ill consequences of frequenting cinemas;

3. That sports should be encouraged among school children and persuasion used in favour of open air games rather than the close atmosphere of dark cinema halls;

4. That scholastic Committees and Banks should set up school cinemas which are at the present time an indispensable auxiliary to sound education; these cinemas should be under the direction of school masters and doctors and should be organized to meet educational needs;

5. That, weather permitting, these shows should be held in the open air, in the twilight hours, in accordance with the American system. In this manner, the drawbacks of dark and ill-ventilated halls would be avoided.

6. That children under 16 years of age should be rigorously excluded from cinema halls when programmes pronounced by the police authorities or by a censoring committee to be anti-moral are being shown.

7. That special shows should be organized to which school children and indigent young persons should be admitted gratis or at a very low fee. Such shows should, of course, be of an educational or instructive tenour;

8. That a special committee composed of school teachers and school doctors, experts, and police officials should be appointed to supervise the strict observance of all regulations governing film exhibitions, to suggest new measures and, where expedient,
to complete existing ones. This committee ought more particularly to undertake the revision of films intended for school shows and take steps to organize educational cinemas.

It was pointed out that committees of this kind were already functioning in many towns abroad and that where they were lacking the police did not hesitate to enforce certain apposite clauses of the Civil Code and to carry out very strict measures in order to safeguard the young and the masses of the people from being corrupted by the cinema.

In any case, it was obvious and universally admitted that the school teachers and scholastic authorities in general were the persons best qualified for the task and most likely to obtain satisfactory results, and it was their duty to educate and guide not only their pupils, but a large number of the public as well, along the lines indicated above.

Our efforts were not made in vain. They were instrumental in bringing about the following results:

a) The Constantinidis Private School opened a cinema hall for the exhibition of educational films, which have met with marked success;

b) Cinema theatres started to organize special shows reserved to children, these shows being promoted by the leading womens' associations of Athens and by the competent authorities;

c) Several schools have organized cinemas for their pupils.

Unfortunately, from the start we found ourselves up against a number of obstacles of a practical and technical order; more particularly the difficulty of procuring suitable films. Notwithstanding collections and donations, the purchase of films threatened to swallow up our school film fund and it was found difficult, if not impossible, to replenish the stocks. Luckily, however, the Greek associations interested in child welfare came to the rescue.

d) Thus, the National Committee of Greek Women, in cooperation with the «Parnassus» Institute, the Greek Womens' College, the Patriotic Institute for the Protection of Children, and the Hellenic Red Cross, set up in 1928 the «Association for the Promotion of the School Cinema» — a special organization
that was placed under the patronage of the Ministry of Public Education and the State Teaching Staff. This association has ever since its foundation organized a number of educational cinema shows in Athens and other provincial towns.

The resources of the association were still too narrow, however, for notwithstanding the success of the shows and their popularity among the school children, receipts were never sufficient to cover expenditure, especially owing to the high cost of educational films consequent on their more restricted circulation;

e) Meanwhile a special law was enacted to regulate film exhibitions and the safety of cinemas (Act sanctioning the Decree of 13th December 1925).

This Act provides for the censorship of all film exhibition programmes. It provides that no cinema hall may be opened without the previous sanction of the Police authorities and the consent of a Committee ad hoc consisting of the Mayor, the Chief of Police, a technical expert, an electrician and a doctor. This Committee is more particularly required to make sure that all due measures are taken for the health, safety and general protection of the audiences.

Art. 10 of this Act lays down that access to cinema halls shall be rigorously interdicted to children under 10 years of age and that children aged between eleven and sixteen years shall be admitted only when accompanied by their parents or guardians. This prescription, however, met with so much opposition on the part of cinema hall managers that it was found impossible to enforce it. As a result, a new Bill was laid some time ago before the Chamber of Deputies whereby Art. 10 is amended as follows:

« It is strictly forbidden for children of either sex who have not yet completed sixteen years of age to frequent public cinema halls. The ages of young persons shall be checked by the staff of the cinema theatres with the aid of identity cards delivered by the Mayor or (in the case of foreigners) by the proper Consular Authorities. All identity cards must bear the photograph of the child to whom it belongs.

« This prescription does not apply to special school shows in which films that have been already revised and pronounced suitable for showing to families and children are exhibited.
« Any cinema manager infringing this regulation and who is found to have admitted to his theatre any child who has not attained the stated age shall be liable to a fine not exceeding 10,000 drachmas inflicted by a court of summary jurisdiction.

« Any person who, after giving notice of a special family spectacle suitable for children, exhibits or causes to be exhibited films that have not been approved for the purpose, shall be liable to a term of imprisonment not exceeding three months or a fine not exceeding 40,000 drachmas and, in case of a repetition of the offense to both forms of punishment concurrently.

« The last preceding measure shall come into force in virtue of a ministerial ordinance at the close of the 1929 financial year ».

This bill deals also with the hygiene of cinema halls and precautions against fire.

f) The work of the Hellenic Red Cross. The Hellenic Red Cross Society, and more particularly the Junior Red Cross Section, has taken an active part in this campaign. Its efforts are deserving of special mention.

Being anxious to learn the views of Greek school teachers on the effects of the cinema, as noted by them in the course of the year, it opened an enquiry of the most comprehensive kind, the results of which were submitted to the League of Nations through the medium of the League of Red Cross Societies. We summarize herewith briefly the answers of the teaching staff which are unanimous on the following points: a) that the cinema is a source of physical danger owing to the stuffy atmosphere, the promiscuity of the audience which favours the transmission of contagious diseases, and the over excitement of the nervous system; b) of moral danger, consequent on the stirring up of the imagination and the direct urge to sentimental and sensuous excitement.

The school-teachers made the following suggestions with a view to obviating these dangers as far as possible:

a) that children aged less than four years should be excluded from public cinema halls;

b) that special shows should be organized for children under the direction of a Committee consisting of school teachers, school
doctors, parents and the higher police authorities, unless, indeed, the Hellenic Red Cross were itself willing to organize them — a suggestion that was very favourably viewed by the teachers, owing to the uncontested prestige of the Red Cross Society in Greece and its perfect organization;

c) that the scenarios of childrens' films should preferably reproduce scenes of child life, amusing stories, factory scenes, historical events, scenes from the Old and New Testaments, documentary films of distant countries, etc. In view of the fact that the cinematograph has become a necessary auxiliary to all practical teaching, the teachers expressed the hope that each of the schools might be endowed with a cinema hall.

d) that all shows for children should be given in well ventilated premises or, preferably, in the open air;

e) that shows should not last longer than one hour and that the intervals between projections should be as long as possible;

f) that a methodical propaganda be carried on in schools and scholastic associations with a view to impressing upon parents all the harm the cinema may cause their children.

Following on this enquiry, the Hellenic Red Cross Society undertook an active campaign in favour of the educational cinema and took the practical step of importing into Greece a certain number of moveable projection cabins, which it ceded at cost price to the school associations.

All these efforts are about to be crowned by the creation of a Central National Office of the Educational Cinematograph. This much desired institution will become a reality as soon as Parliament passes the Bill now before it.

On the 11th May last, by order of the Head of the Government, M. Venizelos, the representatives of the several Ministries and associations concerned with the welfare and education of children were invited to come together to consider the best ways and means of promoting the educational cinematograph and to discuss how it would be possible to overcome the difficulties to which we have referred, first among which was the difficulty in obtaining the requisite films.
The «Association for the Promotion of the Educational Cinematograph» and the Ministry of Public Education took the initiative in organizing this meeting. Being armed with the experience gained in the course of their work on behalf of the educational film and well acquainted with the practical difficulties of the situation, they took pains to prepare the ground with care.

The absolute need of obtaining the support and close cooperation of all the educational and administrative authorities rendered the convocation of such a meeting all the more necessary.

In the course of this meeting, Mme Stouditou, Secretary of the Association for the Promotion of the Educational Cinematograph, and the writer set forth their views on the organization of this Central Office. Our suggestions were embodied in the terms of a Bill which will shortly be laid before the Greek Parliament.

This Bill once passed, is it legitimate to hope that we may at last see our aims realized and our country enjoy the benefits of the educational film? To what extent will this be possible? It is difficult to foresee, for the good results which we expect from the new organism do not depend exclusively on the goodwill of its promoters, but also, and mainly, on its sound management and on the experience and zeal of the persons engaged in it, as well as on the amount of the credits which the Government will place at its disposal.

But we are very optimistic and, for my own part, I am convinced that the educational cinematograph, if placed in the hands of competent persons and assured of the State’s moral and financial support, will soon be firmly organized in Greece. Nor have we any doubts as to the excellent results it will yield, when conceived and organized on the lines laid down for its guidance by an organ of the League of Nations, the International Institute in Rome.

Prof. E. N. Lampadarios
Director of the School Hygiene Section of the Ministry of Public Education, Vice President of the Hellenic Junior Red Cross.
THE CINEMA AND TEACHING IN FRANCE*

(From the French)

There are a number of institutions in France which furnish films free of charge to school-masters, professors and lecturers. These institutions centre round the Musée Pédagogique de l'État (the Government Pedagogical Museum), located at 41 Rue Gay Lussac, in the Val de Grâce quarter, in Paris. This admirable organization commands respect, both for the importance and variety of the material it has collected and for the singular devotion of its staff; it has played a most active part in promoting both magic lantern and cinematic shows for the purposes of schools and post scholastic teaching in France.

The formation, by way of experiment, of a Cinémathèque, (film archive), or, more precisely, a film service aiming at completing that of stationary slides, dates back to 1920. Fifty-four films were loaned during that year, and there has been ever since a steady increase in the number of loans: 3,541 in 1921; 11,574 in 1922; 19,525 in 1923; 22,345 in 1924; 24,563 in 1925 and 28,915 in 1926-1927.

The films distributed by the Pedagogical Museum for instructive purposes are entrusted to its management by the Ministry of Education, which purchases them year by year from specialized producers. The Ministry devotes the greatest care to its choice of films; nevertheless, they are subjected to a further process of selection.

The following enumeration gives some idea of the different classes of films dealt with:

Agriculture (37 films) - Anatomy (20) - Archeology, Art and History (31) - Nursing (47) - Astronomy, Physics and Chemistry (30) - Aviation (13) - Botany (22) - Geology (23) - French Geography (131) - Hygiene (36) - The Navy (14) - Fishing and Hunting (29)

(*) See the 3d (September) No of the International Review.

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- Diverse Industries (68) - Eugenics and infant welfare (3) - Sports (26) - Zoology (108). Besides these, there are 69 Films dealing with the French Colonies, 87 with Europe generally, 32 on Asia, 10 on Africa, 19 on America, and 3 on Australia.

There are two, five, and as many as ten and more copies of some of these films, the number of copies purchased being fixed according to the applications registered within a given period. In all, there are 5000 ribbons of different lengths — a quite inadequate supply when we consider that over 500 applications have sometimes been received in one day. Nor does Monsieur Ripault, Director of the Museum, cease for his part to deplore the insufficiency of the funds placed at his disposal and invoke the aid of Maecenas!

On the other hand, it will be realized that the circulation of the films — the incessant shifting of these from one extremity of the country to another — causes considerable loss of time, and the films are consequently out of service during the greater part of the year. On this account the opening of sub-offices was considered in 1927 with the object of decentralizing the service.

At the present time, the following Departments have their own film archives in their respective principle towns: Aube, Aude, Aveyron, Charente-Inférieure, Bouches-du-Rhône, Calvados, Côte-d’Or, Finistère, Gard, Gironde, Hautes-Alpes, Haute-Marne, Haut-Rhin, Hérault, Indre-et-Loire, Jura, Loire, Loiret, Lot-et-Garonne, Lozère, Pyrénées-Orientales, Sarthe, Vaucluse, Vosges, Vienne, Yonne.

In addition to these Departmental film collections, there are a certain number of regional collections: those of Puy-de-Dôme, Haute Garonne, le Nord (which serves the Aisne, Ardennes, Nord, Pas-de-Calais and Somme districts) and that of Meurthe-et-Moselle.

This decentralization has been most practical in its results; school-masters are now able to get hold of any particular film in proper time for their lessons or lectures, and far more service is got out of the ribbons now that long journeys hither and thither are avoided. In one department at a considerable distance from
Paris, namely Aude, it has been possible in less than 2 months to utilize 16 films for the purposes of 93 classes and 105 post-scholastic lectures.

The Pedagogical Museum has proved by its organization how much can be accomplished by coordinating efforts. The understanding between the Museum and the Ministry of Agriculture respecting the task of general education grows closer from day to day: their circulars are animated by one and the same spirit, and they make use of the same depots both in Paris and the Provinces, whenever materially possible.

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There is also a General Direction of Technical Training, which deals with the cinema problem for the several domains for which it is responsible. This Office is likewise dependent on the Ministry of Public Education, though forming a quite separate department. Its very able director, M. Labbé, neglects nothing that may help to establish the claim of the film to a place of honour in vocational schools and in accessory institutions even indirectly connected therewith. As far back as 1922, it had already begun to assert its claims in connection with the important question of vocational orientation, and it was thanks to M. L'Abbé's encouragement that M. A. Bruneau, Government Inspector of the Vocational Schools of the City of Paris, had the earliest films taken, with the laudable aim of helping young people in the choice of a trade. A little later, the Chambers of Commerce, Employers' and Workers' Unions, Apprenticeship Committees, and a few convinced and strenuous persons had films taken, the schemes of which had been studied beforehand by competent commissions. These films were to the purpose, simple, short, and impeccable from the photographic standpoint; they were not of a kind to distract the attention by technical stunts or to mislead by inexactitudes.

In 1928 the Direction of Technical training had classified in the National Archive, housed at 14 Rue de Fleurus: 14 films on artistic crafts; 19 on vocational orientation; 6 geographical; 2 on
the history of costume; 15 films on object lessons; 2 on hygiene; 7 on physical exercises; 4 on scientific subjects; 6 natural history films, and ten on sundry subjects.

The reader may be interested in a few of these film titles: Ceramics; Painted Paper; Wheel-making; Farriery; Optical Glass Works; Metal Turnery; Artistic Wrought Iron Work; Making a Book; Making a Chair; Wood Sculpture; Lead Working; An Art Foundry; Artificial Flowers.

The Permanent Commission was consulted on a number of other films: films dealing with the National Technical Schools, the Training Workshops of the Paris Chamber of Commerce, and with the following womens’ trades: Ironing, Lingerie, Hat-making. We will mention two other films, The Human Machine, which indicates the conditions governing the choice of a trade, and one on Masonry.

We have referred to the National Cinémathèque (Film Archive) which the uninitiated tend to confuse with the Cinémathèque de la Ville de Paris. A word of explanation will not be out of place here. Although it has actually been in existence since 1920, the City of Paris Film Archive was not officially founded until the beginning of 1926, following on a resolution of the Municipal Council; it was then definitely established in the premises of the former Primary School, 14 Rue de Fleurus, in the Luxembourg quarter, which have since been taken over entirely by this Service.

Since the 1st. January 1927 the Municipal Film Archive has been subsidized by the Seine General Council, which has enabled it to extend its action to the whole of the Department, as regards both the loan of films and the organization of lectures. Following on an agreement between the General Direction of Technical Training and the City of Paris, and thanks to a subsidy granted by the Ministry of Public Education and Fine Arts, the Municipal Film Archive is now the headquarters of the cinematographic service in connection with technical training for vocational orientation. This is a national service.

Thus the National Film Archive for Vocational Training studies and prepares films bearing on vocational choice and
technical training, which are then forwarded to the several vocational training centres throughout France; these 16 centres will soon be increased to twenty.

The Syndical Chambers sometimes collaborate in the work of the Permanent Commission of the Film Archive appointed by the Ministry and contribute towards its expenses. Certain firms, moreover, which publish films at their own expense, offer to deposit one or more copies at the Cinémathèque, which undertakes to distribute them in the provincial centres.

Thus the Municipal Cinémathèque constitutes one of the services of the Seine Prefecture (Direction of Primary Education), while the Cinémathèque Nationale depends on the Ministry of Public Education (General Direction of Technical Training); but the two bodies work in perfect harmony.

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The Ministry of Agriculture is the State Department most actively interested in cinematography, and its Film Collection — started 17 years ago — is the best supplied; no doubt because it has considerable credits at its disposal. On the 1st January 1929, it owned 425 different films, representing a total value of some 3 million francs. Its admirably compiled Catalogue consists of no less than 50 pages.

This Ministry lends its Films free of charge to the following organizations:

1. Agricultural Training Establishments; 2. Directors of Agricultural Services, Professors and Officials of the Ministry; 3. Agricultural Agencies, Chambers of Agriculture and Agricultural Associations; 4. Rural Communes; 5. Head Masters and Head Mistresses of Communal Schools; 6. to institutions and individuals concerned with agricultural propaganda and education.

As the Preface to the Catalogue points out, the Agricultural Cinema contributes the most valuable and striking data on hygiene, protection against disease, the preservation of national produce, commercial practice, packing, transport; sale, etc., while at the same time it develops a taste for habits of observation and enquiry,
a love of exactitude, and the spirit of initiative and achievement. By bearing us in an instant into far distant lands, it enables us to take a part in the life of all peoples, in their work, their joys, and their sorrows; it helps us to understand one another better and therefore to love one another better.

Let me just describe how these films of the Ministry of Agriculture are distributed in the Catalogue as between the several subjects.

Vegetables account for 14 pages; these are sub-divided into: Vegetable Physiology, Cereals, Industrial Plants, Fruit Culture, Cultivation in Marshlands, Woods and Forests, Vines, etc. Animals occupy 18 pages and comprise the following subjects: Animal Physiology, Animal Pathology, Stockbreeding, diverse Mammalia, Poultry Yards, Birds, Fish and other Aquatic Animals, Game, Fishing, Useful Insects, Bee-keeping, Sericulture, Noxious Insects, Vermin, Physics, Chemistry, etc. The next section covers Agricultural Industries, to which have been added, Physical Culture and Sports and Social Hygiene, etc.; then Comfort and Recreation, the Agricultural Schools of Cibeins, Rural Crafts, Childhood on the Land, Workers’ Gardens, Disabled men on Farms, Electricity in Villages and Farms, Life in a Modern Village, Water on the Farm, Water Supply, etc. etc.

Thanks to the interest of the different Ministers who have followed one another during recent years at the Rue de Varenne, and to the steady and methodical work of M. Paul Drouard, Head of the Service of the Commission du Cinéma Agricole, presided over by the former Minister, M. Alfred Massé, to which the writer has the honour to belong, agricultural cinematography is welcomed in the rural districts with ever growing enthusiasm. But figures will be more eloquent than words on this point. Up to the 31st July 1928, the Ministry of Agriculture had granted subsidies amounting to 1 million 222,000 francs, distributed between 833 projection centres. 2,900,000 metres of film were, in this way, distributed among the 953 clients registered in 1928. The whole service is steadily on the increase.
The Ministry of Labour, Hygiene, and Social Welfare and Providence, grants considerable subsidies to film propaganda and education, by the credits it devotes to the campaign against tuberculosis, venereal disease, and cancer.

The General Propaganda Commission of the National Social Hygiene Office has been able to establish a program of educational work by moving pictures, in concert with the Prophylactic Service in connection with Venereal Disease, the Directions of Public Welfare and Hygiene, the National Committee for Protection against Tuberculosis, the French National League against the Venereal Peril, the National Committee on Infant Welfare, the National Temperance League, the Franco-Anglo-American League against Cancer, the League of Red Cross Societies, etc.

A central Film Archive has been set up by the Rockefeller Mission (American Commission for the Prevention of Tuberculosis and the National Committee for Protection against Tuberculosis) which started with a very modest collection of propaganda films, 50 in all, with 300 copies and a total length of about 200,000 metres.

At the present time the National Social Hygiene Office classifies its collection under 5 heads:

1st. General hygiene . . . 19 Films (6,350 m.)
2nd. The health of mother and child . . . 11 » (6,200 »)
3rd. Social scourges:
   Drink . . . . . . . . . 8 » (4,480 »)
   Venereal Danger . . . . 10 » (5,520 »)
   Slums . . . . . . . . . 1 » (1,400 »)
   Tuberculosis . . . . . . 27 » (13,200 »)
4th. Diverse . . . . . . . 27 »
5th. Physical education . . 14 »

This gives a total of 120 different films, 300 copies in all. The total length sums up to 170,000 metres. During 1924, the National Office lent 357 films, and 925 during 1927.

The experience of over ten years has proved the striking services which cinema propaganda can render to social hygiene.
The only complaint made by all the organizations concerned with the improvement of public health is that the number of films placed at their disposal is too small, that there are too few copies in circulation, and that the subject matter is too restricted. The very active General Propaganda Secretary, M. Lucien Viborel, considers that complementary subsidies should be obtained to bring the total figure up to 800,000 francs per annum, of which 300,000 francs would be devoted to the purchase of supplementary copies, and 500,000 to the production of new films.

The fact is that educational bodies in general are making an ever increasing demand for films on social hygiene, more particularly those dealing with infant welfare, tuberculosis, personal hygiene and venereal diseases. The ribbons wear out so rapidly!

The Ministry of War's Film Instruction Section, better known as the Army Geographical Service, owns 124 films aggregating some 98,910 metres of ribbon, distributed as follows:

- For the Infantry: 22 Films
- For the Artillery: 25 »
- For the Engineers Corps: 20 »
- For the Air Service: 12 »
- Physical Education lessons: 9 »
- Physical Exercises: 7 »
- Athletics: 13 »
- Swimming: 4 »
- Games and sundry subjects: 12 »
- Military History: 31,380 metres

The greater number of these films, which average about 300 metres in length, form part of an instruction program drawn up by the late General Buat, Chief of the General Staff of the Army; they are regarded as a modern supplementary means of training for officers and men both in the infantry and in the cavalry, in the artillery, armoured car corps, air service, etc. In this manner the Training Section has lent over a million metres to the army corps equipped for the purpose.

Let me add that over 200 apparatus are in service, and that
there are three cinema cameras, one of which is for slow motion filming, and a studio for all film operations generally.

Not long ago Captain Calvet, Director of the Army Geographical Service, exhibited two unpublished films he had composed at the Polytechnic School, which much impressed our marshals: one of these represented on a large scale map of the North of France the defensive battle of 1918, the other the offensive battles of the 18th. July to the 8th. August. An ingenious adaptation of animated drawings, executed by a master in this line, M. Albert Mourlan, makes it possible to move about on the map, as on a chess-board, small squares representing the 400 divisions that took part in the operations. This fine history lesson met with unprecedented success, and General Debeney, of the General Army Staff, expressed his warm appreciation to Captain Calvet.

The Collection of the Ministry of Marine comprises 120 to 130 films, but of a highly eclectic character, and rather of a documentary kind for the most part. There are indeed a certain number of purely maritime subjects and some of a technical order; some of these deal with seaplanes and are not among the least successful in lectures delivered in all quarters.

A very strenuous colonial propaganda is carried on in France, not under the auspices of the Ministry of the Colonies, but through the Economic Agencies, and dealing with Indo-China, Algeria, Equatorial Africa, West Africa, Tunis, Morrocco, Madagascar, etc. The said Agencies make a point of lending every assistance to the lecturers in order to make the still unplumbed resources and the admirable beauties of our rich and majestic colonial empire better known.

Let me give a single example. The Indo-China Economic Agency kindly places the list of its 152 films (some 2500 metres) — which might well serve as a model list — at the disposal of technical training and higher instructional establishments, as well as of teachers and lecturers: this list shows the titles of the films, the number of copies available, the meterage, the number of minutes taken by projection, and in the «Remarks» column such notes as the following are entered: very good, good, not very interesting, fine landscape, dull, etc.
Some Colonies, such as Martinique, Guadeloupe, Guyana, Saint Pierre et Miquelon, and the French Oceanic possessions, have had films published, which the General Colonial Agency, representing the self governing possessions, lends gratis to teachers and lecturers.

The services connected with the Ministry of Public Works are far from ignoring the advantages which each of them, in its own particular sphere of action, may derive from the cinema. Thus the Governing body of the National Bridges and Embankments School makes good use of the films placed at its disposal by the heads of enterprises and manufacturers, pending the publication of films of its own.

The same may be said of the Higher School of Mining, the Saint Etienne Mining School, and the Administration of State Potash Mines.

At the Ministry of Foreign Affairs the « Service des Oeuvres françaises à l’étranger » (Office of French Institutes abroad) carries on film propaganda with the help of funds derived from its meagre « sundry works » credits, the purpose of which is to support French societies, foundations and institutions of all kinds. With the 362,000 francs placed at its disposal in 1928, this service was able to send to our countrymen settled abroad (Europe, the Near and Far East, and America) 16 cameras, 111 touristic films and 127 instructional films. It has been able to do a little better since then; but all this is a mere bagatelle and can do little to advance our influence.

It should be noted that our diplomatic and consular agents are constantly asking for more films to be sent, for they fully recognize their efficacy, since they serve at one and the same time the purposes of French political propaganda, scientific propaganda, and even tourist and commercial propaganda, and do much in the cause of international good-will.

The 1929 programme merits our attention, for it contemplates the despatch of films and apparatus into a number of countries where there is a sad lack of commercial travellers.

I still have to mention the Regional Offices which are set
up in several quarters and have headquarters in many big towns. They do not all follow the same programme, but they all collaborate in the work of supplementary or post-scholastic education. Many of them take all possible steps in favour of the «school screens» and to assist the masters in making the best use of them. These offices, although encouraged by the Ministries of Public Education, Agriculture, and Hygiene, etc., are institutions at once of an official and a private character. They owe their existence some to private and others to municipal enterprise.

The oldest established, and also the most important, is the Lyons Regional Office of the Educational Cinema, round which 12 south-east departments centre. Presided over by Senator Brenier and directed by M. Gustave Cauvin, it possesses over 2000 films (161,983 metres). During the past year, it organized over 6000 educational and recreational shows and furnished 250 programmes per week, which represents 20 million metres of ribbon per annum. Its budget, which amounted to 15,000 francs in 1922, rose in 1926 to 250,000 francs, reaching 350,000 in 1927 and 400,000 in 1928.

*The Lorraine Regional Cinematographic Instruction Office*, with headquarters at Nancy, was started during the war; it comprises the following Departments: Meuse, Meurthe and Moselle, Vosges, Haute Marne, Doubs, Moselle, Upper Rhine and Lower Rhine. Its purpose is to assist clients in the choice of apparatus, to train operators, and to give suggestions to teachers on the uses to be made of films in teaching, thus enabling them to benefit by previous experience in the field.

At the present time the Nancy Office counts 220 clients. It has already done much useful service; it owns a film collection aggregating 150,000 metres; makes yearly loans of more than 1 million metres; has organized over 1000 scholastic, post-scholastic and recreational shows in 1928; its balance-sheet accounts for over 100,000 francs. These are encouraging figures, and we should add that in the Meuse Department alone over 140 schools possess their moving picture projection apparatus.

The Saint Etienne and Loire Film Archive, which has its
headquarters at the Municipality of Saint-Etienne, was set up in 1922 by Messrs. M. Matte, Academy Inspector, and Alfred Vernay, Chief Assistant of the Mayor; M. Eugène Reboul, Public School-Master is its zealous Director. In 1927, this Office owned 30,000 metres of ribbon and had managed to purchase 100,000 francs' worth of apparatus.

The Lille and Northern Regions Cinema Office, which was set up in Lille in 1926 by M. Châtelet, Rector of the Academy of that City, comprises the five Northern French Departments within its sphere of action (Nord, Pas de Calais, Somme, Aisne, Ardennes) covering 6000 communes and 11,000 schools.

In less than two years it has assembled some thousand apparatuses and catalogued close on 100,000 metres of film. Not a bad beginning, to be sure!

At its last General Assembly, the Director of the Office, Mr. Ousselin, analyzed the subsidies received, which summed up to 55,000 francs for the school year, and found the assets to amount to some 300,000 francs.

The annals of the Clermont-Ferrand Regional Office are so far vacant. Its creation dates back a very few months, but we are justified in hoping much from it. As a start it offers its clients a collection of more than 300 films classified in twenty categories, from instructive and documentary films to recreational ones.

Other Regional Offices are functioning at Bordeaux, Toulouse, Châlons, Marseilles, and Strasburg. They are of too recent date for figures to be available. We can only say that, under excellent guidance, they are rendering first class services.

Last, but not least, Paris has its regional office, which comprises the whole of the Seine and the Seine-et-Oise district. Its President is Prof. Paul Langevin, of the Collège de France, M. Marcel Martin being its director.

We ought not to overlook the following organizations, although they are anything but opulent: The Office National du Tourisme, the Touring Club de France, the Fédération des Syndicats d'initiative (1) and a few of the syndicats themselves: e. g. the Shipping

(1) These are special associations formed in France for the purpose
Companies' Association and the Railway Companies' Association; several institutions of a social humanitarian kind, such as the Red Cross Societies, the National Temperance League, etc. Each of these groups own interesting films which are too little known.

The National Tourist Office is at the present time carrying on a comprehensive enquiry, the object of which is to establish a general and definitive catalogue of films of a documentary, artistic and picturesque character, having a distinct bearing, however, on instruction and propaganda. Thanks to its efforts, the French Tourist Office in Geneva has got together a collection of 100 films; the Barcelona Office owns 29 films; the London Office 7 films (with titles and captions in English), besides having at its disposal for projection the ribbons belonging to the Railway Companies, the Syndicats d'initiative, etc.

***

It would, indeed, be hard to give any adequate idea of what France has done in recent years in the direction of teaching by the film. All that remains to be done is to organize and classify all these admirable efforts, and more especially to establish a liaison between the several groups to which I have referred, and which have, up to the present, acted independently one of the other.

Let us not forget to mention that, side by side with these official organizations, there are in France a certain number of manufacturers who — notwithstanding disappointments (for the educational film is costly to produce and yields poor profits) — compete with one another in their clever efforts to extend their already ample stocks in this line.

Our foremost publishers, Pathé and Gaumont, firms of worldwide reputation, have for some time past organized a first-class section of scolastic, educational, propaganda and documentary of promoting tourist and similar interests in the organizations to which they apply.

— 634
films. They publish analytical catalogues of no negligible volume, admirably compiled, which are unfortunately all too rarely consulted.

Nor would it be fair for me not to make special mention of the individuals who have worked so earnestly and strenuously to meet the needs of modern teaching: M. Jean Benoit-Lévy and M. Jean Painlevé, to mention only two names from among the most able and the most conscientious.

M. Jean Benoit-Lévy, the Pasteur film producer, is responsible, together with Dr. Devraigne, for the production of the marvellous film in the cause of eugenics and infant welfare: *La Future Maman* (Mothers to be), which met with such unanimous praise in France and abroad. His programme, of some considerable range and begun in obscurity, is being pursued at the present time in the full blaze of a success which promises well.

From the long list of educational films which M. Benoit-Lévy has given to France, let us call attention to the following:

Agricultural: *Sericulture, Mulberry growing, The Riddance of Field-mice* (film by M. Régnier, Director of the Rouen Entomological Station); *Urgent Farm Work* (Film by Dr. G. Moussu, Professor at the Veterinary College of Alfort); *The Egg Cycle* (by M. A. Chapellier, Director of the Station des Vertèbres, at the Institute of Agronomic Research), and *Good and Bad Dairymen* (under the direction of the Office Agricole de Seine-et-Oise). The list of Medical Films starts with *The Technique of Post-Mortems*, in accordance with the Roussy and Ameuille method, as practiced by Dr. Roger Leroux; *Obstetric Operations* (under the scientific direction of the Baudelocque Clinic, of the French Faculty of Medicine); *Tuberculosis*, which is at once a medical and a social propaganda film. « *Once upon a time there were three Friends* » a film for social welfare purposes, *The Source, Motherhood*, etc.

Attention should also be called to the highly curious and striking productions of the young French scholar, M. Jean Painlevé, who is as devoted to science as his father, and who aims at popularizing six films of some 300 metres each. These films bear the titles: *Sea-Urchins; Hyas et Stenorinques; Daphnia, the Octopus and The Hermit Crab.*
These films are the first of a series which will certainly claim universal admiration, for it continues most worthily the world-famed work of the famous scholar, Dr. Comandon. M. Painlevé has drawn up a vast program; he will undoubtedly carry it out for the greater honour of France and the educational cinema.

***

Lastly, let me have the pleasure of recalling the fact that the French Government on several occasions in the course of last year placed the question of the educational cinema on the agenda, for debate both in the Chamber of Deputies and the Senate.

M. Edouard Herriot was an earnest advocate of this cause during his period of office in the Ministry of Education and Fine Arts. All his admirable speeches on the subject would bear citing; they are both instructive and at the same time full of encouragement.

Senator Brenier defended the cause of the school film in the Senate, formulating the problem in the clearest terms and rallying all his colleagues to his point of view.

Deputy Antoine Borrel made a masterly report on the subject, equally well supported by evidence, which he closed by laying a Bill before the Chamber proposing the creation of a National Cinematograph Office, differing very little from that conceived by M. Brenier, which should coordinate all the cinema services attached to the several ministries, so as to do away with watertight compartments, and compile a well classified catalogue and statistics to be kept constantly up to date.

According to M. Brenier's idea, this National Office ought to be constituted as a body corporate and be financially independent. It should be attached to the Ministry of Public Education and would comprise delegates from all the interested ministries, to whom competent authorities and recognized technical experts should be added. We have every hope that this interesting project may soon be realized. The Members of the Chamber are con-
verts to the scheme and are only awaiting the right moment to raise the cinema to its proper status.

Let us for a moment turn aside from the schools and look in at the public cinemas; we are delighted to find social educational films here, included in the regular programmes. This is a big victory for the beneficent film.

In quitting this survey, we feel justified in claiming for France a position in the vanguard of the scholastic and educational film movement. Steady progress is being made. We should add that, in this domain as in all others, France will be happy to join forces with other Nations for the continuous growth of international cooperation and the promotion of goodwill among men, by teaching them their duties, and helping them to know one another better through that universal book, the Screen.

G. Michel Coissac.
AN ENQUIRY RESPECTING THE CINEMATOGRAPH MADE IN THE SCHOOLS OF NEUCHÂTEL, LAUSANNE AND GENEVA(*).

by Prof. André de Maday, Librarian of the International Labour Office, in collaboration with Mlle Hermine Aellig, Mlle Rose Jung and the students of Neuchâtel University, the Women's School of Social Studies in Geneva, and the Institut J. J. Rousseau at Geneva.

(From the French).

THE RESULTS OF THE ENQUIRY IN LAUSANNE.

Thanks to the kind collaboration of M. A. Burnier and the directors of the educational establishments referred to in the earlier part of this paper, I obtained 3558 answers in Lausanne. In addition to this, I received through the J. J. Rousseau Institute the results of a minor enquiry concerning 42 children. This was carried out at Orbe on the 11th. February by M. Fauconnet, schoolmaster, in response to M. Bovet's appeal in the « Intermédiaire des Educateurs », to which I have already referred.

Mlle Jung classified the results of the Lausanne enquiry. In tabulating the final returns she took into account only 3212 answers. She did not count in pupils aged 18 years or more, as there were too few of them, nor yet a certain number of mixed classes, in respect of which it was not always possible to distinguish which were the girls' answers and which the boys'.

Three forms of questionnaire were submitted to the children:

Questionnaire No. 1.

Age ? — Nationality ? — Parents' profession ? — Do you go to the cinema? — With whom? — When? (week-days or Sunday) — When? (afternoon or evening) — Do you like

(*) See No 5 of the International Review of Educational Cinematography.
going there? — Why? — What are your favourite subjects? — When you return home do you endeavour to re-act the scenes you have been watching?

**Questionnaire No. 2.**

The first 10 questions are identical with those appearing in Questionnaire No. 1; the following questions are added thereto:

11. Does the cinema rouse your artistic emotions? 12. Has the cinema opened up new vistas in your life?

**Questionnaire No. 3.**

This was identical with the questionnaire addressed to adults (see No. 4, page 540). Mlle Jung classified only the questions referring to the cinema and left out the questions referring to theatres, concerts, and other places of entertainment. If we adopt the conventional enumeration adopted on page 549 of our October issue, this questionnaire reads as follows:


Questionnaire No. 1 was addressed to the elementary schools and to a section of the high school of Derrière-Bourg; questionnaire No. 2 to the other section of Derrière-Bourg, and Questionnaire No. 3 to the boarding schools and grammar schools and to the School of Commerce.

**Ist. Question - Sex.**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>1519</td>
<td>(47.29%)</td>
</tr>
<tr>
<td>Boys</td>
<td>1693</td>
<td>(52.71%)</td>
</tr>
<tr>
<td>Total</td>
<td>3212</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

639 —
2nd. Question - Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 years</td>
<td>16</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>102</td>
<td>131</td>
<td>233</td>
</tr>
<tr>
<td>12</td>
<td>308</td>
<td>300</td>
<td>608</td>
</tr>
<tr>
<td>13</td>
<td>342</td>
<td>347</td>
<td>689</td>
</tr>
<tr>
<td>14</td>
<td>336</td>
<td>374</td>
<td>710</td>
</tr>
<tr>
<td>15</td>
<td>245</td>
<td>304</td>
<td>549</td>
</tr>
<tr>
<td>16</td>
<td>90</td>
<td>122</td>
<td>212</td>
</tr>
<tr>
<td>17</td>
<td>54</td>
<td>60</td>
<td>114</td>
</tr>
<tr>
<td>18</td>
<td>26</td>
<td>41</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>1519</td>
<td>1693</td>
<td>3212</td>
</tr>
</tbody>
</table>

3rd. Question - Nationality.

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swiss</td>
<td>2720</td>
<td>(84.68%)</td>
<td>2720</td>
</tr>
<tr>
<td>Foreigners</td>
<td>492</td>
<td>(15.32%)</td>
<td>492</td>
</tr>
<tr>
<td>Total</td>
<td>3212</td>
<td>(100%)</td>
<td>3212</td>
</tr>
</tbody>
</table>

4th. Question - Frequentation

<table>
<thead>
<tr>
<th>Frequentation</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to the cinema</td>
<td>1188</td>
<td>1416</td>
<td>2604</td>
</tr>
<tr>
<td>Don't go to the cinema</td>
<td>315</td>
<td>252</td>
<td>567</td>
</tr>
<tr>
<td>Total</td>
<td>1503</td>
<td>1668</td>
<td>3171</td>
</tr>
<tr>
<td>No answer</td>
<td>16</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1519</td>
<td>1693</td>
<td>3212</td>
</tr>
</tbody>
</table>

The above table shows that the boys are more addicted to frequenting the cinema than the girls. 20% of the girls state that they never go to the cinema, while only 15% of the boys don't go.
From this table it is seen that foreigners are more addicted to frequenting the cinemas than the Swiss. As regards the subsidiary question, whether those who go to the cinema go there often or not, we have the following returns:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go often to the cinema</td>
<td>136</td>
<td>238</td>
<td>374</td>
</tr>
<tr>
<td>Go fairly often to the cinema</td>
<td>298</td>
<td>357</td>
<td>655</td>
</tr>
<tr>
<td>Go rarely to the cinema</td>
<td>754</td>
<td>821</td>
<td>1575</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1188</td>
<td>1416</td>
<td>2604</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Swiss</th>
<th>Foreigners</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go often to the cinema</td>
<td>275</td>
<td>99</td>
<td>374</td>
</tr>
<tr>
<td>Go fairly often to the cinema</td>
<td>538</td>
<td>117</td>
<td>655</td>
</tr>
<tr>
<td>Go rarely to the cinema</td>
<td>1367</td>
<td>208</td>
<td>1575</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2180</td>
<td>424</td>
<td>2604</td>
</tr>
</tbody>
</table>

32% of the total number of the children answer that they go often or fairly often to the cinema, 50% that they go rarely, and 18% "never".

As regards the ages of the children who frequent the cinema, we have the following returns:

**Girls.**

<table>
<thead>
<tr>
<th>Age</th>
<th>Often</th>
<th>Fairly often</th>
<th>Rarely</th>
<th>Never</th>
<th>No answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>15</td>
<td>42</td>
<td>23</td>
<td>10</td>
<td>102</td>
</tr>
<tr>
<td>12</td>
<td>30</td>
<td>54</td>
<td>140</td>
<td>84</td>
<td>—</td>
<td>308</td>
</tr>
<tr>
<td>13</td>
<td>31</td>
<td>73</td>
<td>172</td>
<td>65</td>
<td>1</td>
<td>342</td>
</tr>
<tr>
<td>14</td>
<td>38</td>
<td>85</td>
<td>153</td>
<td>59</td>
<td>1</td>
<td>336</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>43</td>
<td>144</td>
<td>41</td>
<td>1</td>
<td>245</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>14</td>
<td>49</td>
<td>23</td>
<td>1</td>
<td>90</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>8</td>
<td>30</td>
<td>13</td>
<td>1</td>
<td>54</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>3</td>
<td>16</td>
<td>5</td>
<td>—</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>136</td>
<td>298</td>
<td>754</td>
<td>315</td>
<td>16</td>
<td>1514</td>
</tr>
</tbody>
</table>

3-ingl. 641 —
Boys

<table>
<thead>
<tr>
<th>Age</th>
<th>Often</th>
<th>Fairly often</th>
<th>Rarely</th>
<th>Never</th>
<th>No answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>—</td>
<td>14</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>73</td>
<td>31</td>
<td>2</td>
<td>131</td>
</tr>
<tr>
<td>12</td>
<td>35</td>
<td>65</td>
<td>146</td>
<td>47</td>
<td>7</td>
<td>300</td>
</tr>
<tr>
<td>13</td>
<td>56</td>
<td>65</td>
<td>178</td>
<td>45</td>
<td>3</td>
<td>347</td>
</tr>
<tr>
<td>14</td>
<td>59</td>
<td>102</td>
<td>154</td>
<td>55</td>
<td>4</td>
<td>374</td>
</tr>
<tr>
<td>15</td>
<td>47</td>
<td>54</td>
<td>157</td>
<td>40</td>
<td>6</td>
<td>304</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>35</td>
<td>49</td>
<td>21</td>
<td>1</td>
<td>122</td>
</tr>
<tr>
<td>17</td>
<td>9</td>
<td>13</td>
<td>33</td>
<td>3</td>
<td>2</td>
<td>69</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>6</td>
<td>23</td>
<td>9</td>
<td>—</td>
<td>41</td>
</tr>
<tr>
<td>Total</td>
<td>238</td>
<td>357</td>
<td>821</td>
<td>252</td>
<td>25</td>
<td>1693</td>
</tr>
</tbody>
</table>

This shows that the girls go to the cinema most frequently between the ages of 10 and 14 years; the highest percentage is given by girls of 14; after this age till the age of 18 the number declines pretty steadily. As regard the boys, 13 to 16 years of age give the highest number; in any case, their answers display more diversity than those of the girls.

When comparing the Neuchâtel and Lausanne returns, Mlle Jung noted that the proportion of the Neuchâtel children who answered that they went frequently to the cinema was greater than that of the Lausanne children; on the other hand, the proportion of those who stated that they went fairly often or occasionally was lower. Those who go rarely are more numerous in Neuchâtel than in Lausanne, but there are fewer who never go. Mlle Jung observes that if any possible local influences are left out of count, it would appear that the war had slightly increased the frequency of the cinema, since a comparison of all the different categories of answers shows that, as a whole, frequency is slightly higher in Lausanne.

For my own part, I am of the opinion that this point is open to doubt.

5th Question. - With Whom?

The children generally go to the cinema with their parents. A certain number of them go with friends, especially among the
boys. The girls rarely go alone to the cinema, whereas the boys go there more frequently by themselves than with friends.

In any case, the significance of this question has considerably diminished in consequence of the regulations governing the admission of children to cinema shows.

6th and 7th Questions. - When?

The pupils of the Lausanne Elementary Schools go to the cinema mostly on Sunday. Those of the Derrière-Bourg School and the boarding school go there more often during the week. This very likely depends on the different social spheres to which the children of the several schools belong and the fact that among the working classes Sunday is the usual day for going to the cinema.

Some of the children answer that they choose rainy days to go to the pictures, or that they go there on holidays or when there are special shows for children. It should be noted that no question was put with respect to special shows for school children.

As regards the question «whether in the afternoon or evening?» most of the children reply that they go there in the afternoon.

8th Question. - Do you like going to the cinema?

This question was asked of 964 boys only out of 1693, owing to the fact that 729 boys had to reply to questionnaire No. 3, in which this question is lacking. This fact accounts for a disproportion between the girls’ answers and the boys’ answers, a point which we beg the reader to bear in mind. The answers obtained may be tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>998</td>
<td>684</td>
<td>1682</td>
</tr>
<tr>
<td></td>
<td>138</td>
<td>55</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td>83</td>
<td>45</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>180</td>
<td>480</td>
</tr>
<tr>
<td>Total</td>
<td>1519</td>
<td>964</td>
<td>2483</td>
</tr>
</tbody>
</table>

Mlle Jung concludes that the children do enjoy the cinema, since 71 % of the boys and 66 % of the girls answer in the affirm-
ative. These returns are all the more significant from the fact that they refer to the answers as a whole, including those children (20 %) who did not answer the question, either because they never went there (we have seen above that 18 % answered that they never went to the cinema), or for some other reason.

A larger number of girls than of boys answer that they don’t care much to go to the cinema or don’t like it.

Enjoyment of the cinema is most marked among the girls at the age if 14 and the boys at 15.

Question 9a - Why do you like going?

This question like the preceding one, was asked of 964 boys only.

The answers vary considerably, but we have been able to tabulate them under the following headings: interesting, amusing, instructive, beautiful, as a pastime.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because it is instructive</td>
<td>200</td>
<td>111</td>
<td>311</td>
</tr>
<tr>
<td>Because it is interesting</td>
<td>578</td>
<td>319</td>
<td>897</td>
</tr>
<tr>
<td>Because it is amusing</td>
<td>191</td>
<td>65</td>
<td>256</td>
</tr>
<tr>
<td>As a pastime</td>
<td>162</td>
<td>173</td>
<td>335</td>
</tr>
<tr>
<td>Because it is beautiful</td>
<td>75</td>
<td>83</td>
<td>158</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1206</strong></td>
<td><strong>751</strong></td>
<td><strong>1957</strong></td>
</tr>
</tbody>
</table>

These children are attracted to the cinema mainly because it is interesting (36 %). It is worth noting that the girls are more attracted by the amusing side of the film than the boys, who go there rather as a pastime: this need of recreation diminishes however with years, while — as Mlle Jung observes — the answer that it is «instructive» becomes more frequent.

Mlle Jung has recorded some of the answers given by the children: «it develops the understanding and intelligence», «it is very striking», «it thrills me», «c’est chic», «it brings new ideas», «it influences children», «I like to see people moving about», «because I meet friends there», etc.
Question 9 b. - Why don't you like going?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cinema hurts my eyes</td>
<td>59</td>
<td>39</td>
<td>98</td>
</tr>
<tr>
<td>Children don't care for drama or get too</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>much of it</td>
<td>24</td>
<td>7</td>
<td>31</td>
</tr>
<tr>
<td>« Not interesting »</td>
<td>11</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>94</td>
<td>48</td>
<td>142</td>
</tr>
</tbody>
</table>

Here are some other somewhat peculiar answers: « it's waste of money », « it's too exciting », « I dream about it », « it tires me », « it's stupid », « the films are crude », « a well-behaved girl doesn't go to such places », « it is not always proper », « it gives me bad thoughts », « one learns nasty things there », « it upsets me », « it makes one want to imitate it », « one sees the blackest side of life with all these robbers and brigands », « the cinema turns one against an industrious life », « I don't like the style and the company », « too much violent passion », « I like healthier amusements ».

These children judge the cinema severely. It seems likely that, in many cases; the views expressed reflect those of their parents, but there is no doubt that the children are expressing their real feelings when they say that the cinema excites them too much and that they dream of it at night.

10th Question. - Favourite Subjects.

We have tabulated subject matter as follows:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comical scenes</td>
<td>674</td>
<td>723</td>
<td>1397</td>
</tr>
<tr>
<td>Topical Films</td>
<td>511</td>
<td>739</td>
<td>1250</td>
</tr>
<tr>
<td>Travel</td>
<td>474</td>
<td>578</td>
<td>1052</td>
</tr>
<tr>
<td>Drama</td>
<td>389</td>
<td>521</td>
<td>910</td>
</tr>
<tr>
<td>Geography</td>
<td>210</td>
<td>317</td>
<td>527</td>
</tr>
<tr>
<td>Instructive films</td>
<td>200</td>
<td>111</td>
<td>311</td>
</tr>
<tr>
<td>Historical films</td>
<td>83</td>
<td>64</td>
<td>147</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2541</td>
<td>3053</td>
<td>5594</td>
</tr>
</tbody>
</table>
Mlle Jung makes the following comments:

The girls prefer comical scenes; the boys prefer current events. Enjoyment of comical scenes decreases with the boys from the age of 10 to 18 years; interest in current events, on the contrary, increases with age; this is mainly due to the fact that they are interested in the events of the war. Travel comes next after comical scenes and current events; drama ranks fourth.

We have seen already that the girls are fond enough of going to the cinema because it is amusing; the fact that more girls than boys returned this answer suggests that they are sincere in this.

By reducing the headings of the preceding table to four, we obtain the following results:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instructive, (travel, geography, historical films, etc.)</td>
<td>967</td>
<td>1070</td>
<td>2037</td>
</tr>
<tr>
<td>2. Comical scenes</td>
<td>674</td>
<td>723</td>
<td>1397</td>
</tr>
<tr>
<td>3. Topical scenes</td>
<td>511</td>
<td>739</td>
<td>1250</td>
</tr>
<tr>
<td>4. Drama</td>
<td>389</td>
<td>521</td>
<td>910</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2541</strong></td>
<td><strong>3053</strong></td>
<td><strong>5594</strong></td>
</tr>
</tbody>
</table>

11th. Question. Do you re-act at home the scenes you have watched?

We have been unable to tabulate the answers to this question for statistical purposes, since some of the children interpreted the word «répéter» (literally «repeat») as meaning imitating or re-acting, and others as meaning recounting.

On the whole, the children are inclined to recount what they have seen, but not to re-act it.

In addition to all the «Yeses» and «Noes», the meaning of which is not altogether clear, we find such answers as the following:

«Yes, I re-act what I have seen, and my parents are obliged to tell me to be quiet»; «I love to have others share the hatred and admiration that I feel»; «yes, when I am in a good temper»; «yes, when there is a poor man who becomes a millionaire»; «it amuses our neighbour's children»; «mamma calls me her guignol»; and so on. One child declares that he is clever at
imitating what he has seen at the cinema; another states that he is not an actor; while another replies no to the question, adding «it might become dangerous, one might go mad».

12th. Question. Are your artistic emotions aroused by the cinema?

This question was put to 717 boys and 202 girls. The boys ranged in age from 11 to 18 years, and the girls from 15 to 18. Out of a total of 919 children who were interrogated, 468 replied, and the answers may be tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>107</td>
<td>121</td>
</tr>
<tr>
<td>Sometimes</td>
<td>11</td>
<td>67</td>
<td>78</td>
</tr>
<tr>
<td>Seldom</td>
<td>9</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total number of affirmative answers</strong></td>
<td>34</td>
<td>200</td>
<td>234</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>181</td>
<td>234</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>87</td>
<td>381</td>
<td>468</td>
</tr>
</tbody>
</table>

It is a curious fact that, on the whole, the number of «noes» and «yeses» is about equal. In tabulating the answers by sex, we see that «yes» predominates among the boys and «no» among the girls. The comparative value of these figures, however, might seem somewhat doubtful when we consider that the smaller girls, from 11 to 14 years of age, were not interrogated, and that the majority of «yeses» among the boys may perhaps be due to youthful enthusiasm. But this cannot be the case, for if we consider only the answers of the boys ranging from 15 to 18 years, like those of the girls, the majority of affirmatives is maintained: out of 197 answers, yes occurs 106 times and no 91.

Among the negative answers given to the 12th. question, Mlle Jung noted the answer of a scholar, very seriously given: «emotion is generally unhealthy».

The subjects especially mentioned by the children as arousing artistic feeling are those showing beautiful countries and historical events. With regard to the latter, Mlle Jung observes that the feeling seems to be more patriotic than artistic.
While noting the relatively low number of affirmative answers (234 out of 919 children interrogated), and especially the small number of those who answered by a decisive «yes» (121 out of 919 children interrogated) Mlle Jung made the following remark:

«We may conclude that the cinema really arouses artistic emotion in only a very small minority. It must, however, be remembered that we are considering the cinema as it was in 1915. The progress made since that period is so important that there is no doubt we should obtain very different answers today».

13th. Question. Has the Cinema opened new horizons to you?

This question, like the preceding one, was put to only 717 boys and 202 girls, that is, to a total number of 919 children; 427 answers were obtained, which may be tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15</td>
<td>59</td>
<td>75</td>
</tr>
<tr>
<td>Sometimes</td>
<td>4</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Seldom</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Total no. of «yeses»</td>
<td>22</td>
<td>77</td>
<td>99</td>
</tr>
<tr>
<td>No</td>
<td>58</td>
<td>270</td>
<td>328</td>
</tr>
<tr>
<td>Grand total</td>
<td>80</td>
<td>347</td>
<td>427</td>
</tr>
</tbody>
</table>

We see that in regard to this question the number of negative answers is much greater than the number of affirmative answers. And we may add that there were even some boys, one of fifteen and one of thirteen, who replied to the question: does the cinema open new horizons to you? by the statement: «quite the contrary» or by the declaration: «it closes them rather».

If we examine the affirmative answers, they reveal the fact that the cinema has aroused a taste for travelling in certain children and that it has also given them useful information in regard to science and topical events. One boy found that it showed him the difficulties there are in life; a little girl was enabled by the cinema to make comparisons between the lives of rich and poor, while another made acquaintance by its means with the lives of
working people. Some of the children said they wanted to become actors or detectives, and one boy wanted to be an apache, but the latter was probably not answering seriously.

We may mention two more answers: a boy of sixteen declared that the cinema «confirmed the ancient world», and another boy of eighteen remarked, with pitiless philosophy, that the cinema helped him to «judge the intelligence or stupidity of his comrades».

14th. Question. What is it that attracts you to the cinema?

This question was put to 729 boys of from 10 to 18 years of age; and 498 answers were received, which may be tabulated as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters</td>
<td>263</td>
</tr>
<tr>
<td>Advertisements</td>
<td>85</td>
</tr>
<tr>
<td>Programmes</td>
<td>50</td>
</tr>
<tr>
<td>Desire for amusement</td>
<td>49</td>
</tr>
<tr>
<td>Films and actors</td>
<td>27</td>
</tr>
<tr>
<td>Handbills</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>498</strong></td>
</tr>
</tbody>
</table>

It is obvious that several of these categories might be amalgamated, and that we should not place too much importance on the distinction made by the children between «advertisements» «programmes» and «handbills». But, as Mlle Jung remarks, it is undoubtedly true that posters are far and away ahead of all other types of advertisement.

None the less, Mlle Jung found some answers of children declaring that posters aroused no desire in them to go to the cinema. It may be added, also, that a certain number of children are attracted to the cinema by the accounts of their little friends.

15th. Question. What do you think of the cinema during the war?

This question, like the preceding one, was put only to the students in boarding schools, high schools and commercial schools; and the majority of the children interrogated were boys. Some of
them were older than 18. The answers vary so much and in some cases are so unexpected, that it has not been possible to tabulate them methodically.

In this connection, Mlle Jung made the following observations:

The answers obtained show that a large number of children think that cinemas should be closed during the war. They ought to be closed, according to these children, because they constitute a useless expense, because a lot of the persons receiving the dole go to them, because one ought not to amuse oneself while others are fighting or weeping, because it is better to comfort those who are in trouble, because they impoverish the villages and towns, since everybody spends money at the cinema, because many men refuse the necessities of life to their families in order to go to the cinema, because they give false ideas and because they are bad for young people. Certain children regard the cinema as immoral, and accuse it of suppressing impartiality. But while some of them insist that the cinema is not sufficiently neutral, others reproach it with being too neutral.

Mlle Jung made an attempt to express in figures some of the answers given by boys against the cinema during the war. She obtained the following results:

<table>
<thead>
<tr>
<th>Answer</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>« We could dispense with them »</td>
<td>58</td>
</tr>
<tr>
<td>« A useless expense »</td>
<td>43</td>
</tr>
<tr>
<td>« They ought to be closed »</td>
<td>179</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280</strong></td>
</tr>
</tbody>
</table>

Mlle Jung found, however, that other scholars considered the cinema interesting during the war. She counted 55 favourable answers among the boys, and the arguments put forward in favour of the cinema during the war were as follows: « It is better to go there than to a café », « they ought to remain open because every one should be at liberty to earn his living as he wishes », « they arouse patriotism ». The argument that freedom should be allowed to the cinema is very frequent, as also is the argument that the cinema provides work for the directors and their employés.
The results of the enquiry at Geneva.

The enquiry was made in the elementary schools at Geneva, and also in the intermediary and vocational schools, the schools of domestic economy and boarding schools. 4262 children answered our questionnaire. The tabulation was done by Mlle Aellig.

1st. Question. Sex.

Among the 4262 children there were:

- 2019 girls
- 2243 boys

2nd. Question. Age.

<table>
<thead>
<tr>
<th>Age</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>30</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>226</td>
<td>191</td>
<td>417</td>
</tr>
<tr>
<td>12</td>
<td>421</td>
<td>470</td>
<td>921</td>
</tr>
<tr>
<td>13</td>
<td>569</td>
<td>621</td>
<td>1193</td>
</tr>
<tr>
<td>14</td>
<td>436</td>
<td>553</td>
<td>989</td>
</tr>
<tr>
<td>15</td>
<td>216</td>
<td>304</td>
<td>520</td>
</tr>
<tr>
<td>16</td>
<td>73</td>
<td>82</td>
<td>155</td>
</tr>
<tr>
<td>17</td>
<td>13</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>18</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>2019</td>
<td>2243</td>
<td>4262</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>Swiss</th>
<th></th>
<th>Foreigners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>1387</td>
<td>Girls</td>
<td>632</td>
</tr>
<tr>
<td>Boys</td>
<td>1573</td>
<td>Boys</td>
<td>670</td>
</tr>
<tr>
<td>Total</td>
<td>2960</td>
<td>Total</td>
<td>1302</td>
</tr>
</tbody>
</table>

The foreigners belonged to 21 different nationalities. Among them, France took first place. The following are the statistics of scholars of foreign nationality:
France ........ 689  Turkey ........ 6
Italy ........ 351  United States .... 5
Russia ......... 80  Bulgaria ....... 5
Germany ....... 62  Holland ....... 5
England ........ 19  Greece ........ 4
Poland .......... 15  Roumania ....... 4
Austria .......... 13  Spain ........... 3
Brazil .......... 13  Serbia .......... 1
Argentina ....... 11  Persia .......... 1
Belgium .......... 8  Egypt ............ 1
Peru ........... 6


According to the answers given to the fourth question:

3395 scholars (about $4/5$) go to the cinema.
867 scholars (about $1/5$) do not go there.

Number of girls going to the cinema 1513.
Number of boys going to the cinema 1882.

Number of Swiss children frequenting the cinema 2297 (about 78%)
of whom 1011 (73%) were girls and 1286 (82%) were boys.

Foreign children frequenting the cinema 1098 (about 85%),
of whom 502 (80%) were girls and 596 (89%) were boys.

Out of the 3395 children who frequent the cinema there are:
1507 who go often (1).
1888 who go seldom

The proportion of boys and girls was much the same;

Those going often  Girls 663 (44.5%)  Boys 844 (44.9%)
Those going seldom  Girls 850 (55.5%)  Boys 1038 (55.1%)

The following figures show the frequentation of the cinema in relation to the age of the children:

(1) Mlle Aellig has used the word «often» where the child goes to the cinema at least once a month.
Girls

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Do not go to the cinema</th>
<th>Go to the cinema rarely</th>
<th>often</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years</td>
<td>226</td>
<td>53 (23.45%)</td>
<td></td>
<td></td>
<td>173 (76.55%)</td>
</tr>
<tr>
<td>12 »</td>
<td>451</td>
<td>97 (21.51%)</td>
<td>179</td>
<td>336</td>
<td>354 (78.49%)</td>
</tr>
<tr>
<td>13 »</td>
<td>509</td>
<td>141 (24.78%)</td>
<td>250</td>
<td>178</td>
<td>428 (75.22%)</td>
</tr>
<tr>
<td>14 »</td>
<td>436</td>
<td>119 (27.29%)</td>
<td>173</td>
<td>144</td>
<td>317 (72.71%)</td>
</tr>
<tr>
<td>15 »</td>
<td>216</td>
<td>67 (31.02%)</td>
<td>96</td>
<td>53</td>
<td>149 (68.98%)</td>
</tr>
<tr>
<td>16 »</td>
<td>73</td>
<td>18 (24.66%)</td>
<td>24</td>
<td>31</td>
<td>55 (75.34%)</td>
</tr>
<tr>
<td>17 »</td>
<td>13</td>
<td>3 (23.08%)</td>
<td>9</td>
<td>1</td>
<td>10 (76.92%)</td>
</tr>
<tr>
<td>18 »</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Boys

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Do not go to the cinema</th>
<th>Go to the cinema rarely</th>
<th>often</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years</td>
<td>191</td>
<td>28 (14.66%)</td>
<td>82</td>
<td>81</td>
<td>163 (85.34%)</td>
</tr>
<tr>
<td>12 »</td>
<td>470</td>
<td>68 (14.47%)</td>
<td>205</td>
<td>197</td>
<td>402 (85.53%)</td>
</tr>
<tr>
<td>13 »</td>
<td>624</td>
<td>98 (15.71%)</td>
<td>262</td>
<td>202</td>
<td>526 (84.29%)</td>
</tr>
<tr>
<td>14 »</td>
<td>553</td>
<td>98 (17.72%)</td>
<td>265</td>
<td>190</td>
<td>455 (82.28%)</td>
</tr>
<tr>
<td>15 »</td>
<td>304</td>
<td>48 (15.79%)</td>
<td>175</td>
<td>81</td>
<td>256 (84.21%)</td>
</tr>
<tr>
<td>16 »</td>
<td>82</td>
<td>18 (21.95%)</td>
<td>39</td>
<td>25</td>
<td>64 (78.05%)</td>
</tr>
<tr>
<td>17 »</td>
<td>14</td>
<td>3 (21.43%)</td>
<td>6</td>
<td>5</td>
<td>11 (78.57%)</td>
</tr>
<tr>
<td>18 »</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

These statistics contain some interesting information, which we will indicate but will not attempt to explain.

a) It will be seen that the number of girls who do not frequent the cinema is higher than that of the boys: 21 1/2 to 31% of the girls and 14 1/2 to 22% of the boys (we do not take into account the figures dealing with young people of 18 years, which concern too small a number to be of interest).

b) Among the girls the proportion of those who do not frequent the cinema is in constant increase with the age and reaches its maximum at the age of 15; from this age it decreases. Among boys, the figures are not so regular; and it is worthy of remark that it is precisely at 15 years of age that frequentation of the cinema increases among boys, while the number of them who do not go to the cinema is highest at the age of 16. The decrease in frequentation of the cinema towards the age of 15 or 16 is attributed by Mlle Aellig to the effects of regligious instruction, since it is be-
tween the ages of 15 and 16 that Protestant children take their first communion.

c) Finally we note that, according to the answers obtained, it is at the age of 12 years that frequentation of the cinema reaches its maximum, in the case of both girls and boys. (Is the explanation of this fact to be found in the organization of special films for children? We do not know).

5th. Question. With whom?

The greater number of children go to the cinema with their parents, brothers, sisters, cousins, etc. Others go with friends. Some children even manage to go alone, in spite of the decree of the Council of State of June 18, 1912 which prohibits children of less than 16 years to go alone to the cinema. Some children, evidently finding the question indiscreet, either did not reply at all or replied evasively. One even said: «that has nothing to do with anyone else», another said simply: «I go there in good company». It is mainly from the age of 15 and 16 that the children begin to give these answers.

There are from 60 to 70 children per hundred, according to age classification, who go to the cinema with their parents, from 5 to 15 with friends, and from 1 to 5 who go alone.

The proportion of children who go either with friends or alone naturally increases with their age. On the other hand, it will be noted, Mlle Aellig observes, that the proportion is much higher in the vocational schools and the schools of domestic economy than in other schools.

6th. Question. When (week days or Sundays)?

It is mainly on Sunday and holidays that children go to the cinema, in the afternoon or evening. In the case of many families, there seems to be a tradition that they should go either on New Year's day or on Escalade day. One boy writes: «I love to go on Sunday, because that rests us for next day's lessons», while a little girl remarks: «it throws us all out for Monday». Boys
generally go on Sunday, except when they go to a football match; and in that case they go to the cinema on Wednesday. Saturday evening comes next, especially in the case of children who go with their families, because they are able to stay in bed later on Sunday morning.

Thursday, which is a holiday for school children in Geneva, comes third, Friday and Wednesday fourth, and Monday and Tuesday fifth.

With regard to the relation between the choice of days and the schools where the enquiry was made, Mlle Aellig found the following to be the case:

Boarding school pupils and scholars from the secondary schools seldom choose Sunday, but generally go on Thursday. In the other schools, on the contrary, the children generally go on Sunday.

7th. Question. When? (afternoon or evening).

This question was not tabulated for Geneva.

8th. Question. Do you like going to the cinema?

2928 (69%) children like going to the cinema, 1263 of them being girls and 1665 boys.

506 children (12%) say they do not like going; the proportion of girls in this number was 262 and of boys 244.

828 children (19%) were indifferent; 494 girls and 334 boys.

The following are some of the answers:

« Pretty well », « very much », « oh yes », « I believe you », « I adore it », « certainly », « passionately », « of course », etc. « It is the only pleasure I have », « undoubtedly », « when there is a nice programme », etc.

« Not at all », « I detest it », « not in the least », « it does not suit me », « it has no attraction for me ».

Then there is the « yes » with reserves, the « no » with exceptions, « according to what they put on the film », « according to the programme », « that depends », etc.

655 —
A boy of 15 likes to go to the cinema from time to time provided they give something from life, no matter what the subject may be, so long as it is real!

A little Genevan girl says yes, adding: «when they give a sad play, I drop my eyes».

A virtuous youngster of thirteen writes: «yes, when they give healthy pieces».

A little Polish girl of 11 says: «I like to go when the film is instructive for children, when there is nothing extraordinary about it, and it does not pervert my mind».

It is interesting to note the increase of interest in the cinema as the girls grow older, and the decrease of interest on the contrary as the boys grow older.

<table>
<thead>
<tr>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>11 years</td>
<td>64%</td>
</tr>
<tr>
<td>12</td>
<td>69%</td>
</tr>
<tr>
<td>13</td>
<td>63%</td>
</tr>
<tr>
<td>14</td>
<td>58%</td>
</tr>
<tr>
<td>15</td>
<td>58%</td>
</tr>
<tr>
<td>16</td>
<td>73%</td>
</tr>
<tr>
<td>17</td>
<td>77%</td>
</tr>
</tbody>
</table>

Among girls the proportion of «yeses» drops between 12 and 15 years, but at 16 it increases rapidly, while the «noes» drop to zero. Among boys, on the contrary, we notice a continual decrease of interest. Mlle Aellig is of the opinion that sport takes the upper hand with boys from the age of 16, and draws them away from the cinema. Young girls, not being interested in sport, she explains, or at any rate to a much smaller extent, pass their Sundays at the cinema.

9th. Question. Why do children like to go to the cinema?

Taking the two main reasons: instruction and amusement, Mlle Aellig has tabulated 2660 answers in the following way:
Examining the answers in detail, Mlle Aellig found that the following additional reasons appeared in the answers:

**Interest — Instruction**

The cinema interests children; even those who never go there say: « they must show some interesting things ».

The following are some answers from those children who have been to the cinema:

The things they show at the cinema are out of the ordinary. The cinema opens the mind, it strengthens the intelligence, it makes us sharper, it teaches us things we did not know. After books, it is the cinema that represents novels and history best, and all sorts of other nice things; it is more interesting to see things represented than simply to read about them.

Here is an answer of a boy of 13: « I am always learning at the cinema, especially by the geographic al films, and the police and detective films » (the obvious inquiry that comes into one’s mind is, Just what does he learn ?)

**Recreation**

The following are some of the answers:

It is nice, it is attractive, it is very beautiful. The cinema is full of amusement which carries one out of the ordinary monotonous life of every day. It gives us a little leisure and makes us forget the cares and annoyances we may have. It is the most agreeable pastime when the weather is bad. One enjoys oneself at the cinema, one dies of laughing. They have things which cannot be seen elsewhere, which are outside of real life and which are awfully amusing! And then, it is pleasant to go there with one’s
family; one goes to keep company with some one else, to be with one’s pal, to find one’s friends. We are sheltered from the weather there, and it is warm and they spray perfume in the halls. It is a pleasure that is easily procured. We can see a lot there at a small expense.

The following are the various advantages of the cinema according to a boy of 13:

It interests me.
It amuses me.
I get to know plays and novels there.
I go there to see horse racing.
I go there to see other lands.
I go there to see about the lives of abandoned orphans.
It helps to pass the time when it is raining.

Morality

The following are some of the answers: «It is instructive, and certain dramas have a moral. The cinema often develops sentimental ideas, and there is always a moral at the end of the pieces. They teach that the wicked are always punished».

The answer of a little girl of 13: «I like to go to the cinema very much, because I can travel with my eyes, I learn new things, and I see scenes of life which make me realize that it needs a lot of courage to climb the path we have to travel and go right to the end without complaining».

The answer of a boy of 13: «I adore the cinema, it is my greatest pleasure. The cinema is a comfort in hours of anguish. It lightens our common sorrows, it draws together hearts that are disunited... it stimulates kindness».

Patriotism

The patriotic element also plays its part. The following is a characteristic answer: «The war subjects are especially in-
interesting; they show how one ought to behave, even in the most
difficult moments, in order to serve one’s country. We learn
there to know the life of the soldier at the front and the damage
cau sed by the war; we see the mines laid by the enemy.»

Criticism of the cinema by children. General.

Here are some of the criticisms: It is not worth while spending
money to see a lot of foolishness and fill one’s head with things
that have never existed. There is enough work to do and enough
to amuse one without that. It is the theatre of the illiterate. Peo-
ple make a noise and yell there; disorder reigns at the cinema. The
films are worked off too rapidly. They are spotted and confused.

The hygiene of the cinema is often criticised. It is bad for
one’s eyes. It is too hot, there is not enough air; it is bad for the
health. The halls are full of nauseating perfumes.

Morality.

The cinema is too immoral for the young. It offers attractions
that are not true to life. Sometimes one sees disagreeable scenes
there which are bad for one’s eyes and one’s mind also. Instructive
pieces are rare in Genevan and Swiss cinemas. The nicest
pieces are spoilt by immoral interludes which leave us with bad
ideas in our minds. We see children going to the bad, because
they go to the cinema too often. They teach us nothing but to
make up dramas or to steal, according to the things they show.
It is not respectable with all these crimes. Very often the shows are
in bad taste. And lastly: «The cinema teaches us many things
but also many others.»

10th. Question. Subjects preferred.

With regard to the subjects preferred, it goes without saying
that many children mention a number of subjects that «they like
best». In the statistics that we give below, the total number of
answers is therefore greater than the number of children who
answered the enquiry. We have classed the subjects in the order of preference shown by the answers.

<table>
<thead>
<tr>
<th>Subjects preferred</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comical scenes</td>
<td>901</td>
<td>1290</td>
<td>2191</td>
</tr>
<tr>
<td>Topical subjects</td>
<td>736</td>
<td>1236</td>
<td>1972</td>
</tr>
<tr>
<td>Travel</td>
<td>698</td>
<td>1025</td>
<td>1723</td>
</tr>
<tr>
<td>Dramas in general</td>
<td>464</td>
<td>750</td>
<td>1214</td>
</tr>
<tr>
<td>Geography</td>
<td>330</td>
<td>453</td>
<td>783</td>
</tr>
<tr>
<td>Police dramas</td>
<td>62</td>
<td>198</td>
<td>260</td>
</tr>
<tr>
<td>Historical scenes</td>
<td>52</td>
<td>135</td>
<td>187</td>
</tr>
<tr>
<td>American dramas</td>
<td>34</td>
<td>112</td>
<td>146</td>
</tr>
<tr>
<td>Scientific films</td>
<td>26</td>
<td>26</td>
<td>52</td>
</tr>
</tbody>
</table>

If we reduce the number of groups to four, we obtain the following table:

<table>
<thead>
<tr>
<th>Subjects preferred</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructive (travel, geography, historical scenes, scientific films)</td>
<td>1106</td>
<td>1639</td>
<td>2745</td>
</tr>
<tr>
<td>Comical scenes</td>
<td>901</td>
<td>1290</td>
<td>2191</td>
</tr>
<tr>
<td>Topical subjects</td>
<td>736</td>
<td>1236</td>
<td>1972</td>
</tr>
<tr>
<td>Dramas</td>
<td>560</td>
<td>1060</td>
<td>1620</td>
</tr>
</tbody>
</table>

The number of answers dealing with the subjects preferred led Mlle Aellig to make some observations, of which we give the following extract:

**Dramas.**

Dramas are the most discussed and disputable point of cinematograph shows. There are children who are fervent supporters of the cinema on account of these dramas. They find the dramas «striking» «exciting», «thrilling». Dramas excite them and stir their emotions in a way that they like. In order to show just where this passion for the drama may lead, we will give these answers of two boys of 13: one loves dramas because «we see sad and cruel things in them»; and another has a predilection for love dramas because they are sad and also «on account of the satur-gique (?) scenes and the scenes of debauch.»

Happily, this type of lover of the drama is the exception rather than the rule.
In opposition to impassioned lovers of the drama, we have the contrary type: the serious children, with cold, reserved natures. These children condemn the drama, or approve of it only with certain reservations. Here are some of their criticisms:

The greater number of dramas are not suited for young people and heat their imagination by exciting and unnatural scenes; their effects on feeble minds are entirely evil. Dramas are lies; some dramas are even rather ridiculous. The setting is different, but at bottom they are all alike; there are, however, sensational dramas and reconstructions of books which might be interesting.

In the police dramas we see persons pull out their revolvers and knives at every moment, «the people do nothing but fire pistols at themselves or their enemies».

There are dramas with a bad moral which might lead us astray. There are others which are stupid; police dramas which have neither beginning nor end.

It is bad for the nerves, the dramas frighten us and make us dream at night. The grand dramas are absurd, where one sees death in all its detail. Some of the dramas, however, are so so. They are not always true to life, but they are interesting all the same. It is nice to see a comical scene after a drama.

Travel.

The following is one of the answers giving a reason for the preference for travel films:

«Travel films are very instructive, they help us to know far-off countries and foreign customs, they illustrate and complete our school lessons. We see beautiful countries before our eyes, and think that we are really there».

All the children, however, are not of the same opinion. Here is what one of the boys thinks: «Journeys are boring. Under the pretext of geography, they show you nothing but cascades. Very amusing!» One of the boarding-school pupils who does not like travel either, says he has enough of it in the lectures.

In the course of the tabulation, states Mlle Aellig, we have noticed that dramas and travel tend each to exclude the other. Impassioned
lovers of the drama feel little interest in travel and geography. The average child however, is better able to distribute its interest among the different subjects. But in cases where travel films predominate, the drama takes last place, or is not even mentioned.

Comical scenes.

Comical scenes enjoy an almost unanimous approval. Those who do not like any of the other subjects, at least like the comical scenes.

A very small number of children finds the comical scenes stupid. The great majority find them « so amusing », « I die of laughing ». They even love them, in some cases, « because they are so silly ». « Nothing makes one laugh so much as seeing a comical film at the cinema ». In 1915 Max Linder was the great comedian in vogue. There was only one child who declared that he did not like Max Linder’s comical scenes.

Historical films.

Generally speaking, boys have more liking than girls for historical films. Here is what a young girl says about them, however: « Historical pieces are very interesting. I like to see them acted by Parisian or French actors. The pictures are so beautiful and show the people of the Middle Ages so well that they delight me ».

Comparisons - Conclusion.

Before formulating my conclusions. I wish to thank all those who have been good enough to lend me their aid, some by giving me permission to carry out my enquiry, and others by helping me to bring my work to a satisfactory issue. I therefore tender my thanks to the various authorities and members of the different teaching bodies, the students of the University of Neuchâtel, the School of Social Studies for Women at Geneva, and especially Miles Jung and Aellig, who undertook the heavy task of the final tabulation.

The results that we have obtained, modest though they are, are not to be despised. By way of comparison, I may recall the fact that the enquiry organized by Fraüllein Dr. Emilie Altenloh in
various classes of society in Germany, shortly before the war (1) resulted in the receipt of about 2400 answers to the 17,500 questionnaires sent out. Out of this figure, 2031 were sent by scholars, 650 of whom were pupils in the elementary and vocational schools, and 1381 in the commercial schools. Thanks to the valuable aid I received at Neuchâtel, Geneva and Lausanne, in the organization of my enquiry, I obtained ten thousand answers, in round figures.

Let us see what information we have gained from this large number of answers. The text of this study, in which the answers of the children have been grouped by question, gives us the answer, and the reader is at liberty to draw his own conclusions. My task was essentially, as I declared in my first circular in 1914, to carry out a scientific work supported by documentary evidence, and not to undertake a study lege ferenda. And the only commentary that I wish to present together with the report on my enquiry concerns the scientific character of the results obtained.

It is true that the difficulties met with in tabulating the returns (of which I have spoken in the preface) and the limited time that we each had at our disposal, compelled me at the last to decide on a type of tabulation which is fragmentary in places rather than a complete tabulation, the data for which would have been uncertain.

But, in spite of its sometimes fragmentary nature, our enquiry contains scientific information of great interest, especially in regard to the psychology of children.

We will first examine some comparative statistics concerning the frequentation of the cinema in the three towns (Question n. 4).

<table>
<thead>
<tr>
<th></th>
<th>Answers</th>
<th>%</th>
<th>Go</th>
<th>%</th>
<th>Don't go</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>3986</td>
<td>100</td>
<td>3091</td>
<td>77.54</td>
<td>895</td>
<td>22.46</td>
</tr>
<tr>
<td>Boys</td>
<td>4261</td>
<td>100</td>
<td>3603</td>
<td>84.56</td>
<td>658</td>
<td>15.44</td>
</tr>
<tr>
<td>Total</td>
<td>8247</td>
<td>100</td>
<td>6694</td>
<td>81.17</td>
<td>1553</td>
<td>18.83</td>
</tr>
</tbody>
</table>

II.

<table>
<thead>
<tr>
<th></th>
<th>Answers</th>
<th>%</th>
<th>Go</th>
<th>%</th>
<th>Don't go</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>3091</td>
<td>100</td>
<td>1221</td>
<td>39.50</td>
<td>1870</td>
<td>60.50</td>
</tr>
<tr>
<td>Boys</td>
<td>3603</td>
<td>100</td>
<td>1551</td>
<td>43.05</td>
<td>2052</td>
<td>56.95</td>
</tr>
<tr>
<td>Total</td>
<td>6694</td>
<td>100</td>
<td>2772</td>
<td>41.71</td>
<td>3922</td>
<td>58.56</td>
</tr>
</tbody>
</table>

III.

<table>
<thead>
<tr>
<th></th>
<th>Answers</th>
<th>%</th>
<th>Go</th>
<th>%</th>
<th>Don't go</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swiss</td>
<td>6467</td>
<td>100</td>
<td>5159</td>
<td>79.77</td>
<td>1308</td>
<td>20.23</td>
</tr>
<tr>
<td>Foreigners</td>
<td>1888</td>
<td>100</td>
<td>1612</td>
<td>85.88</td>
<td>276</td>
<td>14.62</td>
</tr>
<tr>
<td>*Total</td>
<td>8355</td>
<td>100</td>
<td>6771</td>
<td>81.04</td>
<td>1584</td>
<td>18.96</td>
</tr>
</tbody>
</table>

I publish these statistics without any comments. All the same, I must make an observation on the subject of Table III. Too hasty conclusions should not be drawn from the fact that children of foreign nationalities go to the cinema oftener than Swiss children. This difference in the frequentation of the cinema might be due to psychological differences, or it might be simply the consequence of the fact that the majority of Swiss children, living with their families, are kept under careful watch and ward.

As to the scientific results of the enquiry, especially those of a psychological nature, I will take Question 10 (subjects preferred) as an example. We will examine the comparative results of the enquiry on this question from three points of view, that is:

a) variation of taste in children according to age;
b) variation of taste in children in consequence of the war;
c) degree of certitude in the results obtained.

Mlle Aellig and Mlle Jung have established, for the three towns concerned, the order of preference given by the children, under the age classification, to the four principal subjects: Topical subjects, Dramas, Comical Scenes and Travel.

(*) The difference in the number of answers in Table I and Table III is explained by the fact that in Table I the 108 answers of the mixed schools of Neuchâtel have not been included.
I have drawn up these results in the table which I give below, with the object of finding out if information of a general order could be extracted from a comparison of the answers concerning the three towns. The favourable result obtained has surpassed all my hopes. (I must point out that the comparison can be made for six different age classifications between Geneva and Lausanne, but only for four between Geneva and Lausanne on the one side and Neuchâtel on the other.)

In the following table:

A means Topical films  
C means Comical scenes  
D means Dramas  
T means Travel

The four letter are placed in the order of preference given by each age classification to each of the four subjects.

<table>
<thead>
<tr>
<th>Neuchâtel</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9 years</td>
<td>D</td>
<td>C</td>
<td>T</td>
<td>A</td>
</tr>
<tr>
<td>10 »</td>
<td>C</td>
<td>T</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>11 »</td>
<td>C</td>
<td>D</td>
<td>A</td>
<td>T</td>
</tr>
<tr>
<td>12 »</td>
<td>C</td>
<td>T</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>13 »</td>
<td>C</td>
<td>T</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>14 »</td>
<td>C</td>
<td>T</td>
<td>D</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lausanne</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years</td>
<td>C</td>
<td>A</td>
<td>T</td>
<td>D</td>
</tr>
<tr>
<td>12 »</td>
<td>C</td>
<td>A</td>
<td>D</td>
<td>T</td>
</tr>
<tr>
<td>13 »</td>
<td>C</td>
<td>A</td>
<td>T</td>
<td>D</td>
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<tr>
<td>14 »</td>
<td>C</td>
<td>A</td>
<td>T</td>
<td>D</td>
</tr>
<tr>
<td>15 »</td>
<td>A</td>
<td>C</td>
<td>T</td>
<td>D</td>
</tr>
<tr>
<td>16 »</td>
<td>A</td>
<td>C</td>
<td>T</td>
<td>D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geneva</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years</td>
<td>C</td>
<td>A</td>
<td>T</td>
<td>D</td>
</tr>
<tr>
<td>12 »</td>
<td>C</td>
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<td>T</td>
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<tr>
<td>13 »</td>
<td>C</td>
<td>A</td>
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<td>D</td>
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<tr>
<td>14 »</td>
<td>A</td>
<td>C</td>
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<td>D</td>
</tr>
<tr>
<td>15 »</td>
<td>A</td>
<td>T</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>16 »</td>
<td>A</td>
<td>D</td>
<td>T</td>
<td>C</td>
</tr>
</tbody>
</table>
The first thing which strikes one on examining this table is its uniformity. It is a striking proof of the objective value of the results obtained, a value deriving from the certitude of great numbers.

Let us examine some of the points:

a) In the three towns, although each is so different from the others, the children of 11, 12 and 13 years of age show the same preference: the comical scenes.

b) In the three towns, dramas suddenly come into favour (for reasons which we do not know) among children of between 11 and 12 years of age (11 at Neuchâtel, 12 at Lausanne and Geneva).

c) The effects of the war tend to modify the childrens' tastes. At Neuchâtel, where the enquiry was largely terminated before the war, topical films take last place (with one exception: among children of 11 years they take third place). At Lausanne and Geneva, on the contrary, where the enquiry was made during the war, topical subjects — which at that period consisted mainly of war films — occupy the first and second places, without exception.

d) The preference of the children for topical subjects allows us also to note change of taste according to the age of the children. This change is manifested with equal regularity at Lausanne and at Geneva. The younger children prefer comical scenes, while the older prefer topical subjects. The only difference is the period when the change takes place: at Lausanne it occurs at 15 years, and at Geneva at the age of 14.

e) One of the most surprising instances of regularity that the enquiry revealed was the decline in favour of comical scenes among the school children of Geneva. Among children of from 11 to 13 years comical scenes take first place, among those of 14 years second place, among those of 15 third place, and fourth place among those of 16.

f) If we leave the topical subjects aside and deal only with the other three, a new uniformity appears in the answers of the schoolchildren of the three towns, which is even more general than the preceding ones. In fact, eliminating topical subjects, we obtain the following table:
<table>
<thead>
<tr>
<th>Town</th>
<th>Years</th>
<th>C</th>
<th>D</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuchâtel</td>
<td>11</td>
<td>C</td>
<td>D</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>C</td>
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<td>D</td>
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<td></td>
<td>13</td>
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</tr>
<tr>
<td>Lausanne</td>
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</tbody>
</table>

There is an almost absolute concordance in the answers from the three towns.

I have finished. My aim was neither to impose nor to propose, but simply to expose. That aim has been attained.

(Prof.) André de Maday.
Librarian of the I. L. O.
Formerly Dean of the Faculty of Law at the University of Neuchâtel.
AGRICULTURAL TRAINING AND THE EDUCATION OF THE RURAL POPULATION BY MEANS OF THE FILM IN URUGUAY

(from the Spanish)

The Report of the Information and Training Section of the Uruguay Direction of Agriculture gives a better idea than any other document could afford us of the results achieved during its first working year by the travelling cinema service organized by the said department in the rural districts of Uruguay. We have pleasure in publishing herewith the text of this report.

The travelling cinemas of this Department have accomplished their first year's work. The results obtained surpass our expectations. In this Report we propose to deal more particularly with the work done in the departments of Artigas, Salto, Paysandu, de Ricas, Canelones and Montevideo.

It is not easy to give an adequate idea of the efficacy of this form of teaching, which not only arouses the interest of the farmers in the different systems of cultivation and brings before them the advantages of modern methods, but is also a practical means of education and an auxiliary to the instruction imparted in the rural schools. In addition to this, the cinema, which was almost unknown to the country children and indeed to numbers of grown-up persons in the interior departments — that is to say those nearest to the Capital — offers them an attraction that is conducive to the happiest results.

Thus the Direction of Agriculture — while promoting the diffusion of technical farm training — accomplishes at the same time an educational mission. Our regional agronomists and all those in a position to judge of its truly extraordinary results, declare with good reason that it would take a year to inculcate by any other method the elements of knowledge which our rural
population have been able by this means to pick up in the course of five or six days.

We will not dwell on the details of the work done by the different groups of travelling cinemas during their successive tours. At the present time the group belonging to the Information and Training Section of the Direction of Agriculture is methodically pursuing a very active prophylactic campaign of incontestable social value by the exhibition of films bearing on so-called «secret» and contagious diseases. These films have been given or lent us by the National Hygiene Council. This is a form of propaganda which it would be difficult to carry on by any other means. In collaboration with the bodies organized by the Ministry of Industry for safeguarding the public health, which, without the collaboration of the agricultural department, would have been unable to reach the rural masses, this form of social and patriotic education offers a means of moral uplift of adults and children and is instrumental in forming a new conscience more open to the reception of modern agricultural teaching.

The efficacy of the methods tried by the Direction of Agriculture is beyond dispute. This system, moreover, is being practised at the present time in most branches of training by schools, post-scholastic, and specialized teaching organizations.

The National Council of Primary and Secondary Instruction cooperates in this work, by means of films dealing with subjects included in the school curricula, which our travelling cinema groups exhibit in the districts they work.

So far as possible, all the shows have been given in school buildings.

The following expresses the views of an authority on film education on the value of our methods.

«After writing and printing, the cinema is undoubtedly the most revolutionary of all the inventions that have been applied to teaching. It is an instrument that we cannot overlook.

«So many and various are its forms of expression that it offers us quite unique possibilities; it is accessible to all and exercises its sway over all mankind, with the exception of the blind. So
strong is the impression of reality produced by a scene projected
on the screen that adults and children alike come under its spell;
some regard it merely as a spectacle, while others draw their own
conclusions on its imitative efficacy; but all are subject to its in-
fluence.

«No books, no words, no other form of manifesting our
thoughts, has the cinema's power of presenting the truth, especially
when the film is prepared by a good teacher.

«How shall we acquaint children with the world's natural
beauties, its conformation, the different races of mankind, the
great works of man, the manners and customs of other races, their
rites, etc.? How shall we give them, in a practical and attractive
form, a complete idea of the world of industry? How present
the creations of the human intellect in a realistic manner to the
minds of students? — show them roads, commerce, farms,
fieldwork, experimental stations, new technical processes, work
in mines, and so forth?

«Can we ask all this of illustrated books? We cannot,
because illustrations do not sufficiently interest the child, nor give
him a precise notion of reality.

«The cinema possesses all the essential elements of the picture,
but it is a living picture, which shows the whole world in all its
luminous beauty and down to the very depths of the sea — things
that no master, however zealous he may be, can know or teach
but in an incomplete and colourless form».

The unquestionable educative and instructive value of the
(cinema being thus recognized, the Information and Training
Section asked the Direction of Agriculture for authority to equip
another group of travelling cinemas, so as to extend this method
of instruction and enable it to achieve the fullest results possible
within its sphere of action.

The success achieved by the Direction of Agriculture in the
way of popular education on rural problems by means of the
film assures Uruguay a first rank place among the Latin American
Countries. For the past two years, travelling cinemas equipped
with autonomous electric generators, have been travelling the

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country. Truly exceptional results have been attained, nor are these limited to the agricultural domain alone, for the films (which are regarded by agrarian experts merely as an auxiliary means of training) embrace all elements of knowledge and social culture; they are not concerned solely with problems of an agricultural order, but with scientific questions of many kinds.

The equipment of these five groups of travelling cinemas, completed by broadcasting, makes it possible to carry on a very practical and enlightened work of general education which could not easily be attempted by other means. Thanks to it, we shall educate and uplift our rural population and at the same time obtain a better yield from our soil.

Communicated by E. Rovira.
Delegate of Uruguay
to the International Institute of Agriculture.
THE ARTISTIC ACTIVITY OF THE SOVIET CINEMATOGRAPH DURING THE PAST TEN YEARS.

(from the Russian)

General Considerations. — The art of the film must be considered in relation to the general artistic culture and the politico-social organization of a given period. In the cinematographic domain, however, there are still many prejudices, partly attributable to ignorance, and partly to the residua of an over optimistic mentality, which assumed that the cinematograph would develop independently and that its artistic form does not depend on politico-social principles or on the influence of other forms of art — what we may term artistic currents. In reality, the form and the style of the film are closely bound up with a specific study of the theme dealt with — a study which, in its turn, is subordinate to the vital needs of the period.

The form and the theme of a film are complementary one to the other. The revolution that has taken place in form is an indisputable sign of the decadence of the old subject matter. We can note these same phenomena also in the history of other forms of art, but it is especially true of the Sovietic film production of the past ten years.

(Ed. Note) With the greatest interest we have received and publish Mr. Fedoroff's article on the present position of the Soviet cinematograph. It is obvious that a great deal has been done in the U. R. S. S. on behalf of the educational and propagandist film. Special care has been taken in the production of films bearing on social questions, and these deserve to be known. We look forward in later numbers to illustrating all that Soviet Russia have done in the domain of the educational film; indeed the Review will devote systematically a part of its space to illustrating and making known what has been accomplished in all the different countries. M. Coissac's valuable article is an example of this. In a later issue we will publish a highly interesting paper by Mr. North, who directs and controls the educational cinema in the United States, being the official exponent of what Washington is doing to encourage and diffuse the scholastic and educational film.

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The Russian Cinematograph before the Revolution. — The cinematograph, as it existed in Russia prior to the October revolution, was, both in subject and form, nothing more nor less than the mirror of the tastes and characteristics of the bourgeoisie, and more particularly of the lower middle classes, of that time. The various forms of artistic decadence which had invaded the spirit of society at the beginning of the twentieth century reacted on the cinematograph as on all other forms of art.

It is true that at that date the cinematograph was but little developed from the technical standpoint and was therefore not in a position to create forms on a level with those created in other fields of artistic production. But even aesthetic symbolism had penetrated into the cinematographic domain, and in the scenes staged by M. Bauer we can trace the romantic tendencies of that period: we will not speak of all the modern sex problems which found in the film their most effective means of propaganda. All these subjects, presented in a suggestive and licentious form, calculated to awaken the lowest instincts, were dealt with in a censureless manner, which not even the optimists of the old school can have approved.

The Soviet Cinema during the first years. — The revolution in Soviet cinematography began with a transformation in the choice of subject matter, in the form of the Soviet cinematographic chronicles and in artistic propaganda, right from the time of the civil war and the first years of the revolution. Soviet cinematography was unable, however, to discern at once a clear form and a precise choice of themes for its new material. In this regard it formed no exception to artistic activities in general; literature, which is the normal source of the cinematograph, was equally behindhand in social development. At the same time, no very deep study had been made either of the technique or of the canons of the cinematographic art, whether in Russia or elsewhere. At a certain period — or to be more precise, at the time of our civil war — cinematography, in its principal form, namely that of artistic and documentary propaganda (although it pursued certain concrete notions of form and a new technique in subject matter) did not display the creative spirit of artists ready to sink their
personality in their art. This process of spiritual fusion is generally a slow matter of time, and therefore in the field of artistic propaganda we had a form of cinematography which merely reflected the creations of the period.

It should, moreover, be realized that at that time none but the former artistic cinema directors were working.

The artist passively obeyed these influences, without infusing into his production any of the creative force which, either consciously or unconsciously, is a sine qua non of all complete forms of art. Hence film propaganda, during the civil war period, was unresponsive and ineffectual and no masters in this line stood out. Its peculiarities (scant meterage, unpersuasiveness, a lack of any deep study of the personal psychology of the characters, nature films to the extent of 90%, the representation of mass scenes differing from the film melodramas of the bourgeois halls) were all due to contingent circumstances: the screening of the battles of the proletarian masses at the front or in the streets of villages and towns, and fierce class struggles,—all scenes in which individual personality and individual interests are left completely in the shade. Only later on, when peace and the period of economic reconstruction supervened, when the plough once again replaced the sword and the great problems of life and culture became pressing, when artists again knew and felt life in its essential reality, and their functions in public life became manifest—then, and not till then, the true path was revealed to those in quest of form and proletarian artists and writers woke up to the new technique.

The mastery of technique, the quest and prescience of new forms, on the part of artists who realized the reality of the moment, found expression during the first few years mostly in lectures and in lengthy experimental study.

The new trend of the cinematograph has by now assumed so great an importance, that already, right from the first years of economic reconstruction, it has played a vital part in all spheres of idealistic competition.

The new style of the Soviet Film. — First of all, this new cinematographic form differed essentially from the old forms. Thus, while formerly psychological drama, intermixed with aesthetic

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decoration and scenery, was the vogue (performed by dramatic artists who represented in the crudest manner the passions of a single social element, i.e. middle-class man living by himself and for himself), it had now to be replaced by social drama, depicting the life and struggles of the collectivity, or of individuals considered not as isolated factors, but in their relation to the community. This entails live action which displays the truth in its completeness to the spectator, himself a member of a new social collectivity.

Considered from the standpoint of form, the most powerful means of this new development of the film — based on the social instinct, on a knowledge of cinematographic technique, and experimental work — consists, on the one hand, in a perfect staging of the film, and on the other, in the performance of the actor, in his mastery of the technique of movement and the effects it produces on the screen. All this was alien to the old methods, theatrical in their essence and reactionary from the social standpoint, which predominated in the cinematograph prior to the revolution.

The necessity that the performance of the artists should create convincing and objective images and the practical representation of such images, compelled actors to conform themselves to the elasticity of living nature, which is the principal resource in scene-setting for imparting life to the drama. This new principle made it possible to get free from the reactionary bonds of the personal psychological drama.

The film should not form an arena for the actor and his histri-onics; the actor must be the arena — the medium — for the film and its message. To put it differently, it is not the personality of the actor that should emerge from the film, but the psychology and class type that he represents.

But theoretic premises and reasoning alone were not enough, and the genius of the individual masters of the cinematograph could not create a new form of art. Examples and illustrations were necessary for any advance to be made. Examples were to be found in the American adventure films and in the Soviet theatres which cultivated this line in a much more aesthetic form (the amateur stage and experimental heroic drama of B. Ferdinandoff).
Leo Kuleshoff. — The conditions above indicated and the fusion of American film realism with Russian aesthetic tendencies gave birth to the school of Leo Kuleshoff, the pioneer of the revolution in Soviet cinematography. Quite apart from the aesthetic importance of his individual style, it should be remembered that he is the founder of the School for Artistic Directors, inspired by his knowledge of cinematographic technique, staging and filming, and all other film factors, especially an understanding of the actor himself. L. Kuleshoff trained a number of new stage directors, such as V. Pudovkin, L. Obolenski, S. P. Comaroff, B. Barbett; and such actors as A. Chochlov, F. Fogel, S. Comaroff, G. Galadgev, and others.

Although he introduced adventure films — a quite new type of film in Russia — Leo Kuleshoff did not succeed in creating any complete examples of this kind. The problem was in due course solved satisfactorily by I. N. Perestiani, with his film « Little Red Devils » based on the scenario of P. A. Bliachin. « Little Red Devils » was the first film in which the questions of the day were studied and presented in a quite new form.

Dsiga Vertoff. — The same social sources, that is to say, the ideas originated by the October revolution and the great significance which the opening years of the new regime had for us, and the defects and numerous artistic failure of the first Soviet films — hardly to be avoided in a period of adventure into new paths and new ideas — were responsible for the fierce criticism of the artistic films of Dsiga Vertoff, founder of the Kinokov Group. This group had for its slogan : « Down with the theatrical film; the cinematograph must reflect our political realities ».

Dsiga Vertoff worked strenuously in the field of the topical film, and did not limit himself merely to composing the films, but aimed at imparting to them a typical and perfect form. He had recourse in his creations to a very lively mise en scene, and did not seek his material in the usual events of the day, but in special incidents, on the principle of « seizing life on the wing ». By a clever scenic fusion of typical features, events of the day, and scenes from nature, Dsiga Vertoff endeavoured in his films « Kino-Pravda » (cinematographic truths) and « Kino-Glas » (the eyes of the cine-
to give an accurate idea of real life under the Soviet regime and to create genuine cinematographic images of these truths. He achieved great mastery in filming and staging technique.

We should recall also the «constructionist» group, which was formed in 1922, organized by A. Gan. This group was somewhat similar to the Kinokov Group. Its slogan was: «Show real life on the Film». The first of its productions, «The Young Pioneers» was a failure. It found later in E. Schub, author of «The Fall of the Romanoff Dynasty», an artist capable of realizing intelligently the constructive film, by basing the mise en scene on documentary material.

While working for the cinematographic chronicle and against the dramatic film, Dsiga Vertoff none the less rendered considerable services to the latter. His methods of filming and of stage setting taught much to the artistic directors of the theatrical film.

Sergius Eisenstein. — Following along the same lines as L. Kuleshoff and Dsiga Vertoff, and by his new method of staging in the proletarian educational theatre, S. Eisenstein has achieved great fame in cinematography.

He at once turned his attention to the new subject matter and to the new type of cinema spectator. In addition to this, he realized the importance of form, which demanded special care in order to exercise a utilitarian influence, consonant with the aims to be impressed on the spectator (logical social-reflex method). In his first film «The Strike», the subject was made subordinate to the staging of the different pictures, each of which offered the spectacle of a given event, of an actor, or other single scene or episode.

Eisenstein composed his films not around the different personages and the parts they were to play, but on masses. The individuals were no more than episodic figures. We have a brilliant example of this method in «The Potemkin Cruiser», a film which has been shown nearly all over the world and attracted the interest of the film experts of Europe and America.

Vsevolod Pudovkin. — The drama dealing with contemporary social questions has a master of the first order in V. Pudovkin. The manner in which he screened Gorki’s «Mother», and «The
end of St. Petersburg) has earned him great fame as a scene director both in Soviet Russia and abroad. As regards form, he unites the very clear method of L. Kuleshoff with the vigorous realism of Eisenstein, thus completing the cycle of the development of form in the film art started by Kuleshoff himself. We should point out that the style of the Moscow cinematograph masters (Eisenstein and Pudovkin, more especially) has reacted to the influence not only of the American film, but also of the new French current (Abel Gance and Jean Einstein), tending to a poetic form of film, always based on the innovations introduced into cinematographic technique (picturesque character, musicality, mass technique, double projection, slow and quick motion, etc.).

Charlie Chaplin’s film «The Parisienne» produced a great influence on the Soviet masters.

A. Dovgenko: Pursuing much the same principles as those above delineated, the film «The Zveni Mountains» by A. Dovgenko, at once established his reputation in Ukraine as an artistic director of great value. His film «The Arsenal» reveals yet more completely his individuality and ability.

A. Room: This excellent artistic director has felt, among the other influences above indicated, also that of the German cinematograph: he has, however, developed a structural method of his own.

The Eccentric Actors’ School: While the Moscow artistic directors have pursued the path of effective realism, the young Leningrad directors, such as G. M. Kosnizeff and D. Z. Trauberg of the «Feksi» School of Eccentric Actors, after the experiments made with the film, «The October Events», have developed a form of impressionist melodrama — the word «impressionist» not being, of course, used in the accustomed sense of the «impressionist» school of art.

A very unusual taste and style are united to perfect cinematographic intuition, with the result that the theatrical and conventional are surpassed by cinematographic realism.

It may be true that the style of the «Feksi» school was subject, till recently, to the influence which Robert Winne and Paul Wegener, and later on Conrad — who was regarded as the first
impressionist in cinematographic art (« Paganini » and other films) — exercised on the German film. Recently, the Feksi school has reflected also the influence of the French School of the Left.

The New Masters of the Cinematograph: After having enumerated the diverse currents apparent in the Soviet cinema and mentioned the exponents thereof, we may recall some other names which are bound up with the tendencies of Soviet cinematography: among many others, G. V. Alexandrof (Eisenstein's partner), E. Cerviakoff, F. Ermler, the Georgian Sceghelei, and Bek-Nasaroff. Together they have formed the G. T. K. (The State Cinema Theatre Institute).

We have other new artistic directors (E. Scetrov, Petroff, Bitoff, et al.) who devote their activities to films reproducing exclusively local customs. They aim at the faithful representation of local environment, having specially in mind the audiences in these environments (peasants and workers), and they subordinate the form of the contemporary film to this end.

The Pre-Revolution Masters and their Present-day Disciples: Besides the young Soviet School, we have also many masters of the old school.

Although these are not uninfluenced by the innovations which have taken place in the cinematographic domain, their style conforms to tradition, and, from this aspect, their production is closely allied to the realistic forms so characteristic of modern German cinematography.

We may cite here A. Protasonoff, V. P. Casianoff, A. E. Rasumni; there are many others besides.

There are also a certain number of young artistic directors who follow the trend of the « traditional » school: special mention should be made of V. Taric and L. Roscial.

Gardin, who is the master of many young artistic directors, stands apart from these, since he often violates tradition in order to introduce « experimental » principles. He is a precursor of specialized methods, especially in respect of the mise en scene.

A. Fedoroff.
COLOUR CINEMATOGRAPHY

BI-CHROMATIC AND TRI-CHROMATIC SUBTRACTIVE SYNTHESIS.

(From the Italian)

(Continued from Nos. 2 and 5).

As already stated, the only process of colour cinematography which has so far been put into practice is the process whereby the analysis or selection is limited to two colours and synthesis is obtained by superposing two series of monochrome images — one red and the other green. A single film takes the two perfectly coincident images, the red on one side and the green on the other.

The images are of normal dimensions and the film is projected by the usual apparatus, the only requisite precaution being to ensure that there be plenty of light, in view of the greater opacity of these colour films as compared with the usual ones.

No description of the processes by which such bi-chromatic films are obtained has been published, nor can the process be protected by patent, since the principle of selection, like that on which the synthetic process is based, is public property.

The technique to be followed for the production of such films has been reconstituted by the author in these notes, in the light of an examination of several pieces of bi-chromatic film and of a number of experiments.

It is clear that, while we may be able to lay down the technical bases of the several operations and more especially to give particulars regarding the production of the two series of monochromes, it is impossible to say anything on the mechanical part of the process, which must undoubtedly present difficulties; these however are not so formidable that they cannot be overcome in laboratories specially devoted to mechanical cinematography.
The Negative Film in Bi-chromatic Cinematography.

The first question that naturally arises when observing these two-colour films relates to the negative film from which they are produced.

How was this film obtained?

Was it made on one and the same film, by alternating the two images through a green and an orange coloured screen? In this case it would hardly be possible to obtain the perfect coincidence of the two successive images, especially where a subject in rapid motion was photographed: and yet the writer has been unable to trace even by microscopic examination, defects of coincidence in any two-colour images. It is true, however, that in none of the films observed did the subjects or scenes represented suggest that there had been any rapid movement.

Or were two objectives used and superposed one on the other, thus obtaining simultaneously two images through two selective filters on the same film?

In this case, however, it would be requisite to arrange for the slight convergence of the two axes of the objectives or to adopt General Russo's system to remedy the phenomenon of parallax. We should still, however, be faced by the difficulty of having to change a portion of the film corresponding to a double normal image, involving a somewhat vigorous pull on the film.

The first system is the simpler and, in the case of staged scenes, it would not appear to be difficult to restrict the movements of the subject to an extent that would obviate any perceptible displacement of the two consecutive images.

The Colours of the Subject and the exigencies of the bi-chromatic Process.

While we can do much to adapt the movements of the subject to meet the needs of the two-colour process, as much and more can be done in the matter of colour. It should also be added that since it is possible to realize the complemenal character of white with pairs of different filters, the colour of the light screens in the bi-chro-
matic process, is less restricted than in the three-colour process. The importance of completing the white is moreover relative, since everything depends on the sensation of the eye, which receives the impression of white from a $\frac{1}{2}$ Watt electric lamp, though it differs not a little from daylight, being much poorer in blue and violet rays, as we can note by observing a blue or violet coloured object at night by artificial light.

It may be said that the pair of screens used in bi-chromatic photography may be varied somewhat according to the subject and that while, in staged scenes taken by artificial light, it is expedient that the green screen should tend to blue, yellowish-green screens are to be preferred for three colour photography of open air scenes, the deficiencies in blue covering being counteracted by means of the complementary exposure under white light to which I referred in a preceding article.

ILLUSION AND RELIEF IN BI-CHROMATIC CINEMATOGRAPHY.

While we ask of the ordinary cinematograph to give our eyes the illusion of form and movement, colour cinematography by whatsoever process it may by realized must give us a sensation that increases the illusion and approaches nearer to the truth; this does not depend entirely on the more or less faithful rendering of colour, but also on the fact that, thanks to variety of colouring, the details of a picture, which would be merged in the usual chiaroscuro image, stand out.

A colour projection, though the colours may be but approximate, so long as they are the result of selection and are not merely applied by hand (as they were in the Pathé-Colour process that has now well nigh died out) affords not only the suggestion of colour, but also of relief.

And here it is fitting to make a comparison with the still projection of natural scenes, in which the effects of relief, atmosphere, and distance are considerably enhanced when the ordinary slides are replaced by coloured slides obtained by the autochromatic, tri-chromatic, or bi-chromatic process.
If it is true that the sensation of relief in respect of near subjects is in large measure due to binocular sight, it must also be considered that the effect of atmosphere and distance in a landscape is due entirely to the gradual training of the eye, whereby it transforms automatically, in the brain, the fading and variation of colour into the sensation of distance.

Thus, even failing the much desired invention of a stereocinematographic process (an invention that has been repeatedly heralded but the possibility of which seems remote, when considered apart from complicated systems of separate vision by the two eyes), the introduction of even approximative processes of colour cinematography will enhance the impression of relief and of distance.

The manner in which bi-chromatic cinematography has been applied to medicine by means of the clever Busch apparatus, described on page 270 of the third issue of this Review, proves that, notwithstanding the incompleteness of the sensation, the effect obtained is much more demonstrative than anything that can be obtained by ordinary cinematography, and the greater truthfulness of the picture certainly produces the effect of making the details stand out with greater relief.

**The Positive Film and Printing on Both Sides.**

A film of celluloid coated with a double stratum of sensitive emulsion, one on either side, is unquestionably the kind best suited to bi-chromatic cinematography.

The usual emulsion employed for cinematographic positive films intended for ordinary projection is used. But two circumstances must be allowed for in printing the positives, one of a mechanical and the other of a physical order.

The printing machine must allow a single series of images to be printed on each side of the film; hence it follows that the two films — the negative and the rough positive — cannot be printed in the ordinary way, it being necessary to jump one image: only by this means is it possible to print on one side a continuous
series of images intended to supply the monochrome red and on the other the monochrome green series. This does not involve any very arduous mechanical problem, but it is obviously necessary to have a printing machine which allows the negative films to be moved at just double the speed of the rough films.

The mechanical exigencies of positive printing may on the other hand differ according to the method used in selection, while some systems, such as the Audibert system described by Prof. Seyewetz in the 4th number of the Review, may entail the necessity of enlarged prints.

The other difficulty, which is of a physical kind, derives from the necessity of preventing the light, while a series of images is being impressed on one stratum, from traversing the celluloid ribbon, and producing an impression also on the stratum on the opposite side.

This latter difficulty is completely eliminated by dyeing the emulsion yellow; thus for instance a slight degree of colouring with tartrazine yellow removes the difficulty without affecting the print, while the yellow colouring disappears entirely in the course of developing, fixing and washing the film. Or again a stratum of hydrate of bi-oxide of brown manganese, precipitated in the emulsion, renders the stratum quite opaque, while the manganese composition can very easily be removed by using a solution of hyposulphite containing a sufficient quantity of bi-sulphite of sodium for fixing.

The development of double-faced films calls also for some special arrangements which are quite easily made.

By recourse to the methods above indicated, we obtain a positive film bearing a double series of black images, one on either surface; each of these series of images must afterwards be converted into the corresponding monochromes.

**How the Images are converted into Monochromes.**

It is not uncommon nowadays to speak of the transformation of a black image (formed as is known by reduced silver) into an
image of any colour, as though the process of this transformation had been born with the cinematograph.

As a matter of fact, it is only during the last fifteen years that chemico-photographic technique has been able to solve this problem in a really perfect manner. Formerly, the so-called iron intensifiers — uranium and vanadium — were used in cinematographic technique, but these intensifiers, if we except the iron ones, did not render brilliant hues and much less colours that lent themselves to bi-chromatic and tri-chromatic synthesis.

It was in 1909 that the writer of these notes presented to the Congress of Applied Chemistry in London the first specimens of fixing tar dyes on silver prints; and by later experiments he was able to perfect the process and to present fresh specimens to the International Photographic Congress held in Dresden during the same year, and later on some final specimens to the IIIrd National Photographic Congress in Rome in 1911. The writer was thus able to ascertain that, just as in textile printing certain metallic salts act as mordants for a given category of tar dyes, it is possible in like manner in photography to attract and retain certain colours comprised in the category of basic tar dyes by substituting a metallic salt, or more precisely a copper salt, for reduced silver.

Certain distinguished experts in photo-chemistry devoted themselves to perfecting this process and rendering it more practical; among other Dr. Traube of Munich (who based on it the so-called Uvachrome process for the production of coloured slides for projections), M. Christensen, who advantageously replaced ferrocyanide of copper mordants by sulphocyanide of copper, as also Messrs. Lumière and Seyewetz, who made a comprehensive study of the dyes best adapted for fixing by ferrocyanide and sulphocyanide of copper.

Methods for Transforming Cinematographic Silverprint Images into Monochromes.

While it is not possible to describe in detail the physical and mechanical aspects of the methods pursued by the American
Technicolor Company in the production of films for the Associated Artists, we can give precise particulars of the chemical side of the transformation of black images into monochromes; these particulars are gathered from numerous experiments made by the writer, experiments supported by highly demonstrative specimens. I will limit myself here to giving an idea of the processes followed, while referring readers who are anxious for further details to a monograph I have recently published (1).

Double-faced films, developed in the usual way, in a bath of hydroquinone and metol, in such a manner as to obtain bold but unexaggerated pictures, is immersed in a transformation bath, with the object of substituting sulphocyanide of copper for reduced silver, the former being an energetic mordant for basic tar dyes.

Sulphate of copper, neutral citrate of sodium and sulphocyanide of ammonium are used for this transformation bath according to a receipt which is an emendation of that given by Christensen.

The film must be wound round a drum with a non metallic surface; it is stirred about for a time in the bath until the images are completely bleached. When one series of images has been bleached, the film is reversed so as to be able to bleach those on the opposite side.

A short rinsing is sufficient after this process; the white image produced by the treatment is formed by sulphocyanide of copper and replaces the mordant needed to fix the colours.

While fixing them, the film must be wound round a drum with a rubber surface in such a way as not to allow the coloured liquid to pass behind. The drum is revolved in the colouring solution and the colour is thus fixed to the image. Green malachite and safranine red are the best dyes for the purposes of bi-chromatic photography. Experience has shown me that by the use of sufficiently diluted dyeing solutions (1 : 10,000), the colours may be fixed to the image without any colouring of the

(1) Cf. Prof. R. Namias: La tecnica e la pratica dei raggi e della fissazione dei colori sulle diapositive e sui films cinematografici, pubd. by the Progresso Fotografico, Milan, 1928.
white, because highly diluted solutions are incapable of colouring gelatin, while copper sulphocyanide mordant, by which the image is formed, attracts and accumulates the colour and produces very intense images, so long as the treatment is sufficiently prolonged.

This method of obtaining monochromes by means of well diluted dyeing solutions provides images of insuperable regularity and perfection, as any one may prove by experimenting on a piece of positive film or on an ordinary slide.

Films must not be perforated beforehand, so that the colour may not pass to the other side; after producing one series of monochromes, the green for instance, on one surface, the series of red monochromes is produced on the other side. No disturbance likely to protract the operation need arise since the work is practically automatic, and a little experience is sufficient to show how long it ought to last.

The treatment could be done very rapidly if relatively concentrated dyeing solutions were used, but this would produce a general colouring of the whole surface and a supplementary treatment with acid permanganate or neutral permanganate would be required to rid the photograph of the general colouring.

But this method, as I have had occasion to prove, always compromises the chiaroscuro to some extent, especially as there is a difference in the resistance of the two colours to the oxidizing action of the permanganate.

**Tri-chromatic films.**

The eminent chemist and photo-chemist, Prof. Seyewetz called attention in No. 4 of the Review to the Audibert trichromatic process, which also makes use of a double-faced positive film, producing thereon in the first instance two images (in this case one with rhodamine S. and the other with methylene blue) and superposing a yellow image thereon.

Leaving aside the optical and mechanical considerations which have been dealt with by Prof. Seyewetz, I would point out that tri-chromatic synthesis by means of the final addition of a
yellow monochrome, and coating with bromide gelatin emulsion; printing, development, and transformation to a yellow image by the process of fixing by a copper mordant, in a manner analogous to that above described, creates considerable complications and involves processes and operations such as the preparation and coating with bromide gelatin emulsion, which are alien to the usual processes adopted in film factories.

The production of this third image intended to form the trichromatic trio, which alone can meet the exigencies of a complete colour rendering, represents the most arduous of all the problems facing colour cinematography by subtractive synthesis, and one can have no idea of the variety of processes that have been suggested and the number of patents taken out. It has been suggested to produce the third monochrome by transferring from a film prepared according to the Pinatipia process, or else by means of a photo-mechanical print, or by sticking two images, one bi-chromatic and one monochrome, together.

But, without any wish to detract from the merits of so many inventive minds, I must conclude by repeating what I said at the beginning: «The only practical solution of colour cinematography for the present is to be sought in bi-chromatic and tri-chromatic accumulative synthesis and bi-chromatic subtractive synthesis.

Prof. Rodolfo Namias.
SIR ERIC DRUMMOND IN ROME

On the occasion of his visit to Rome to visit the Head of the Italian Government, Sir Eric Drummond, Secretary General of the League of Nations, did not fail to honour by a visit the institutions created by the League or working in direct touch with it that have their headquarters in the Eternal City.

The International Educational Cinematographic Institute was honoured by a visit from Sir Eric Drummond first at the Villa Torlonia, the centre of its work, and later at its official quarters, the Villa Falconieri.

Accompanied by the Marquis Paulucci de' Calboli-Barone, Under Secretary-General of the League of Nations, Sir Eric Drummond

Sir Eric Drummond at Villa Torlonia, standing between Marchese Paulucci de Calboli and Dr. de Feo; Director of the I. E. C. I., together with the officials and staff of the Institute.

devoted part of the morning of the 1st November to visiting the Villa Torlonia, where the offices of the I. E. C. I. are located, and displayed
keen interest in the work in progress there, expressing himself in encouraging terms to all, and manifesting to the Director of the Institute, Dr. de Feo, his entire satisfaction at the way in which they were organized and working.

A few minutes later Sir Eric Drummond was at Frascati, at the Villa Falconieri, where H. E. Rocco, President of the I. E. C. I., offered an unceremonious lunch in his honour. No toasts were proposed and no formal speeches were made, but the occasion was marked by a friendly exchange of views which furnished the occasion to the

At Villa Falconieri. Sir Eric Drummond is seen together with H. E. Alfredo Rocco, Italian Minister of Justice, H. E. Dino Grandi, Minister of Foreign Affairs, and others on the banks of the pond.

Secretary General of the League to renew in all earnestness to Signor Rocco the expression of the interest and approval which he had already shown that morning in regard to the work of the I. E. C. I.

From Frascati to Nemi, by the route winding among the Alban Hills, is no long journey, and after the enchantments of Villa Falconieri what more interesting trip could be offered to Sir Eric than that
On the banks of Lake Nemi.

Sir Eric Drummond keenly interested in the work carried out in Lake Nemi for the salvage of Caligula's galleys.
leading to the Nemorensis Lacus, so dear to the Pecets, whose aspect, sometimes smiling, sometimes frowning, has tempted the brush of so many artists and the surroundings of which are so rich in the remains of Ancient Rome? Not only the surroundings; for the very waters of the lake and the basin in which it lies have held Caligula’s galleys these many centuries, and guarded them jealously from the gaze of the curious and the quest of archeologists right to these latter days. But their secret has now been violated. Premier Mussolini, anxious that this inestimable evidence of the skill of the Romans in ship-building should be made available to students and to the world at large, has caused the lake to be partially drained by means of powerful electric aspirating pumps, and one of these galleys has been actually salved from the water and brought to dry land.

Among the photographs which we reproduce as a record of the moments which the Secretary General of the League was good enough to devote to the I. E. C. I. there is one showing the interest he displayed in this unique archeological specimen.
CINEMATOGRAPHIC CENSORSHIP IN THE NEAR EAST.

In the Eastern Mediterranean countries, which are the principal centres of Islamic life and culture, religious considerations are one of the main factors in film censorship. The necessity of safeguarding the intimate life of these peoples through religious, that is to say moral, influences, is obvious when we remember, not only that photography — the presentation of man in effigy, whether still or in motion — is regarded as sacrilegious, but also the immense importance attached to the protection of family life.

East and West, with their diverse systems of life, meet on the shores of the common sea, the Mediterranean, but they do not merge. The mental attitudes of the two peoples are absolutely different. Christianity and Islamism live side by side, without interfering with or encroaching on one another, and only when morals and religion are at issue do we become aware of the imperious will to prevent any offence against the sentiments and the normal ways of life which are the objective ethics of mankind.

For this reason the task of cinematographic control, even if restricted and justified by the limitations of religious ideas, comes into touch with the western concept. However much they may differ in form and expression, the bases of morals and education are the same everywhere. The rules laid down for the censorship reveal a like difference in form and expression, but the groundwork is always the same: the defence of the family and the State by recalling men to the observance of the religion of their forefathers and by insisting upon the respect due to themselves and their fellows.

EGYPT.

The exercise of Control. — The ministerial decree of the 2nd August 1921, issued by the Ministry of Finance in concert with the Ministry of the Interior, lays down in Art. 1 that no film shall be exhibited in public places, or, if imported from abroad, be removed from the custom-house or post-office, without the previous authorization of the Ministry of the Interior; this is shown by affixing a tail to the film; which forms an integral part of the film and must be projected together with it, so that the audience shall be apprized that it has been passed by the censor.

The censorship of films in Egypt is carried out at the Ministry of the Interior through the medium of special officers. This constitutes a
purely official censorship in which there is no popular representation, such as there is in most western countries. The State itself provides for safeguarding moral and religious principles.

A fee of 4% of the potential and actual amount of customs duties is charged for the revision of films.

Art. 4 of the ministerial decree cited lays down particular conditions for the censoring of imported films. If permission to exhibit a film is refused, all customs duties charged on the film (which until deposited with the Ministry of the Interior is considered as introduced temporarily) are returned, together with one half of the supplementary tax of 4%.

**General principles of censorship** : The main purpose of film censorship in Egypt is to safeguard public and private morality and to ban all that might incite, encourage, or exalt crime and vice, or that might, on the other hand, offend public feeling.

From such a very generic principle it would clearly not be possible to deduce a precise and concrete statement of the various reasons which the public censorship officials may adduce for prohibiting the exhibition of films or for requiring emendations and excisions. Such a schedule has, however, been formed in practice and, though not embodied in a definite regulation, it offers a compendium of indications of the highest interest.

**Special criteria of Censorship** :

a) **Religion.** — The highest respect of all religious principles and especially those of Islamism. It is forbidden to endeavour to represent the Deity in a concrete form or to show the images of the prophets on the screen.

Religious and especially Moslem ceremonies and rites must be shown, if at all, in the most decorous and respectful manner. In all cases it is absolutely prohibited to show any thing that might rouse in the spectator a feeling of contempt or of irreverence towards religion.

For this reason, it is not allowed to present events or deeds derived from the Koran or the Gospels, which might offend the feelings of any part of the audience. It is likewise not allowed to reproduce in comic scenes, or with the object of creating by contrast a sense of the comical, texts from Holy Writ, more particularly from the Koran, the El Ahadiss or the Uabawia.

b) **Political.** — For reasons of domestic policy, it is prohibited to exhibit scenes of a revolutionary character or contrary to monarchic principles; and in general all scenes that are likely, in any way, to disturb the present social organization or to provoke disaffection or rebellion. It is likewise most strictly prohibited to show in an unfavourable light per-
sons and offices of importance in the Kingdom, or representative of its life such as religious dignitaries, ministers, magistrates, doctors, officers, etc.

In regard to foreign politics, while the censors take care to exclude subjects and scenes likely to degrade, in the eyes of the spectator, the East and the life of the East; they also very wisely prevent the exhibition of all that might offend the feelings of foreign residents in Egypt or that might arouse reciprocal ill feeling between orientals and westerners.

c) Moral and social Questions. — This is the category which offers the greatest number of instances and prohibitions in Egypt, as indeed it does under all other censorship systems.

The direct representation, even in silhouette, of nude bodies, scenes of orgy of an excessive kind, kisses and embraces that overstep the limits of affection and tenderness, indecorous dress, gesture and acting of a kind to provoke immorality, such as lewd and suggestive dancing, are taboo.

One section of prohibitions deals entirely with questions of sex. Scenes of prostitution, solicitation in public places, procurement and the white slave traffic are banned. It refers also to sexual acts that are prohibited by law and custom, such as unnatural love, incest, and all scenes likely to fire the imagination and senses.

The prohibition includes subject and scenes in which women sacrifice their honour in a noble cause, in view of the fact that it is difficult or impossible for the spectator — who may be a person of sub-normal intelligence — to distinguish what is noble or exalted in the action from what is reprehensible and a potential cause of moral perversion.

Prohibition for moral reasons embraces scenes and subjects of a medical character, childbirth operations, venereal diseases, scenes of a strictly scientific character which are considered suitable for exhibition only to a specialized audience of medical men or students.

d) Crime. — So far as crime is concerned, the object of the Egyptian system of censorship is to prevent the encouragement or exaltation of crime, for fear that scenes and deeds reflected on the screen may excite or pervert the spectators whose mental capacities and education do not enable them to differentiate between the criminal acts exhibited to them and the moral necessities of actual life.

Thus scenes and subjects displaying the modus operandi of criminals, the use of drugs (opium, morphine, hashish, etc.) scenes and actions directed to the commission of crimes, or dramas in which crime forms the centre of the plot; scenes of hanging or flagellation, even under a religious guise or pretext, suicides, scenes in which the criminal is presented as a hero or a person deserving of admiration. In these cases the aim of the censorship is to avoid distorting the spectator’s notions of morality and to assist the public authorities by preventing the exaltation of criminals from impairing the authority and prestige of the defenders of public order,
c) Acts of Cruelty. — Scenes and subjects showing acts of cruelty and ill-treatment of persons and animals are in general forbidden. It is particularly desired to prevent children from witnessing scenes which may awaken in their immature minds those instincts of cruelty which are latent in most children and which can only be corrected and eliminated by education.

f) Captions. — In Egypt as elsewhere, captions are regarded as an integral part of the films, and are subject to censoring along with them. All titles and sub-titles that lend themselves to a double meaning or which contain dangerous suggestions from the point of view of morality and religion are prohibited.

Any purely artistic censorship of films is still lacking in Egypt. This indeed is the case in most countries, owing to the inherent difficulty of setting up any purely subjective artistic standards. The work of censorship, moreover, can only proceed by stages. It is a recognized fact that everywhere social and moral standards form the basis of the censors' task. At a later stage the spectator himself, as his cinégraphic sense develops, can do the needful, select suitable films and reject those which seem to him unworthy. Artistic censorship is therefore a matter for the future and will apply solely to special exhibitions (schools, organizations, associations, etc.), which are likely to demand purely artistic films, and it will be accomplished — as is already gradually being done — by the selective sense of the spectator himself. The film industry, if it wishes to prosper, will be forced by economic laws to conform itself to public opinion and public feeling. Otherwise it will go under.

Palestine.

On the 16th. October 1927 the High Commissioner for Palestine issued an order to regulate the local censorship system. The basis of the system introduced was that the public as well as the official representatives should be given a voice in censoring.

This office has its headquarters in Jerusalem and by the terms of the ordinance above cited, it is composed of a President who is ex officio the Deputy Commissary of the District and of several members, one of whom must be a woman, appointed by the High Commissioner. For the Office to be able to act, there must be present at least two members, one of whom must be a Government official, besides the President. The Office has power to delegate certain specified persons to view films and give their opinion as to the propriety of exhibiting them.

All persons submitting films to the Censor's office for examination must upon application pay a fee of 25 Turkish piasters. This fee is likewise fixed for appeals from the Censor's Office to the High Commissioner. Import duties are returned in the case of rejected films.

By way of exception and with the object of favouring the diffusion
of educational films, the High Commissioner has power to grant exemption from the tax indicated for films certified as of public utility, or those produced for the promotion of social or educational aims.

The Jerusalem Office actually consists of the Deputy Commissioner of the District, acting as President, a female Welfare Inspector, a representative of the Police, a representative of the Education Department, a representative of the Chamber of Commerce, two other members appointed by the High Commissioner, one of whom must be a Moslem, and a secretary chosen from among the members of the Office of the Deputy Commissioner of the District.

How the Office functions. — Not only films but also advertisements thereof are submitted to the Censor’s Office. No film may be exhibited and no poster or advertisement may be posted or distributed unless it has previously been granted a permit by the Censor’s Office or by the person whom the office, as above stated, is authorized in certain circumstances to delegate for the purpose.

The following procedure is followed:

Applicants must submit the scenario of the films to the Office, together with details of the various scenes represented, photographs and publicity matter. All this is examined by the Committee, which usually meets once a fortnight. Whenever this preliminary examination gives rise to any doubts as to the desirability of exhibiting the film, the film itself must be viewed.

Licenses for exhibition are granted by means of certificates, a photograph of which accompanies the film and must be projected together with it on the screen, so as to enable the police authorities to make sure that the film has been submitted for examination.

The whole or a part only of the films may be censored, if the modification required is of such kind as not substantially to damage the film. In this case, the censored part is retained at the Office during the whole of the time the film is being shown in Palestine and is returned to the owner when the film is about to leave the country.

Penalties. — Apart from the question of responsibility, the penal laws in force in the territory provide that any person who presents an immoral public spectacle, or a spectacle liable in any way to disturb the public peace, or who publishes or causes to be distributed or posted any poster or advertisement relating thereto, or who exhibits publicly a prohibited film or any censored part thereof, is liable to a fine of 50 pounds sterling and to imprisonment for a term not exceeding one month.

Any member of the Office, or higher police official, or district officer, or official of the Education Department, is entitled to be present in public premises at any exhibition or exhibitions which he considers it desirable to examine or check, and to seize any offending film or any part of a film and to order the arrest of the persons responsible for it.
Standards of censorship. — There is hardly any film industry in Palestine and only imported films which have already been censored in their country of origin are in practice submitted for revision. This greatly simplifies the task of the censors and reduces to a minimum the schedule of censorable subjects.

During recent years in fact only a few short propaganda films and a single theatrical film have been produced in Palestine; the theatrical film in question (« Jacob’s Well ») was of a purely Zionist propaganda kind.

Revision is therefore carried out with a view to the special and contingent needs of the population, so as to avoid that the strictly western character of certain films should be in conflict with the moral and religious feeling of the masses of the population or be damaging to the prestige of the Mandatory Nation.

In 1928, 465 films were submitted to the Censor’s Office, the greater number of these were of a dramatic or narrative character. About fifty were of a distinctly educational order.

In the case of fifty out of the 465 films in question, the Office was not satisfied with the preliminary examination and required an exhibition of the film. Six films were entirely rejected and cuts were made in twelve others so as to render them fit for public showing.

The criteria followed by this Office may be summarized under two main heads:

a) Politico-religious. — In view of the fierce antagonism between the Arab and the Zionist populations, the projection of films which offend the religious, national, or political sentiments, not only of the whole country but of any section of it, is prohibited.

b) Moral and Social. — All matters pertaining to the common and general basis of the principles of social life and community interests come within the sphere of moral and social control. Thus an absolute embargo is placed on the exaltation of crime, on its realistic presentation, or on all that may tend to impair the prestige of the authorities to whom the repression of crime in all its forms is committed, by presenting criminals in a favourable light. « Dope » scenes, scenes showing the white slave traffic, scenes of promiscuity and indecorous behaviour, and films dealing with sexual problems in a manner offensive to morals and public order are banned.

Contingent reasons (the small number of cinemas, shortage of local production, the importation from abroad of films that have already been subjected to the censors) are responsible, as we have shown, for the lack of any complete schedule enumerating the motives of censoring. In any case, the principles on which revision is based are defined and are sufficient to prevent the cinema, which is such a powerful and excellent instrument of propaganda and education, from becoming a means of social perversion and corruption.
THE CINEMA AT THE SERVICE OF HYGIENE 
AND SOCIAL WELFARE.

Belgium:

We are informed by the Ministry of the Interior and of Hygiene that there is no central government office in Belgium which deals with hygiene and social welfare propaganda. It is true that some of the government departments encourage propaganda in this field to some extent, but all initiative is left in the hands of the higher officials, so that it cannot be said that any real government propaganda exists.

Hygiene and social welfare propaganda is mainly carried on by the Central Department of Hygiene, the National Society for the Protection of Children, and the Ministry of National Defence. These organizations give, fairly regularly, cinematograph shows illustrated by lectures. Their cinematograph material (films and apparatus) is lent free of charge to any workmens' clubs, sporting clubs, welfare clubs and associations that desire it.

Propaganda by means of the cinema is not yet regularly organized in schools, but some of the communal authorities have set up cinematographs which supply the schools under their jurisdiction with a regular service.

Private institutions, like the «Université Cinégraphique Belgique» and «Les Amis de la Cinématographie instructive et éducatrice», are organizing a regular series of cinematograph shows, many of which deal with hygiene and social welfare.

Similar propaganda is being carried on in industrial centres by insurance companies.

The associations for the alleviation of the great scourges of mankind (cancer, tuberculosis, alcoholism, venereal diseases, etc.), and also the Red Cross are doing active cinematograph work in this line.

In Belgium, the censorship of films does not exist. The sole restriction is that laid down by the decree of September, 1, 1920, prohibiting the admission of young people under 16 to the cinema. But this measure was modified by a later Royal Decree of November 19, 1920, which allows children of less than 16 years to go to the cinema provided that the spectacles are what is called family spectacles; that is to say, shows presenting only those films which have been authorized by a special commission instituted by the above mentioned Royal Decree.
Netherlands:

The President of the Council of Hygiene in Holland states, in reply to our questionnaire, that up to the present none of the government offices of his country concern themselves with hygiene and social welfare propaganda by means of the cinematograph; nor are there any laws dealing with the question.

There is, however, a law on cinematograph films, which provides, among other things, for the examination of films from the scientific point of view. If a film which is announced as scientific does not respond to the requirements of science and technique, it is not allowed to be presented to the public.

There are several houses in Holland which produce scientific films and which have put some excellent material on the market.

The Dutch Red Cross informs us that an active cinematographic campaign is being carried on in Holland in the field of hygiene and social welfare.

Numerous films dealing with these subjects are being placed before the public, and they are often preceded or accompanied by lectures and explanations.

Hungary:

The Board of Social Welfare and Labour states that the propaganda of hygiene by means of the cinema in Hungary is centralized at the «Centre of Hygiene Propaganda» connected with the Board. It is regulated by ministerial decree.

The «Centre of Hygiene Propaganda» is not satisfied with merely directing and controlling the organizations and associations authorized to conduct the propaganda, but also takes an active part in the rational organization of the work.

Various social organizations, such as the Red Cross, the different societies for the protection of mothers and infants, the National Stephanie Union, the Institution for Social Assurance with its hospitals and sanatoriums, different cultural associations and the medical corps connected with the schools and communes, are charged with the practical demonstration of the films. The spectacles and lectures are generally given at cinema theatres, but where these are lacking, travelling theatres are set up.

The curriculum in elementary and secondary schools does not provide for a special cinematograph propaganda, but the school doctors frequently have recourse to these shows, illustrating them by practical lectures.

Industrial and commercial firms do not provide for hygiene and so-
cial welfare propaganda among their employés, the task being undertaken, as we have already said, by the above mentioned associations.

The Censor’s Office provides for censoring films bearing on hygiene. The «Centre of Hygiene Propaganda» arranges for the supply of the requisite films, preparing the subjects and giving them local colour. The films are produced by Hungarian firms as a rule, but foreign films are frequently acquired, when they are of a nature to be of use in the propaganda.

The films contained in the archives of the «Centre of Hygiene Propaganda» are lent free of charge to those desiring them. The office has drawn up a complete catalogue of the film material in its possession.

Turkey:

The Board of Hygiene and Social Welfare of Angora informs us that none of the government offices have a section charged with cinematograph propaganda, which is dealt with exclusively by the «Direction of Statistics and Publications» connected with the Board of Hygiene.

The new law on hygiene contains a special paragraph dealing with propaganda by means of the cinematograph.

The Health Offices in the different provinces receive cinematograph films from the central authorities and put them at the disposal of the communal authorities, who, turn by turn, arrange for them to be presented to the public for periods varying from 6 to 15 days according to the density of the population. These spectacles are explained and illustrated by the medical officers of health. Systematic hygiene and social welfare propaganda by means of the cinematograph is also carried on in elementary and secondary schools; this is conducted under the direction of the medical officers of the schools, the head masters and teachers, who, in addition to illustrating the films by practical explanations, distribute pamphlets to the scholars dealing with the principal rules of hygiene, which are published by the Ministry of Public Education.

Industrial and commercial firms in Turkey are also beginning to make use of the film for purposes of hygiene propaganda among their employés.

There is not at present a scientific censorship for this type of film. The greater number of the films are acquired in the United States, but a certain number are also bought from some of the European producers.
M. Albert Thomas, the Director of the International Labour Office, who devotes such rare mental gifts and his genius for organizing to tackling the great problems that lie at the basis of production in its several aspects, visited the International Educational Cinematographic Institute during November.

M. Thomas spent some considerable time in the offices of the Institute, and evinced keen interest in the organization of its services, especially those that directly interest the I. L. O.

One of M. Thomas's main objects in coming to Rome was to confer with the Director of the I. E. C. I. on the carrying out of the understandings recently reached between the two organizations and embodied in the agreement which we published in our September issue. It was agreed to give immediate effect to these understandings.

M. Albert Thomas at the office of the I. E. C. I.
We have reason to hope that before the end of December the commission of experts appointed to examine the social questions in which the cinema is interested, and more especially the best use of the screen as a means of promoting measures to prevent accidents in workshops and agricultural work, will meet. The Commission will study the question in the light of the program drawn up by the I. L. O. and the I. E. C. I., and will draw up a concrete plan of action aiming at encouraging the production of suitable films and indicating at the same time the proper lines to be followed in their actual production.

Another branch of the common work of the two organizations of the League will be their joint examination of some of the replies received by the I. E. C. I. in answer to its questionnaire concerning the uses of the cinema for the purposes of scientific management. The International Institute of Scientific Management will, of course, be invited to collaborate in this part of the work.

In the course of the interviews between M. Thomas and the Director of the I. E. C. I. it was likewise agreed that the enquiry started by the I. L. O. regarding the utilization of the cinema in welfare work (workers' leisure) shall be continued by the I. E. C. I., in close collaboration with the Geneva Office.

It may be confidently affirmed that M. Thomas's visit to the I. E. C. I. has done much to strengthen the collaboration of the two organizations which should lead to tangible, practical and rapid results.
We publish herewith the continuation of the film on scientific bank management, which has roused great interest in banking and industrial circles.

The 2nd and 3rd parts of this film show, in addition to the working methods of the bank, the opportunities for rest and recreation which many of the big organizations of our time provide for their staff.

Care for the spiritual welfare of workers and employees when work is done, and mind and body need leisure after a week of heavy toil, with due thought also to the needs of their families, is a highly humane office and reflects a sound psychological and moral outlook, since such means strengthen a sense of duty and contentment, that translate themselves into terms of better work.

Welfare work, which is on the increase in all civilized countries, largely owing to the proper community spirit that should exist as between workers and employers, is encouraged and helped by the Governments of many nations.

Hence, we are confident that this second part of the «Rotterdamsche Bankvereeniging» film will be welcome to our readers, pending the contributions which we look forward to publishing in later issues bearing on the «workers’ leisure» and on what has been done and may yet be done in this domain.

A perforation indicates on a card the operations to be registered.

The first note of a debit note is shown (the second copy of the special print (discount service) referred to in the earlier part of the film).

Immediately afterwards a perforated card is shown on which the operation is noted. The screen then shows:

Perforating the cards.

A clerk is seen perforating the cards with a hand punch. On a table to his left the cards are so disposed as to allow of his picking them up easily, one at a time.

Three girls, stationed behind an electric punch, are busy perforating cards. The assistant goes up to them and displays, one after the other, a card taken from each of the machines.
The back part of the perforating machine is shown and the cards are seen dropping into a box. The machine is shown closer up. The following caption is projected:

_The cards are printed for checking purposes_  
_The totals are added up automatically_

The «printer» is seen at work, the papers to be printed are sorted, and the several parts of the «printer» displayed to the audience.

The clerk displays the checking sheets, which are next shown enlarged. These sheets show whether all the cards have been duly perforated and the check also affords the certainty that the numbers printed agree with those to be marked by the perforator.

_Sorting the papers_

The «sorters» are seen at work. A member of the technical staff is there to make sure that there is always a packet of papers ready to be sorted in the machine and the machine takes them one at a time as required.

When the papers have been sorted and stamped with the numbers referring to each customer, there is shown:

_How current accounts are checked_

This job is likewise accomplished by the printer.

We are again shown the press at work and the check of the current accounts is shown on the screen.

_Striking the balances_

Some of the clerks of the control service are seen attending to this task by electrically worked calculating machines.

The state of the balances is shown for some seconds on the screen, where we read:

_The same cards are used for calculating the interests on the current accounts (classified according to the dates on which they fall due), for statistical purposes, and for the auditing of the current accounts._

The bank register is likewise compiled by perforating the sheets of the provisional balances for each branch of the service and classifying them under the several bookkeeping heads.

The screen shows:

_How the endorsements are made out_

The «printer» is shown equipped with a roller and a cutter, two improvements which the bank itself has introduced.

The printed notes are seen dropping into a basket.

7-ingl.
The clerk shows an endorsement note which is afterwards projected enlarged. We read on the screen:

"Use the brains of your employees where they are not wasted. Don't make them do work that can be done by a machine."

The audience are shown a number of "printers" and "sorters" worked by a single clerk, and this part of the film gives a vivid idea of what a single section of a modern business really is.

The Caption reads:

"Manual labour is the exception in workshops: in offices it is still the rule and then:

Specialize your work"

The book-keeping office of the Bank is shown, with its machines, The employees file into the office, take up their positions behind the machines and get to work.

The screen shows, closer up, how the machines work. We read: Daily entry of accounts in the register by the old method.

The audience are shown the accountants coming out of the strong room bearing their enormous and heavy registers. This picture is followed by another showing a clerk carrying a bundle of cards.

How things are done to-day

End of the 2nd. Part.

Third Part

Caption:

The technical department

We are shown a skilled mechanic busy experimenting on a new machine designed for the administrative department.

The work-shop

Here we are shown the technical experts at work. We next read:

The printing works

and the film shows us the Bank's printing department.

Several machines are at work; the printers are busy and the foreman supervises them individually.

Some of the machines are shown closer up and the audience watch a rapid press with a special arrangement for printing envelopes, three at a time. A small rapid press is then shown on the screen; this has an automatic attachment for placing the paper in position. Then a big American rapid press is shown, equipped with a like attachment.

The film then exhibits a modern rapid printing press that works en-
tirely automatically and then a platinotype with an automatic attachment for laying the sheets and removing them from the press. Lastly, a general view of the printing works is given.

The Caption reads:

The staff’s cooperative society

A picture of the shops where they make up the parcels which the employees carry off with them when they have finished their day’s work.

Next we read:

The sports field

The staff’s football field is shown.
The players and scout-boys are seen in their sporting attire near a tent. Some of the scout-boys are doing gymnastic exercises; they form into a living picture and disperse.
The next caption reads:

The Nunspeet Holiday Colony

The Board of «Nunspeet» station is shown. A train rolls up. A sign-post points to «Erica». The passengers move off in the direction of the central Erica building.

Several villagers emerge from the house.
The lounge is shown, and then its different corners. Some of the holiday-makers are shown playing billiards, the wives of the employees are seated round a little table; others are busy writing letters in a quiet nook.

Other pictures of the interior are exhibited. The dining hall, the back of the main building and the adjacent lounge.

One of the little chalets

The film gives us a series of pictures of the summer chalets, intended for large families; and of a walk along which a number of panoramas in the neighbourhood of Erica are enjoyed.

The «Little Erica» rest house

The hostel is shown on the film, which closes with a view of some of the characteristic inhabitants of Nunspeet in local costume.

END
THE CINEMA IN THE SERVICE OF AGRICULTURE

Sweden

Although Sweden does not possess any official organizations for the particular purposes of the cinematograph as applied to agriculture, the Royal Administration of Agriculture in Stockholm (Kungl. Lantbruksstyrelsen) devotes a part of its activity to this important branch of the modern cinematograph, by furnishing slides for luminous projection and agricultural films to agricultural schools and the agrarian courses organized by the Rural Economy Societies in the several provinces.

The following private organizations moreover, are interested in propaganda and teaching by means of the film.


b) The Junior Agricultural Union and certain cinematographic firms, such as the A. B. Svensk Filmindustri, the Tullbergs Film A. B., and the Föreningen Arme-och Marinfilm, all of Stockholm, have produced agricultural films.

Some of these organizations have promptly answered the enquiries which the I. E. C. I. addressed to Sweden, and have forwarded to the organization of the League of Nations information concerning the films they had produced on behalf of the agricultural organizations.

Thus we are informed that the General Agricultural Society of Sweden owns and exhibits films on the following subjects:

« Breeding-stock — cattle and swine; Horse breeding in the Västeröland Province; Sheep-breeding in Sweden; Fish hatcheries, Farming in the Jämtland province, the Scientific cultivation of pastureland; the Swedish Dairy Industry and the cultivation of potatoes and alimentary roots.

There are also some films on the importance and use of artificial fertilizers, with special reference to the new fertilizers produced from atmospheric nitrogen.

A fee of 2 öre per metre is charged for the hire of the films (1). Carriage is to the charge of the hirer and the fee for the censoring of agricultural films amounts to 1 crown for the first 100 metres of ribbon and 50 öre for every additional fifty metres.

The «Tullbergs Film» of Stockholm, founded in 1920, is concerned with the production of industrial, technical, scientific, documentary films.

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(1) 100 öre = 1 Swedish Crown.
and propaganda films, and exercises its activities also in the agricultural domain.

This firm has actually produced films dealing directly with some of the most important agricultural problems, namely:— drainage, hay harvesting, nurseries for forest essences, scientific pasture cultivation, methods of transport in barns and hay fields, fertilizers, modern crop harvesting.

The Tullbergs Co. produces several hundreds of films representing the different branches of national industry. It has moreover carried out film orders on behalf of various public bodies, the Ministry of Agriculture among others.

The themes of all agricultural films are elaborated with great care and the Company produces them under the guidance of experts of the Royal Agricultural Administration.

The Tullbergs Film Co. also hires out films, but only to institutions of an official character, such as schools, associations, etc.

Hiring fees amount to 5 öre per metre for the first occasion and to 2 and a half öre per metre for subsequent occasions.

The Svensk Filmindustri of Stockholm is the most important firm producing films in Sweden. It manages some of the biggest cinemas in the country.

This Company has set up a special section for the production and hiring out of educational, training, and propagandist films, dealing with the most varied subject matter. The work it has accomplish in these domains is truly remarkable.

The Svensk Filmindustri has produced up to the present some 90 agricultural films, totalling 6000 metres. It possesses moreover a good number of films of the kind produced by other firms.

The films in question illustrate:

a) the most diverse branches of agriculture, floriculture, etc.;

b) Fertilizing and harvesting;

c) Cattle and swine breeding;

d) Insects: Bee keeping;

e) Mechanical means of cultivation, irrigation, harvesting, etc.

Renting fees are generally calculated for each exhibition. For the rent of complete programs of educational films representing a total metreage of from 1500 to 1750 metres, the tariffs vary from 2 ½ to 3 öre per metre.

The cost of carriage is always to the charge of the users.
NOTES TAKEN FROM REVIEWS AND PAPERS

NOTES FROM THE REVIEWS AND PAPERS

The United States Department of Agriculture has had some sixty films produced for agricultural teaching purposes to be exhibited in farms in remote districts. (Manchester Guardian, Manchester - F. 1/25).

A film entitled: « The Miracle of the Flower », showing the successive phases of the development of a plant, has been exhibited at Bâle. (Baseler Tages Anzeiger, Bâle - F. 1/35).

Prof. Wladimir Ulke of the Masaryk University at Brno (Chechoslovakia) has produced an interesting documentary film illustrating the life of plants. (La Critique Cinématographique, Paris - F. 1/37).

A number of films of a popular agricultural kind are announced as being ready or in course of production by the different Russian firms. (Les Nouveautés du Cinema Soviétique - F. 1/43, 1/48).

Under the direction of Prof. Netschajeff, the Soviet Film Company is preparing a propaganda film against the illiteracy in which the great mass of the Russian rural population are plunged. (Comoedia, Paris - F. 3/194).

The Commission of Enquiry set up in England in 1916, of which Mr. Merchant was the first secretary, has ascertained that young persons who attend the cinema regularly possess a higher degree of general culture than those who don't. (Daily Telegraph, London - F. 3/199).

The Pathé-Baby Co. has obtained the permission of the « Luce » Company to reproduce the latter's films in « Baby » format. (Pathé-Baby, Rome - R. 3/208).

A number of firms are actively engaged in equipping travelling cinemas to go about in Morocco with the object of diffusing European culture. (Lichtbild-bühne, Berlin - F. 3/209).

The Vufku Company will exhibit during 1930, 158 instructive films on agricultural, industrial, economic, political, hygienic, and scientific subjects. It will in addition publish 40 scholastic films. (Les Nouveautés du cinéma Soviétique).

The Ufa Co. of Berlin has turned a film on the metamorphosis of insects. (Ufa Dienst, Berlin - F. 6/265).

The General Direction of Morocco (Spanish Zone) has sent to Madrid a film illustrating documentarily all that Spain has been doing and has undertaken in Morocco with a view to civil improvement and material prosperity. (El Cine, Madrid, Barcelona - F. 6/264).

The yearly expedition organized by the Argentine Ministry of Agriculture has a documentary film entitled « Amid the Ice of the Orcades Islands ». (Cinema Star, Rosario de Santa Fé - F. 6/274).

The Italian National Institute, the « Luce », will exhibit free of charge all over Italy a great film entitled « Year VII », illustrating the manifold forms of activity of the Fascist Regime during the 7th. year of its being. (Il Messaggero, Rome - F. 6/280).

The Sovkino Co. instituted last October a « Cinema-Chronicle » at the
Museum of the Revolution. Exhibitions
last only seven minutes and the en-
trance fee is only 5 kopeks. (*Les Nou-

A film illustrating the studies of the
renowned student and explorer Bengt
Berg has been exhibited in Berlin. In
order to be able to produce this film,
Bengt Berg lived four months in a
tent, observing close at hand all the
details of the life of eagles, which he
even followed when in flight, availing
himself of a small silent aeroplane for
the purpose. (*Kino, Leningrad - F.
6/285).

A film of rare documentary and tour-
istic value entitled: « Santander » is
being circulated in Spain. This is the
first of a series of films that will be
produced by the « Informacion Cine-
matográfica Española » in collaboration
with the aviation services, to illustrate
the several Spanish provinces. (*El De-

The British War Office has turned a
film called: « The Holy Land » illustrat-
ing the Palestine Campaign and the
redemption of Jerusalem. (*El Cine, Bar-
celona - F. 7/24).

Following the example of Mozojon,
the German Ministry of Public Edu-
cation has set up a Cinematographic
University. (*Popolo di Roma, Rome -
F. 8/68).

Signor Gennaro Pistolesi, being con-
vinced of the need for Colonial propa-
ganda, expresses the hope that the Ita-
lian institutions concerned and the Mi-
nistry of the Colonies will lend financial
support to the production of films
on life in the colonies. (*Corriere Emi-
liano, Parma - F. 9/58).

M. Eisenstein has prepared a film on
Karl Marx’s famous book « Capital ».
(*La Cinematografia, Milan - F. 9/68).

During the Congress of the North
American Esperantist Association it was
decided to produce a talking film in the
Esperanto tongue. A three-minute dia-
logue and an address of world welcome
will form the text of the film. M. Henri
W. Hetzel, of Philadelphia, President
of the Esperantist Association; and Ma-
dame Chaumette, a Belgian Esperantist,
will lend their assistance. (*La Tarde,
Bilbao - F. 10/235).

It would appear that the advent of
the talking film has had a discouraging
effect on amateur writers, who feel that
the writing of dialogue scenes is beyond
them. (*Comoedia, Paris - F. 10/236).

The Opera Theatre and the « Sound
Spectacle Syndicate » in Germany have
stipulated an agreement in view of the
production of films which will exhibit
classical German works on the screen.
Mozart’s « The Marriage of Figaro »
and Flotow’s « Martha » will be the
first lyrical works to be filmed. (*Film-

The exhibition of a scientific film on
Child-birth has been suspended at Greitz,
the public having complained that it
was scandalous. (*Lichtbildbühne, Ber-
lin - F. 13/63).

M. Lefevre, of the Institut Optique in
Paris, has had a film called « A Drop
of Water » exhibited; this gives a lucid
vision of microbe life and of the struggle
between microbes. (*Freiburger Zeitung,
Freiburg - F. 13/64).

The latest scientific processes of cin-
ematography as applied to the docu-
mentation of various physical problems
is the subject of a long article published
in the Königsberg Allgemeine Zeitung.
*Könisberg - F. 13/65).

The eminent astronomer John Stewart,
in the course of his observations at
Princeton, has been able to make the
first film reproducing the surface of the
moon. (*Düsseldorfer Nachrichten, Düs-
seldorj - F. 13/66).

A film entitled « Diseased Nerves »
illustrating the disposition to succumb
to or to combat neurasthenia has been
produced under the direction of Dr. Galkine. (*El Cine*, Barcellona - F. 13/67).

The National Commission of the Council of Scientific Research of the United States, has suggested the production of a film illustrating the progress of science during the last hundred years. It is proposed to exhibit this film at the Universal Exhibition to be held in Chicago in 1933. (*Exhibitors' Herald World*, Chicago - F. 13/71).

At the Congress of Stomatology held in Rome last October several members of the Congress had recourse to the film in support of their speeches. (*Il Regime Fascista*, Cremona - F. 13/72).

The scientific films of the Italian National Society, the Luce, which were projected in the course of the Surgical Congress in Paris, met with very marked success. (*Il Tevere*, Rome - F. 13/73).

Prof. Victor Pauchet has shown an animated drawing film on the subject of « The technique of the ablation of Ulcers in the Stomach ». This is the third year in which the eminent student has displayed the demonstration of surgical operations by animated drawings. (*Congres Français de Chirurgie*, Paris - F. 3/75).

The Russian stage manager Eisenstein has turned a film on abortion. One thousand metres of film have been printed under the direction of the doctors of the Cantonal Hospital of Zurich. (*Le Cinema Suisse*, Montreux - F. 13/77).

M. Franco Feline forecasts the creation of films for children based on the same principles as those inspiring childrens' books. (*Il Cinematografo*, Rome - F. 15/86).

Mademoiselle Madeleine Brandeis, who has been recognized by the League of Nations as a zealous promotor of world peace, has exhibited the films she has produced for the purpose of making school children acquainted with the life, ways and deeds of children the world over. These films, which form an integral part of American school curriculums, are of great assistance, especially in the teaching of geography. (*Hamburger Nachrichten*, Hamburg - 15/90).

A « Cultural Institution » has been opened in Latvia having for its object to subsidize educational films. (*Baltische Presse*, Danzig - F. 17/56).

The French censorship has prohibited the public exhibition of the film of M. Jean Painlevé on the transfusion of blood. It will be allowed to show this film only in scientific circles. (*The Daily Film Reuter*, London - 18/189).

The Pan-Pacific Womens' Conference, to be held at Honolulu in August 1930, will devote special consideration to the question of the educational cinema. Dr. Ethel Osborne, of Melbourne, has got into touch with the I. E. C. I. in this connection. (*Bull. of the Pacific Union*, Honolulu - F. 22/229).


M. L. Barschansky is making a study of the great progress made in the course of the last few years in the domain of radio-cinematography. He expresses the view that this new invention, once it is perfected, will be of the greatest service to man in his work and intellectual life. (*Kino und Kultur*, Moscow, 30/51).

Madame Erna Büssing criticises films purporting to depict the life of eastern peoples. She expresses the view that, far from giving any real picture, these films give the audiences a false impression of eastern life and customs. (*Vorwaerts*, Berlin - 34/321).

Mr. R. A. Werzel, of the New York Microscopic Society, working in colla-
boration with his fellows of the Rock-
feller Institute, has observed that in cer-
tain preparations based on colloidal sil-
ver the particles of silver are developed 
by the effect of light. This curious phe-
nomenon, which represents the first step 
towards the solution of the problem of 
the relation between matter and energy, 
has been filmed. (Der Berliner Welten, 
Berlin - F. 36/355).

The Federal Educational Institute of 
Berlin has set up the first cinematograph 
for the use of higher primary schools. 
(Bildwart. Vienna - F. 37/68).

The lessons on physics given by se-
veral Professors with the assistance of 
cinematographic projections, are the sub-
ject of a highly interesting article by 
Monsieur Taranoff, in which he stresses 
the advantages of the cinema for the 
purposes of teaching. (Kine und Kultur, Moscou - F. 37/69).

The meeting of the Governing Body 
of the I. E. C. I. has inspired an ar-
ticle by M. Louis Baralt in which he ex-
amines the details of the problems of 
the film as a means of instruction, and 
enumerates the many and valuable uses 
to which the cinema pays be put, (Il 
Resto del Carlino, Bologna - F. 37/70).

At the Cinematographic Congress at 
Padua, Signor Guido Luzzatto, defended 
the value of the film in an interesting 
lecture and spoke of the work being 

With a view to assisting American 
students in the study of the French 
language, M. J. B. Beck, Professor of 
Romanic languages and literature at the 
University of Pennsylvania, and at the 
« Curtis Institute » of Philadelphia, 
predicts the production of talking films 
reproducing on the screen French clas-
cical drama interpreted by actors of re-
nown. (Bull. Off. de la Chambre Syn-
dicale Francaise, Paris - F. 37/72).

According to an article by Prof. Such-
arodsk, which appeared in the « Berlin 
am Morgen », it will shortly be pos-
sible to give cinematographic lessons in 
the 150,000 schools of Russia, which 
will as soon as possible be equipped 
with apparatus for projection. (Klassen- 
kampf, Halle - F. 37/76).

M. Jules Veran is of the opinion that 
the use of the film in teaching history 
would greatly enhance the interest of 
this study. He deplores the fact that 
the number of schools equipped with 
projection halls is so limited and advoca-
ces that all schools should have re-
course to the screen in their history 
lessons. (Comedia, Paris - F. 37/77).

M. A. Colette maintains that the 
talking film cannot be made any use 
of for teaching purposes. (Jazy Journal, 
Cairo - F. 37/78).

At the Geographical Congress at Mag-
deburg, the uses of plastic art and of 
the cinematograph in teaching geogra-
phy were unanimously recognized. 
(Il Lavoro, Genoa - F. 37/90).

The first speaking film for instruc-
tional purposes is being turned in Ame-
rica. This film is intended for ele-
mentary and higher schools and will be 
produced at the expense of the Uni-
versity Film Foundation of Harvard 
University. (La Cinematografia, Milan - 
F. 37/91).

SOCIAL ASPECTS OF THE FILM

M. Dovjenko will screen a film en-
titled « The Land » depicting the 
struggle between the poor peasant and 
the rich farmer, and also the introd-
uction of agricultural machinery in a little 
village. (Nouveautés du Cin. Sov. - 
1/46).

The Venetian Section of the Italian 
National Soldiers' Institute is equipping 
travelling cinemas for propaganda in 
agricultural training. (Gazetta di Ve-
nezia, Venice - 1/50).
M. Vichniac has turned a film on «Sovietic Fordism». (Nouveautés du Cin. Sovet. - 5/83).

In England, Germany and Holland the cinema is made considerable use of for popularizing cooperative societies. One hundred and fifty of these societies own projection apparatus. The National Cooperative Institute in Italy will also resort to this system. (Il Lavoro Cooperative, Rome - 9/70).

The opinion is expressed in legal circles that there is no reason why a will registered by a talking film should not be valid. It is even considered that forgery might be excluded by this means. (Frankfurter Zeitung, Frankfort - 10/239).

The exhibition of an American sound film, representing the actual scenes of a railway accident, and showing dead and wounded, roused considerable excitement and protest. (Deutsche Allgemeine Zeitung, Berlin - 12/407).

112 New York cinemas have been unable to stand up against the competition of halls where «talkies» are exhibited, and have had to close down. About 80% of the cinemas of the United States need capital to re-equip their halls for sound projection. (Leninogradshaia Gazeta Kino, Kiew - 12/437).

Prof. Van der Velde, in collaboration with the Medical Cinematographic Institute of the University of Berlin, has produced a film of a purely scientific purpose, entitled «Conjugal Life». (La Película, Buenos Ayres - 13/74).

M. Siemaschko, in an article entitled «Health and Hygiene Films» expresses the view that the cinema is the best means of teaching modern hygiene methods to the people and of defending them against vice. He likewise maintains that the film is of great assistance in medical theory and practice. (Kino und Kultur, Moscour - 14/44).

O'Pais contains a highly interesting article on the educational role of the cinema. The health authorities of San Paulo, fully realizing the value of this new weapon of collective defence have organized the production of films of a kind to instruct the public in the elements of knowledge and hygiene to enable them to defend themselves against the risks of the yellow fever, that afflicts certain regions of Brazil. More particularly in the interior of the country, where the benefits of popular scientific teaching make but slow progress, the cinema is able to play an important educational role. (O' Pais, Rio de Janeiro - 14/45).

The German Central Committee for the campaign against tuberculosis calls attention to the film «Forbidden Kisses» which aims at popularizing hygiene and social prophylaxis. (Deutsch Central Komitee Zur Bekämpfung der Tuberkulose, Berlin - 14/47).

The project of cinematographic reform in Germany is analyzed in a highly interesting article, which gives special consideration to the question of the admittance of children to cinemas and the penalties provided for persons infringing the law, including both parents and responsible guardians. (Volkswohlfahrt, Berlin - 15/87).

Prof. Theobald Buchner, of Zurich, in an article entitled: «Can the Cinema set a bad example?» affirms that, although there is no direct relation between crime and the cinema, nevertheless the luxury and thoughtless manner of life depicted in so many films have a bad influence on the young and on the lower middle classes. (Sud. d. Zeitung Morgenblatt, Stuttgart).

In the course of a lecture at Yale University, during the International Psychological Congress, Prof. Blanchard maintained that not only does the cinema not contribute at all to criminaity, but that it exercises a beneficial

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The Greek Parliament has approved a decree absolutely prohibiting that literature intended for children should recount facts or fiction concerning crime, robbery, etc. Similar measures will be taken with respect to films, the revision of which will be entrusted to the Inspectors of Primary Education. *(La Tarde*, Bilbao, 15/97).

In Valencia (Spain) a child of 13 committed a big theft under very romantic circumstances. He declared that the idea had been given him by watching a detective story film. *(El Imparcial*, Madrid, 15/99).

Dr. Porzio, who is well known for his studies on social medical questions, deplors the bad habit of taking quite young children to the cinema. He expresses the view that the law, which watches over the morals of young people aged under 16 years of age, ought for hygienic reasons to prohibit young infants from being taken to the cinema. *(Il Popolo di Roma*, Rome - 15/103).

M. Aug. Nardy in an article on film censorship in France, expresses the view that it would be better to do away with it and to rely entirely on public opinion, as in the case of books and the theatre. *(L'Oeuvre*, Paris - 18/159).

M. Philippe Sarlat expresses the view that the French censorship is futile and advocates a radical reform thereof. *(Comœdia*, Paris - 18/163).

There are many difficulties in the way of the censorship of talking films. The Committee charged with the study of this question in England remarks that it is practically impossible to excise objectionable parts of dialogues, which must either be passed or prohibited as they stand. *(The Daily Film Renter*, London - 18/191).

The censorship of films has been functioning in Mexico since the 15th September. The censor's office, which is attached to the Ministry of the Interior, will exercise its control over both imported films and films intended for export. *(Comœdia*, Paris - 18/181).

The Russian Censorship Commission has been directed to exercise great rigour in censoring imported films, especially American films, because these present life under an aspect that might stir up bourgeois sympathies and complicate the task of educators. *(Le Courrier Cinématothographique*, Paris - 18/182).

The revenue of taxation on public spectacles during 1929 in Germany is estimated at about 85 million francs; more than half of this amount is derived from cinematographs. *(Le Courrier Cinématothographique*, Paris - 24/108).

The British Colonial Office has directed a committee to be appointed to examine the present state of the agreements in force for the supply of films to the Colonies and Protectorates. *(Il Cinema Italiano*, Rome - 25/113).

The question of Sunday entertainments continues to arouse a deal of controversy. The Rev. E. Cornford Bruce expresses the view that none of the precepts of religion are contrary to such entertainments. On his side, Mr. Gordon Pannell, declares that the returns of an enquiry made on this subject clearly demonstrate that there has been a marked diminution in the number of drunkards since the introduction of Sunday shows in England. *(The Times*, London - 25/118).

The German Government, recognizing the importance which the cinema has assumed as an instrument of political propaganda, has bought up most of the shares of the Emelkà Cinematographic Trust. In so doing, it has apparently wished to avoid that the *Emelka* Topical Events section should be
controlled by a different group. (Il Mezzogiorno, Naples - 26/25).

The Central Hygiene Office in Switzerland has acquired a film entitled «Snare and Dangers» which points out to workers how to avoid accidents caused by absent-mindedness and carelessness. (Volkszeitung, Zurich - 33/67).

In a lecture on «Modern Society and the Cinema» Mr. F. Evans attributes two great merits to the cinema: that of having averted the danger of revolution in England and that of having played a valuable part in the anti-drink campaign. (The Cinematograph Times, London - 33/71).

The arrest of a dangerous adventurer has effected in Berlin thanks to the exhibition in cinemas of his description and the warrant for his arrest. (Il Tevere, Rome - 33/72).

The Mejrabpom Film Co. has undertaken, with the cooperation of the Public Health Commissariat, to turn a film with the title: «Do you recognize yourself?» aiming at anti-drink propaganda. («Soviet Cinema Novelties» - 33/73).

M. E. Vuillermoz maintains that the cinema is partly responsible for the present crisis in the marriage rate and in the birth rate also. (Comœdia, Paris - 34/327).

Mr. Winston Churchill, speaking on the cinematograph, expresses the view that it is a most efficacious means of popular education, and, moreover, an eloquent advocate of the idea of universal peace. (Exhibitors’ Herald World - Chicago - 34/329).

Herr Paul A. Schmitz, after noting that two thirds of cinema audiences consist of women, suggests that advantage should be taken of this fact to institute a valuable social and hygiene propaganda with special reference to motherhood. (Reichsport, Vienna - 34/339).

The staffs of the film laboratories of the United States have decided to form a Union to be affiliated to the American Federation of Labor. (El Cine, Barcelona - 35/112).

On the 9th, October the heads of the Commission of Intellectual Workers held a meeting at the Offices of the International Labour Office at Geneva. Among other resolutions, it was decided to commit to the I. L. O. the task of studying the labour conditions of musicians, in connection with the mechanical reproduction of music, as well as the conditions of work of cinema artists and technicians. (Il Tevere, Rome - 35/113).

Negotiations are under way between the principal film producing countries, aiming at an agreement whereby all the studios of the signatory countries will blackball actors who break their contracts. (Film Atelier, Berlin - 35/119).

RELIGIOUS FILMS

The French Fox Movietone operators recently filmed some touching scenes of a Lourdes pilgrimage. (Comœdia, Paris - 11/53).

At the General meeting of the C. E. A. recently held in Newcastle the question of religious films in general was discussed at length; it was decided that the production of a certain type of film liable to wound the susceptibilities of the devout ought to be discouraged. (The Daily Film Renter, London - 11/54).

In an article entitled The Film and Broadcasting at the service of the Church, M. Beran expresses the view that the film is a necessary weapon for combating the enemies of the Church. (Reichsport, Vienna - 11/55).

H. E. Cardinal Piffi, Primate Bishop of Vienna, has lent his support to the production of a film «Innocence», and
authorized the cinematographic presentation of the solemn ceremony of confirmation in the Cathedral of St. Stephen at Vienna. (Film Atelier, Berlin - 11/57).

The second cinema managed under Catholic direction is about to be opened at Breslau. (Lichtbildbuhne, Berlin - 11/58).

The procession of Mount St. Annaberg, the biggest religious festival of Upper Silesia, has been filmed. (Ufa Dienst, Berlin - 55/59).

The Israelite film «Buried Alive» has met with great success in France. It features a Jewish hero and reproduces a number of beautifully reproduced religious ceremonies. (La Cinematografia, Milan - 11/63).

M. Protazonov is preparing an anti-religious film entitled «The Festival of St. George» taken from the novel of Dergestadt. (Soviet Film Novelties - 11/60).

M. Dimitriev has produced a film entitled «In the Land of the Oudmours» built up on the cinematographic material of the Meshrabpom Film expedition in the Vodsk region. This film presents a number of curious ceremonies of a religious character and the ritual sacrifices still practised by those populations. (Soviet Film Novelties - 11/61).

In the United States, Harry Warner has secured the assistance of the renowned Methodist preacher, the Rev. A. Sunday, for the publication of a number of talking films of a religious character. (Kinematograph, Berlin - 11/63).

TECHNICAL ASPECTS OF THE FILM

D. Ulrich F. Schultz devotes an article to examining the difficulties hindering the production of documentary films on the life of animals in a state of nature. (Film Atelier, Berlin - F. 6/262).

The yearly examinations of the Munich School of Cinematography has given excellent results. A course in talking and sound films forms part of the program of studies for next year. (Comedia, Paris - 8/67).

In a very interesting article, M. K. Kolosoff maintains the need for creating a central experimental laboratory which would be of the greatest service in the technical cinema world. The institution of such a laboratory might serve as the basis for the foundation of a Scientific Cinematographic Institute. (Kino und Kultur, Moscow - F. 8/69).

A school for training young cinema actors has been opened at Moscow under the direction of M. Zalis. One of the aims of this school is to study all the scientific questions connected with the cinematograph and especially its industrial development. (Comedia, Paris - F. 8/70).

The Meshrabpom Film Co. is organizing a Committee to study the improvements that might be made in the production of sound films. (Society for Cultural Relations between the U. R. S. S. and Foreign Countries, Moscow).

M. Max Ettinger, the celebrated modern composer, deals with the several questions bearing on the silent film and sound films, in an article devoted to music in the cinema. (Freiburger Zeitung, Freiburg - F. 12/428).

So as to avoid the commercial success of sound films being impaired by defective projections, the foremost American firms have decided to set up an independent commission of experts to supervise sound equipment in cinema halls. (Rivista Cinematografica, Milan, Turin - 12/446).

Dr. Walter Thorner has invented a new process for taking natural colour
photographs. (*Die Photographische Industrie*, Berlin - 21/294).


Messrs. Machkovitch and Okhotinov have invented a new process for registering and reproducing sound. Their system being based entirely on electricity, light has no influence on it. It makes it possible to take photographs and register sound at any speed whatsoever. (*Soc. for Cult. Relations between the U. R. S. S. and Foreign Countries*, Moscou - 21/297).

Señor Fernandez Cuenca describes the new «Superalenti apparatus»; invented by Mr. Bull, whereby 20,000 photographs per second may be obtained. Two interesting films have been made by this apparatus: the first on the bursting of a soap bubble, the other on the movement of a bullet issuing from a gun or cannon. (*La Epoca*, Madrid - 21/298).

A French inventor has devised a way to project texts on the screen during the projection of films spoken in foreign languages, so that these can be read at the same moment that the words reach the ear. (*El Cine*, Barcelona - 21/302).

The Engineer Gozzano, of Milan, has invented a mechanism that obviates the dangers of short circuits in projection cabins. (*Kinematograph*, Berlin - 21/304).

M. Gransenz Androheim has discovered a new means of transmitting colour films by radio; these appear at the receiving station reproduced in their exact colours on an opake slide. (*Exhibitors' Herald World*, Chicago - 21/306).

A new cinematographic projector, remarkable, among other improvements, for the suppression of noise, invented by the Italian Engineer Gentilini, was recently exhibited in London, where it obtained a marked success. (*Lichtbildbühne*, Berlin 21/313).

The André Debrics Works have recently turned out a new portable projection cabin which allows films to be projected at a distance of 25 metres on to a screen measuring from 3 metres 50 to 2 m. 60. This apparatus, which is very cheap, is specially suited to small cinemas and home use. (*Rivista Cinematografica*, Turin - 21/323).


Prof. Leonhard Koeppe describes a new type of screen which eliminates the reverberation of light in the hall. (*Kinotechnik*, Berlin - 21/330).

A new sound apparatus that makes the sound registered immediately audible has just been invented. (*Daily Telegraph*, London - 21/334).

Experiments are being made in the laboratories of the Electrical Trust of Leningrad for the transmission of films by radio. (*Sound Waves*, Hollywood - 30/52).

For the first time in the history of the cinematograph, Berlin has transmitted a spoken film radio. (*Ufa Filmiletton*, Berlin - 30/33).

There is a special section to deal with all manner of research attached to the Hollywood staging hall. Persons with special knowledge in the several branches of human knowledge are to be found there, always ready to give stage directors advice on the most complex and diverse subjects. (*Il Tevere*, Rome - 34/323).

The State of New York has prohibited the sale and hire of films made
out of nitrate of cellulose, on account of their inflammable nature, which, as demonstrated by the recent fire in Cleveland, is a source of serious danger. (The American Projectionist, New York - 33/669).

The photographic sensibility of latent images is the subject of a comprehensive study by Mr. J. Slater Price, F. R. S. (Science et Industrie Photographique - 35/344).

A very interesting article describes the aerating system in use in the Parisian Cinema « America Theater » a system which makes it possible to warm or cool the air as desired and thus to maintain an agreeable temperature. This removes one of the main causes of the cinema dead season. (La Cinématographie Française, Paris - 36/352).

At the Gaiety Theatre of New York, the Fox Film Co. has made a public and successful experiment in a new type of film on 70 mm. ribbon. Thanks to the ampler field of vision, the illusion of depth on the flat screen is more accentuated than in the case of films of normal dimensions. (Film-Kurier, Berlin - 36/358).


A technical article is devoted to the study of the different means of rendering sound films silent, turning silent films into sound films and of modifying sound films. (American Cinematographer, Hollywood - 36/363).

An optical compensation mechanism for moving projections by means of annular prisms is the subject of a study published in the Photographische Industrie. (Berlin - 36/366).

A Californian engineer has invented an apparatus which he has patented as the Osciographoscope by means of which the heart-beats are recorded on a film. It is stated that photographs of the heart taken directly by means of this apparatus reveal the slightest functional irregularity. The exhibition of films obtained by this means enable doctors to observe the functioning of the heart with greater precision than by the stethoscope, which merely renders the sound of the beats more audible. (The American Projectionist, New York).
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