EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION

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JANUARY, 1942

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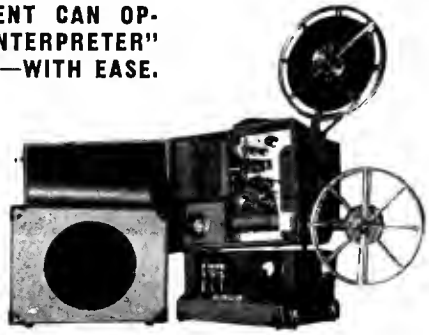

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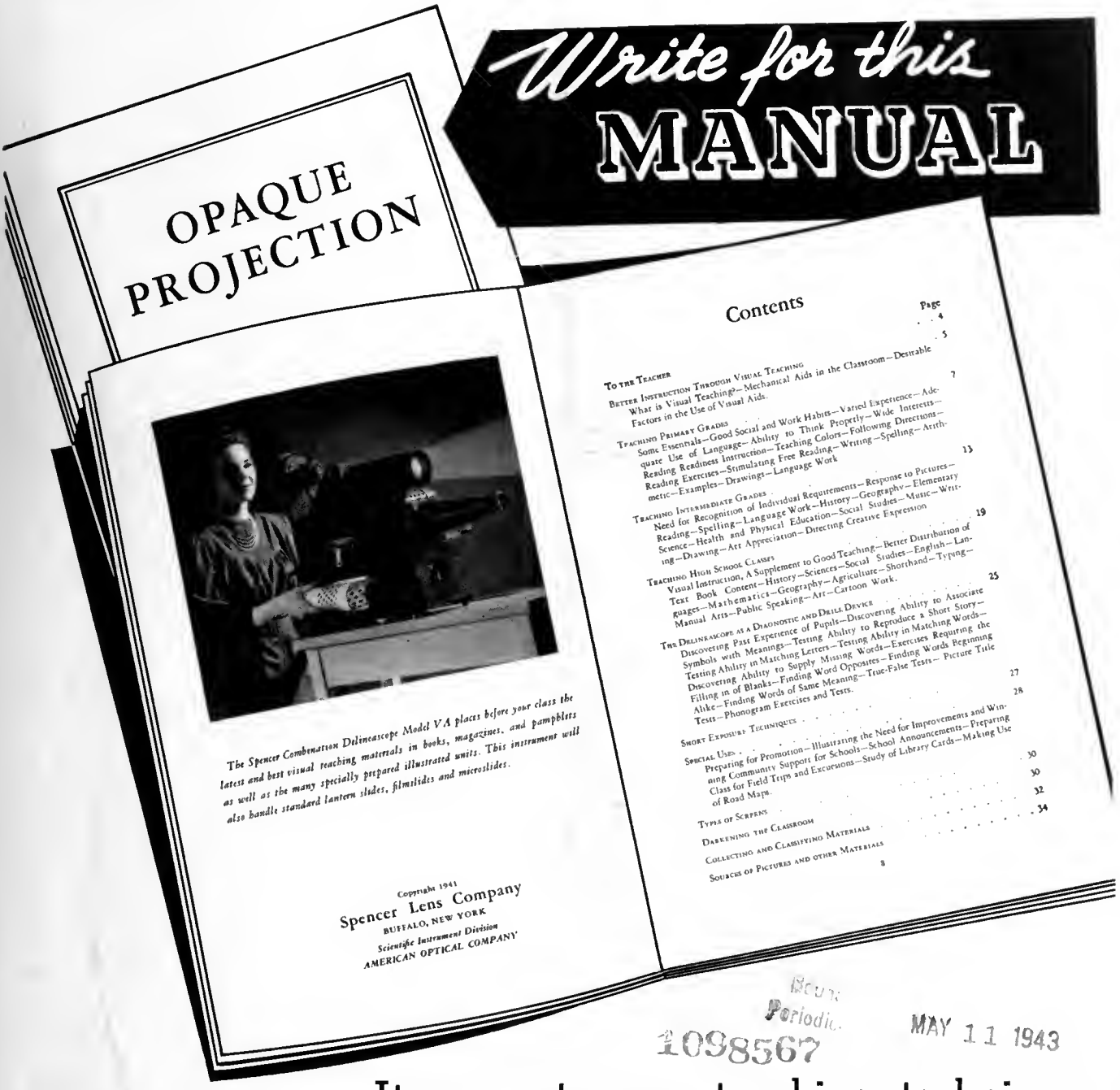

It presents new teaching techniques

This illustrated 36-page manual was published by Spencer in the interests of better instruction through visual teaching. It contains a wealth of specific suggestions for the use of the opaque projector and includes some teaching techniques printed here for the first time.

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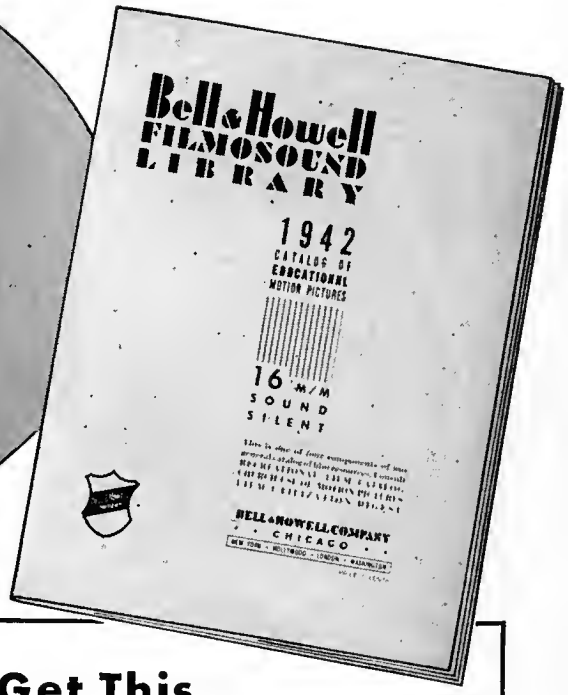

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The EDUCATIONAL SCREEN

VOLUME XXI JANUARY, 1942 NUMBER ONE
WHOLE NUMBER 198

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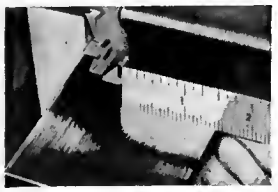
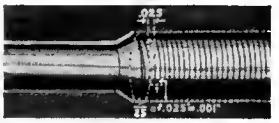


THE STEEL RULE. 475 ft. 16 mm. sound. Cost: $11.37. Subject shows in detail the various forms of steel rule in general use, explains fractional scales and demonstrates correct use. Explanation of blueprint dimensions. Variations in form of depth gages and combination squares. The rule measuring round stock.



THE MICROMETER. 525 ft. 16 mm. sound. Cost: $12.37. Subject shows various forms of the micrometer. Animation teaches their reading. Emphasizes necessity for checking against known standards. Outside, inside and depth micrometers demonstrated. Correct reading of barrel and thimble scales shown.

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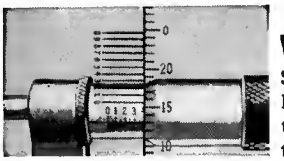
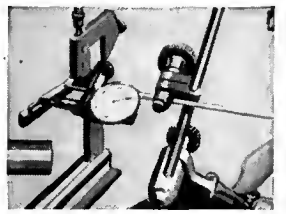


VERNIER SCALE. 675 ft. 16 mm. sound. Cost: $15.37. A detailed study, largely in animation, of principles of the Vernier scale and its application to precision measurement. Both ten and twenty-five part Vernier scales explained. Vernier micrometer and caliper in use. Extreme closeups for experience in reading.



HEIGHT GAGES AND STANDARD INDICATORS. 425 ft. 16 mm. sound. Cost: $8.97. Subject presents fundamental principles of the Vernier height gage. Various forms of standard indicators. Gage's use to scribe necessary lines for a precision lay-out job on angle plate. Use of standard indicator with gage block to check depth of cut.

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Diversitorials

"Priorities" and the Visual Field

AMERICAN education has been, is and will always be the foundation stone of the American way of life, and to defend and perpetuate this way of life America is now at war. Visual materials for projection—such as educational films, slides and film-slides—are a most potent factor in education. The motion picture has been declared "the most powerful weapon ever developed for educating or deluding a people, and a Democracy can survive only if the people learn the truth." The U. S. Government has long produced films for educational purposes but this production is now being enormously intensified. *Hundreds of these Government films* are being used for instruction and training of youth on a nation-wide scale, in camps, shops, schools, colleges, churches, lodge halls, community centers, even in countless homes. *Thousands of films and slides* from other than Government sources are doing their mighty job in American education for defense.

Yet these precious materials are worthless without projectors. The national speed-up for the present emergency is as applicable to education as to industry. More projectors, in unstinted quantity, are a crucial necessity for camps, classrooms and assembly halls—if American education and training are to keep pace with the vast national need. If movie projectors and stereopticons could be doubled in number instantaneously, there are still ample materials available to keep them running, with consequent doubled values for America's education for defense.

From every educational organization, local, state or national—from every school and college—from every superintendent, principal or teacher—from every American who knows what education means to the American way of life—there should arise a unanimous, deafening chorus of approval for such a resolution as the following—already passed with varied wordings by many educational bodies throughout the country:

Be It Resolved that we petition the Government of the United States to assure allotment of all materials necessary for the steady or increased production of equipment essential for motion pictures and other audio-visual aids so urgently and universally needed for American education in the present national emergency.

More Evidence

AN emergency often produces the most strenuous test and positive proof of means and methods in education, as in other fields. The U. S. Army Air Corps is giving the vital training for recruits at a record rate of speed. They are doing a year's work in half a year! Only visual methods could make this possible. Read "Visual Education in the Air Corps Technical Schools" on page 10 of this issue.

First Year of the DVI Zone Plan

THE DVI of the NEA has reached mid-point in its first year of operation under the Zone Plan. Results so far may be said to have reached our expectations if not our hopes. The normal difficulties, inherent in the making of any radical change in organization and procedure, have been greatly increased by the war situation. The national President of the DVI himself, W. Gayle Starnes, has been called to a position in National Defense, which will inevitably handicap his efforts in this most difficult of all years for the departmental Presidency. The defense job even precludes Mr. Starnes' presence at the February meeting in San Francisco, and Mr. Boyd Rakestraw has been asked to take over on necessarily short notice. Nevertheless, a thoughtful reading of the Department's "Among Ourselves" in this issue will show that much meaningful activity is going on in the Zones, excellent foundational work that augurs well for greater progress of the Zonal Plan next year.

From our observation of the situation so far, at least three suggestions occur to us for the second year's program: (1) It would seem desirable to re-elect all present Zone Officers for a second term, in so far as it pleases each Zone so to do and each present incumbent to continue in office. Their experience of success and failure in the first year will constitute the finest sort of preparation for greater achievements next year. (2) There should be a 12 or 16 page folder, ably written, presenting a complete picture of the purposes, activities, and personnel of the national DVI, available in any quantity needed by each Zone as its primary ammunition for membership campaigns. The folder should be so ample in detail, so strong in appeal, that the Zone need prepare only a single-sheet letter, aimed specifically at prospects in its own territory, to accompany the national folder. (3) Definite plans should be formulated for the integration of local and sectional groups, already active within a Zone, into the larger framework and organization of the Zone itself. The exact methods for such intergration, varying as they will in different Zones, must be for decision by the Zones themselves.

Same Department — New Editor

THE department, "New Films of the Month as They Look to a Teacher Committee," was begun in October, 1940, by Don White of the University System of Georgia in Atlanta, and edited by him continuously through December, 1941. Then came the war! The Army called Mr. White to important work as Associate Visual Information Specialist with the Air Corps at Maxwell Field, Montgomery, Alabama, and we release him with our best patriotic grace. Great as was Don White's value to us, we can take his departure cheerfully in view of the vastly greater service he will be rendering in our national emergency. Fortunately, two able volunteers were immediately at hand to carry on. Logically, in these times of "priorities," we accepted the earlier offer by L. C. Larson of Indiana University instead of the later but equally welcome offer of John Gunstream, Director of Radio and Visual Education, State Department of Education, Austin, Texas.

Lawrence C. Larson, after graduation from the University of Nebraska in 1929, taught High School Science, served a three-year principalship, and was appointed Instructor under the Tennessee Valley Authority where he developed the program of audio-visual aids for elementary, secondary and adult education departments. After graduate work at Nebraska and Columbia, he served as evaluator for the American Council on Education's motion picture project, appraising over 500 educational films at the University of Minnesota. Upon completion of his Doctorate, with a thesis in the visual field, Mr. Larson accepted a dual appointment at Indiana University in June 1940 as consultant for the Bureau of Visual Instruction with its wide activities in research and film production, and as Instructor in audio-visual teaching techniques in the School of Education. First appearance of "New Films of the Month as They Look to a Teacher Committee" conducted by Mr. Larson and his staff will be in the February issue of the EDUCATIONAL SCREEN.

We cordially invite all producers of new educational films to take advantage of this notable opportunity for early and telling publicity on their most recent productions. The service entails no expense to Producers other than transportation costs on the film. Merely send the first available print of your new films to Lawrence C. Larson, Bureau of Visual Instruction, Indiana University, Bloomington, Indiana, for review by the Teacher Committee in the next issue of the magazine. The film will be returned to the Producer immediately after the viewing.

On the "Broadways" of America...

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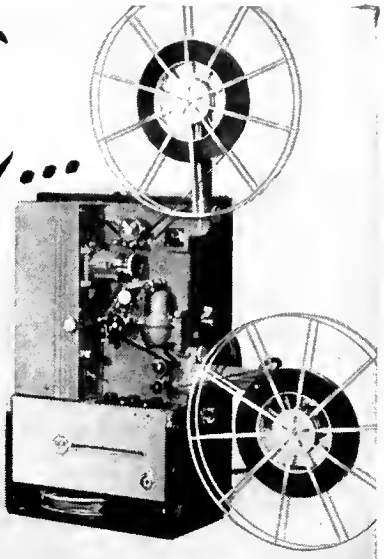

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Visual Aids in the Elementary School Library-Museum with the student-teacher and children enjoying them.

Audio-Visual Enrichme

ANNA CURTIS CHANDLER
Hunter College Elementary School, New York City

THE May, 1940, Bulletin of the Department of Secondary Teachers of the National Education Association has an article entitled, "A Study of the Status of Visual Education Courses in Teacher-Training Institutions." The author[1] states that "as a result of a questionnaire sent to one hundred and fifty institutions which prepare secondary-school teachers", the colleges offering a course in Visual Education "have increased very rapidly during the last five years." The titles of the courses mentioned in the various colleges vary from "Visual Education" to "Audio-Visual Education" and "Multi-sensory Aids"—the latter title showing an increasing understanding of the values of sensory appeal. It is generally agreed that this method of learning by seeing, by hearing, by touching—by making use of all sensory aids—insures greater economy and effectiveness of teaching and learning.

Hunter College of the City of New York trains teachers for both elementary and secondary schools, and the instructors of its various departments are alert to the advantage of this method of curriculum enrichment. Through the interest of the Chairman[2] of the Educational Department of the College, coöperating with the Principals of the Hunter Elementary[3] and High[4] Schools, the author of this article was given the opportunity of planning and presenting Audio-Visual programs which integrated with various areas in the curriculum of the College, and demonstrations in which teachers-in-training and children of the Elementary School took part.

Between February 24th and May 23rd of last year, forty-seven illustrated and integrated programs were presented for the various members of the Instructional Staff of the College Educational Department. Some of the areas of enrichment are shown by the following program titles: "The Value of Audio-Visual Enrichment in the Curriculum," "Making History Vivid," "Monuments of New York City," "Beauty in Building," "How to Look at Architecture and Sculpture," "How to Look at Pictures," "When New York Was New Amsterdam," "Life in a Medieval Castle," "Shakespeare's England," "Italian Backgrounds in Art." The visual enrichment in these programs consisted of large color prints, stereopticon slides and 16mm films from the Metropolitan Museum of Art Lending Collections; slides, habitat-groups and dioramas from The American Museum of Natural History, New York City; and book and magazine illustrations. College students were made acquainted with the many aids in Visual and Audio-Visual Enrichment available for their use as teachers, in Art, Natural History and

[1]E. Winifred Crawford, Director of Visual Education in the Public Schools and Instructor in Visual Education, State Teachers College, Montclair, N. J.
[2]Professor Philip R. V. Curoe, Chairman of the Department of Education, Hunter College of the City of New York.
[3]Dr. Florence Brumbaugh, Principal of the Hunter College Elementary School.
[4]Dr. Jean Brown, Principal of the Hunter College High School.

VISUAL AIDS

Business is good in the Visual Aid Room. Grade 5A was in charge under the guidance of their teacher.

the Curriculum

How audio-visual programs integrating various areas of learning are developed at Hunter College with the aid of student-teachers and demonstration classes.

History Museums; Art Galleries; Libraries and other Educational and Commercial Bureaus and Companies.

Whenever possible, these Audio-Visual Enrichment programs—often with appeal to the sense of touch, as well—were held in the Hunter Elementary School Library-Museum, as demonstrations of Integrated Programs of especial interest to classes from the College and to student-teachers, since children took active part. Integration of Art Appreciation and Creative Expression in Art, Literature, Dramatics, Social Studies and Music created greater understanding and interest on the part of the children in the various areas and their relationships. Older children from the departmental classes helped the younger in the interpretation of these programs, and in the resultant creative expression under the guidance of the Teacher of Art.[5] College students, assigned to Literature and Art, and to the non-departmental classes taking part, thus add to their teaching experience through observation and through personal assistance in the planning and developing of these programs in which various areas of learning in the curriculum are integrated. They have gained experience in the selection of color prints and stereopticon slides, and together with children from the eighth year classes, have distributed the Metropolitan Museum color prints daily, to the various rooms in the school, and stereopticon slides as ordered by various class and subject teachers.

The following are examples of some of these experimental Integrated Programs, given as demonstrations:

1. *Beauty in Building*—a Radio "Television" Demonstration, before seven College classes, by eighth year pupils, integrating Dramatics, Art, Literature, Social Studies, and Music. Some of the College students who observed wrote their impressions, and eighth and sixth year pupils made original drawings, in color, of their interpretations.
2. *The French Maid Who Saved Her Country*—enriched by Audio-Visual Aids, integrating Literature, Art Appreciation and Creative Expression, and Social Studies. Eighth year pupils guided third year children in their creative interpretation and expression. College students assisted with stereopticon slides and helped with the mechanics of the entire program.
3. *Springtime* in poems, songs and colorful pictures of flowers and birds. College students led the second, third and fifth year children in music, and the children themselves presented poems and stories, and discussed the pictures.
4. *How to Look at Pictures*—demonstrations with various grades in the school from the first year through the eighth. College students helped select the color prints and slides. As each picture was presented it was discussed by the children not only from the point of view of the story, but also from that of the "Language of the Painter."
5. *Indians in Art and Story*—a demonstration by third year children in Indian costume, assisted by eighth

(*Continued on page* 28)

[5]Marie A. Boylan, Teacher of Art in the Hunter College Elementary School.

Visual Education in the Air Corps Technical Schoo

A report on production activities of the Training-Film Unit and value of visual aids in technical instruction.

LT. NED L. REGLEIN
Director, Training Film Preparation Unit,
Chanute Field, Rantoul, Illinois

Top, Cameraman preparing to take a shot for a filmstrip. Other three pictures show motion picture crew shooting in the Teletypewriter Department, Chanute Field.

VISUAL education in the Army is about thirteen years old, but it is only recently that much emphasis has been placed upon motion pictures, film-strips and associated aids. In 1937 the first Training-Film Field Unit was established by the Signal Corps. Since then, similar organizations have been set up throughout the Army. The Air Corps has been particularly interested in the possibilities of visual aids, and at present there are four Training-Film Preparation Units functioning to help in the great task of teaching scores of thousands of men the highly technical phases of present-day aviation.

The Air Corps Technical School, with branches at Chanute Field, Illinois, Scott Field, Illinois, Lowry Field, Colorado, Shepherd Field, Texas, and Keesler Field, Mississippi, has been actively promoting the use of visual aids in its Army classrooms. Not only are training-films (motion pictures) and film-strips used, but also large colored charts, reproduced by the silk-screen process, are utilized. The latter are printed for the Air Corps Technical Schools by the Illinois Art Project.

Training-films used by the Air Corps and by the Army at large are produced either by industrial and commercial concerns, or by the War Department. For example, the film "Sex Hygiene" was produced by the Academy of Motion Picture Arts and Sciences in collaboration with the Medical Department and the Signal Corps. On the other hand, many subjects are completely produced within the military organization; for example, the motion picture "Principles of Electricity Applied to the Aircraft Engine", which is a joint production of the Air Corps and the Signal Corps.

Visual aids play a particularly important part in the Air Corps Technical School because of the complexity of the subjects and the huge number of students involved. At Chanute Field alone more than nine hundred students are graduated every two weeks from a twenty-two weeks' course. In the Air Corps Technical School Branches, courses in airplane mechanics, meteorology, parachute rigging, aircraft radio operation and maintenance, aerial photography, and many other highly technical subjects are taught. Thus the value of training-films and film-strips becomes apparent at once.

A Training-Film Preparation Unit has been activated at Chanute Field, Illinois, to produce plans and materials for films and film-strips to be used in teaching future airplane mechanics, parachute riggers, weather observers, Link-Trainer instructors, radio mechanics, and other technicians. The staff includes three com-

(*Concluded on page* 31)

A Radio in the Schoolroom?

Emphasizing the need for careful planning in order to derive the fullest benefits from school use of radio.

ELIZABETH STADTLANDER
State Teachers College,
Slippery Rock, Pennsylvania

THE radio, the movies, the automobile! Are these the very banes of teachers' existences? When Johnny is so tired that he can scarcely sit up because the automobile has made it possible for him to be a part of an entertainment fifty miles away, then truly the automobile does harass the teacher. If the class slumps into a lethargic state every other day because the movie manager brings a new show to town every other night, then indeed the motion pictures fret the teacher. And the radio! No matter what topic is to be discussed, someone has heard a program about some phase of the work so that just the edge of the presentation is taken off and the class becomes worldly wise.

But what of the other means of gaining information? Are there no library books in schools today? Are textbooks in disrepute? Can teachers not teach effectively any longer? Can children not imagine what a region or event might have been like without having a visual image plus sound effects to imprint it upon his mind?

Yes, all of the best of the former methods of teaching still exist. Children are still taught carefully and encouraged to read. Textbooks and library books are constantly becoming more enticing; their pictures are examples of sheer beauty, their contents are more vital to the interests of children, and the physical aspects of the books are far better. Teachers themselves are mostly products of at least four years of college training, during which time special emphasis is given to building backgrounds for well-rounded personalities. What then makes it necessary for teachers and pupils to go beyond the four walls of the schoolroom in order to gain concepts of present and past events?

You would not ride into town in a horse and buggy if a train, bus, or car made the same trip. Why then should teachers employ horse and buggy techniques in their teaching? No good teacher will supplant her teaching with the movie machine, the school bus, the radio, or any other extraneous device. In fact, no teacher who is truly interested in the welfare of her pupils will ever be content with substitutes. And every teacher will find that the use of these sensory aids makes teaching more rather than less complicated. Every teacher who has tried to supplement her teaching with visual aids has found that such lessons require additional preparation, additional skill in the manipulation of the device, and additional assistance from outside sources in order to make the devices available to the class.

In spite of all the extra preparation involved, however, the alert and interested teacher knows that such lessons are of value to her class, that such materials are preparation for the present as well as for the future, and that children react favorably to the use of those implements of learning which are common to the home and the community.

Far from supplanting teachers and their work, the broadcasts of the National Broadcasting Company and the Columbia Broadcasting Company are designed to supplement and vitalize their work. They bring into the classroom the living world in the form of important national and world events, of fine dramatic and musical talent, of living stories from the literature of the past. They are planned to broaden the student's horizon and inspire him to increased reading and greater interest in his work.

But like reading or writing, some training must be given. It has been observed by teachers that children can close their ears to extraneous noises and speaking, while they carry on with their work. Is this the result of the radio in the home? Do children listen half-heartedly to programs and promptly forget all that has been heard? Do children simply close their minds to the radio when they have other things to do or to think about? If the sensory impression made by the radio is weak due to the common use of the instrument in the home, the first duty of the teacher in planning the use of the radio in the school is to improve the sensory attention.

With the advent of the radio in the school and with this problem in mind, the children of the sixth grade of the Laboratory School of the State Teachers College at Slippery Rock, Pennsylvania, decided to tackle an experiment with their hearing abilities. With the help of the teacher, the children decided to weigh their various class procedures against the radio. The various procedures which had been used were reading, reading and discussing. Against these two methods they chose to weigh hearing. They had been hearing the Columbia Broadcasting Company's morning programs. They had been studying Latin America. For two mornings out of the week these two problems dove-tailed. How much better were the presentations, how much more important to the child. They all liked the radio programs, most of them liked to read, and all of them liked to talk.

To put the problem to an actual test, the teacher gave a reading lesson on one phase of Latin American life followed by a short factual test; another lesson on the Americas involved reading and discussion culminated by a short factual test; a radio program of historical events of South America was completed when the short factual test was given. The children offered to do their best in order to test the various procedures.

As a result of this experiment, the children discovered that reading and discussion were superior to listening. The self-activity necessary to participate in a group discussion convinced the children that active learning is superior to passive listening. On the other hand, the children discovered that listening was superior to reading. They explained this by the fact that the action as described in a radio portrayal of an

event lends interest and color to the story. Children at this age are not ready to study and learn by themselves; they are much too social for this type of teaching. They also learned that discussion and reading are superior to mere reading alone. Again this points to the very social nature of pre-adolescent children.

The next interest with the children lay in the determination as to whether they could improve their listening ability if they desired to do so. After hearing several more programs, they asked for a test to discover if they were listening any better. These results showed that 87.1% of the children had improved in their listening capacity.

Such experiments are not so important in and of themselves, but they do indicate a trend. They do point out that children as well as adults can go blithely on with a radio blaring and still be oblivious to the fact that there is noise if not something of importance being broadcast. They also indicate that training in the choice of materials, in the evaluation of the programs which come across the wave lengths, in the critical digestion of programs are important factors in the training of our children for life in a democracy which we hope—indeed, intend to maintain.

If such facts are true of the sixth grade, they must be equally true of other grade levels. If teachers are going to employ the modern devices of teaching, training in the wise use of these devices must be developed. If the broadcasting companies are interested in serving the youth of this land, they must provide programs which are suitable for very young children at a time when teachers may lend a hand in this training. In order that we may begin this training of children in the primary grades, just as we begin the training of children in health habits, reading skills, and motor coordination, programs for wee tots must be presented. Teachers in collaboration with broadcasters hold the solution to this problem.

How We Use Motion Pictures in Chemistry Instruction*

Some conclusions as to how films serve the teacher of chemistry, as drawn from one professor's experience.

DR. CHARLES M. MASON
University of New Hampshire, Durham

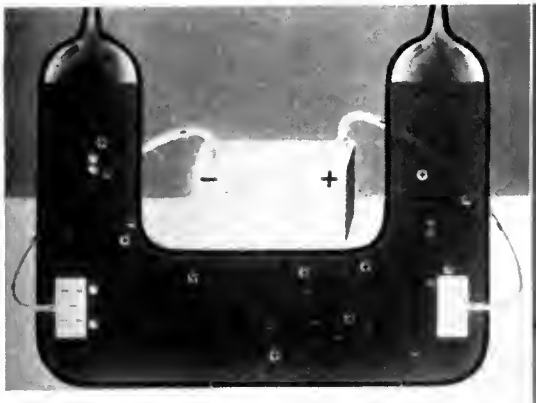
FOR at least eight years the chemistry department at the University of New Hampshire has been experimenting with the use of motion pictures to supplement the regular instruction in chemistry. Up to the present time the work has been entirely supplementary to classroom instruction. It has also been entirely voluntary on the part of the students as far as attendance was concerned. About five years ago the irregular program then in use was abandoned, and replaced by a series of film showing held at a regular time each month. For the last five years these showings have drawn an average attendance of about 125 students with no other stimulus than mild advertising consisting of class announcements, bulletin board postings and short descriptive notices in the college paper. For the future, however, improved equipment will enable us to abandon this procedure and reach all of the students, as the films will be used in the classroom. It is also intended to make use of film slides in the lectures which will supplement the moving pictures to some extent with a more flexible visual program.

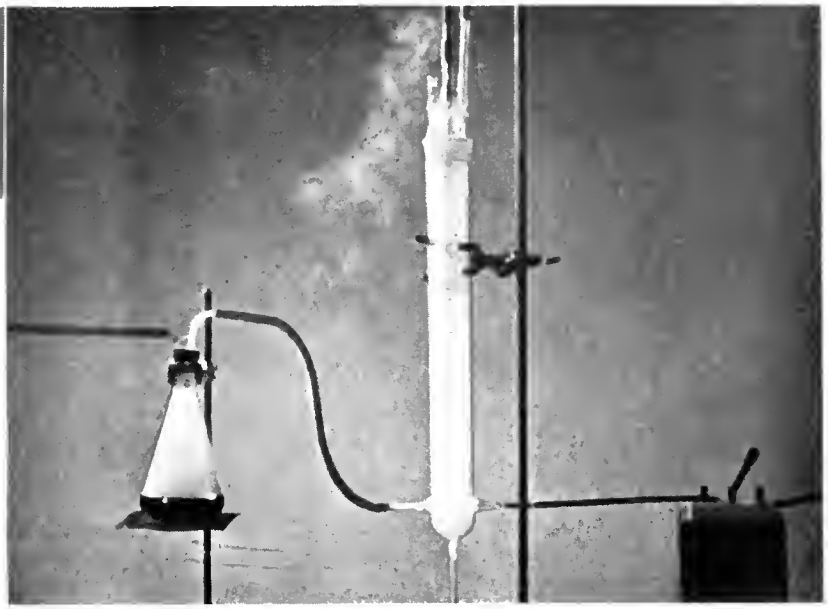
Looking back over the years of experience with this program one finds several conclusions which can be drawn from the experience gained. In the beginning we depended on silent films but by 1936 it became apparent that these could no longer be considered entirely satisfactory. In the first place, the complete use of sound film in commercial work presented to the students an experience and perfection which made them less responsive to silent pictures. Secondly, the industrial concerns began to produce their educational films in sound and such pictures, even with titles, are not suitable for the one-third slower speed at which silent pictures are run. Although we have never given up the use of silent pictures, as there are some so good we feel we cannot, we now supplement these with music by means of a turntable, running them usually at sound speed. Since 1937 therefore we have depended on sound films almost entirely with correspondingly better results.

Our records show four major sources of suitable films for instruction in chemistry. In general one must

A scene in "Exploring With X-rays"—General Electric film.

* Presented before the meeting of the Northern Division of the New England Association of Chemistry Teachers held in Durham, New Hampshire, April, 1941.





Above, An electric current decomposes hydrochloric acid into its elements—from "Electrochemistry." Right, An experiment on "Colloids." Both are Erpi Classroom Films.

differentiate between films designed to teach with, and those which merely explain a given chemical process. The first class of films, as far as use is concerned, are those of high educational value, such as "Colloids," "Electrochemistry," "Catalysis," prepared by Erpi. Eastman Classroom Films, and American Museum of Natural History are other sources. These are, however, all too few. Then as a rule they are rather elementary for college work and can serve only to illustrate a few topics of class discussion. Those with the most animation are, in my judgment, the best, as pictures of lecture experiments will always be a poor substitute for the real thing. Films of this type are of most value in teaching such subjects as the kinetic theory, atomic theory and electrochemistry.

A second class of films of great value are those prepared and loaned by the federal and state governments, particularly the U. S. Bureau of Mines. "Sulphur" is a typical example. In general, for science at least, we have always found all films in these groups to be entirely satisfactory. It is of interest to note that the new announcements of the Bureau of Mines are all in sound—a reversal of their previous policy. There are so many government agencies issuing films, it is impossible at any one time to give a complete list. Most film depots, such as those here at New Hampshire and at Boston University have many of these films on deposit. Some departments of the government prepare from time to time lists of films and these can be obtained by writing direct to the publicity offices of the departments. Such lists tend to get out of date very rapidly.

A third important class of films are those prepared by industrial firms for educational use. "New World Through Chemistry," "The Wonder World of Chemistry," and "Steel, Man's Servant" are examples. Unfortunately, some firms confuse education with advertising and so these films have run the whole gamut from excellent to terrible. Great care must be taken to avoid films prepared for sales work as students tend to take these cynically and learn little. Good industrials are hard to beat, however, in educational value, particularly in explaining a process of manufacture and in giving students an insight into the enormous size of chemical industry. Such films are best obtained direct from the advertising departments of the companies concerned. Among the best companies are duPont, General Electric, Westinghouse, and the Ford Motor Company. Several of the chemical companies also have single films they have loaned us.

A fourth class of available films are those prepared by professional producers either in Hollywood or otherwise. At the present time these are not very plentiful. They are usually rental films and therefore often become obsolete before they are discarded from the theatres. We recently rented one such film in good faith which depicted a process which has been discarded for fifteen years.

Our experiences have led us to certain definite ideas about the value of pictures obtained from different sources as follows:

1. In general, new industrials will be more up-to-date than corresponding films prepared for rental purposes, as there is a tendency in large corporations to discard films very soon after they are made. In industrial pictures, however, the topic will be limited strictly to manufacture and use of a certain product and very little fundamental chemistry can be taught by them.
2. Government pictures are always good. They will teach processes about the mineral industries which can be taught in no other way.
3. Rented films, except those of known educational value, are to be avoided due to their rapid obsolescence.

In conclusion, one might say that we have found that our films have their greatest value along three lines. They serve, first, to create an interest for the ordinary student in chemistry as it really is in life, and, furthermore, they show chemistry out of the test tube stage, a feat impossible in the laboratory. Lastly, they serve to "drive home" visually the processes and ideas which the teacher is trying to get over to his pupils. All films are an aid, a means to an end and should be so considered. They only supplement careful teaching in the classroom.

MOTION PICTURES— NOT FOR THEATRES

Installment 33. — Film activities of U. S. Government agencies are reshaping the entire non-theatrical field. Here is their history from the beginning.

By **ARTHUR EDWIN KROWS**

IT has been related here that in 1912 Paul Redington, who became chief of the Bureau of Biological Survey in 1927 but was then engaged in field work for the U. S. Forest Service, accompanied an Edison newsreel cameraman into the Sierras. This, though, did not represent the earliest motion picture work of the Department of Agriculture, that having been accomplished in 1908, when Lewis Williams, chief of the Division of Illustrations, and W. S. Clime, his assistant, filmed a flight of the Wright Brothers at Fort Myer.

The camera used at that time, a Jenkins machine with a so-called "beater" movement, was brought forth again, in 1910 or 1911, to photograph cattle shipments for Joseph Abel, of the Bureau of Animal Industry. Secretary "Tama Jim" Wilson did not approve of motion pictures then, so C. Francis Jenkins, (founder of the Society of Motion Picture Engineers in 1916—he died in 1934), inventor of the camera in question, personally used it to help the good work along by surreptitiously "shooting" Wilson while he was addressing a group of Corn Club boys. The resultant film, sprung on the old gentleman as a surprise, won him over.

In 1912, the time of Redington's trip, the Department of Agriculture film endeavors began in earnest. W. S. Clime and George R. Goergens, under Andre Boetcher, chief of the Section of Illustrations, were regularly assigned to motion picture activity, and a laboratory—possibly the first government film laboratory in the world—was established. Two years later, 1914, a Departmental motion picture committee was set up under the late George Wharton, then chief of the Office of Information; and by 1915 the service was so far grown that it sent some forty completed subjects to the Panama-Pacific International Exposition at San Francisco.

Don Carlos Ellis (not related to Carlyle Ellis) was placed in charge of the Department of Agriculture film work in 1917. Thirty-four years of age, he had been engaged during the preceding six years in educational projects for the U. S. Forest Service. Before that he had been an instructor in English and history at Gonzaga College, where he had obtained his master's degree after gaining his bachelor's certificate at Georgetown. He remained at the Department of Agriculture film post until late in 1919.

Under Ellis there seems to have been intensive effort to obtain theatrical circulation of the Department motion pictures, the need probably arising from the exigencies of wartime, because normal use of reels from this source is primarily for county agricultural agents of the State Extension Service. May 12, 1917, "by official wartime request," Bray used a Department of Agriculture film in "Paramount Pictographs No. 67" and six months later, in October, 1917, Universal began releasing the "first pictures" made by the Department of Agriculture. The Bray output showed the improved results to be obtained by intensive farming. The Universal announcement, at least, covered an entire series, it being stated there that the subjects "will include some studies of the work of the Forestry Bureau in preventing and fighting fires in the big forest reserves under Government control, and other timely subjects will show the new methods of preserving vegetables by drying and by utilizing the cold pack." I have no information to show that this elaborate Universal series ever materialized—and certainly the pictures named were not "the first."

Raymond Evans came to film work in the U. S Department of Agriculture with native understanding of farm problems and a newspaperman's way of presenting the helpful answers.

Ellis's personal relations with Universal must have been exceptionally cordial, however, for, in 1920, he joined Harry Levey as "director of educational production" there. In March of that same year he was succeeded at the Department of Agriculture Section of Motion Pictures, which was then a part of the Division of Publications, by Fred W. Perkins. Perkins showed much activity in the place, writing promotional articles and delivering lectures on the work, besides expanding the service itself. He had come to the Department in 1917 as staff member of the Office of Information after approximately ten years of newspaper experience.

In 1921 the Section of Motion Pictures was transferred to the Extension Service as the Office of Motion Pictures. In 1922 the Office was housed in a laboratory building on C Street, built especially for the purpose. In 1924 the growing activity was provided with a separate building all its own, containing a studio, a complete processing laboratory, vaults, cutting space, projection theatre and offices. The chief cameraman there then was George R. Goergens, who is still vitally occupied with the film business of the Department of Agriculture. The Department circular of 1922 named 150 of its motion picture subjects, mostly single and double reelers, which would be furnished free (plus transportation charges) to responsible applicants. Approximately 182 subjects were being distributed in similar fashion in 1924, and the estimated number of persons who had viewed them during that year was ten million. Titles included reels on plant and animal care, federal meat inspection, home conveniences, national forest resources, game conservation and the organization of juvenile agricultural clubs.

Late in 1924 an especially promising arrangement was concluded whereby Pathé would produce, in coöperation with the Department of Agriculture, a series of pictures on the basic industries of the United States. In the following spring the first two of these were released: "Meat—from Hoof to Market," and "The Kindly Fruits of the Earth," both one-reelers. Each was accompanied by a syllabus for teachers. In the meantime, the direct production of the Section itself, speeded up, and announcement succeeded announcement of films on earthworms, grasshoppers and other insect pests, and one called "Milk for Health," in which Walter Johnson, baseball pitcher idolized by American youth, attested the virtues of that well known fluid for emulation of his example in drinking it.

Work of the Section for 1925, as reported by the Secretary of Agriculture in the first formal annual statement of that sort required of him, estimated showings, to and including that year, to 900 million persons of a library of 1,862 reels, comprising one to fifty copies of 201 separate subjects. Among the 201 were "The Ox-Warble—a $50,000,000 Tune," "Clean Herds and Hearts," "Out of the Shadows," "The Golden Fleece," "The Charge of the Tick Brigade," "She's Wild," "Cloud-Busting," "There's Magic in It" and "Weighed in the Balance." Distribution was accomplished chiefly through the 3,000 to 4,000 county extension agents of the Department. Many more subjects were produced in 1926, with still higher circulation figures. But, at the end of that year, the efficient Mr.

Perkins resigned to become southern district manager for the Newspapers Film Corporation and Jam Handy Picture Service of Chicago.

Perkins was succeeded as chief by Raymond Evans. Mr. Evans also was conscientious and able, as the records of his earlier career amply indicate. Born at Morristown, Tennessee, in 1875, he was reared on a farm in Central Ohio when American agriculture was in a period of its lustiest expansion. Farm youths then especially looked to city futures, and Evans, no exception, presently found himself in metropolitan newspaper work, attaining that success which was marked by his becoming successively, from 1897 to 1913, Sunday Editor of the Toledo *Times-Bee,* editorial writer on the Pittsburgh *Sun,* Sunday Editor of the Pittsburgh *Post,* and feature and editorial writer for the Newspaper Enterprise Association. In 1914 he became private secretary to the Assistant Secretary of Agriculture; and after only a year there, he was appointed Editor in Farm Management for the U. S. Department of Agriculture. In 1921 he joined Perkins in the Motion Picture Section, Perkins himself having only lately become chief: and when Perkins resigned in 1926, as already related, Evans replaced him. Probably no one has occupied this post in an atmosphere of greater loyalty and affection on the part of his close associates. Under Evans the records of service continued to grow. But under him, too, the public announcements of what was being accomplished took on a less exultant tone. To the *blasé* outsider this could have but one meaning—that politicians were beginning to notice that here was another Government activity which might be given a trading value in the patronage system. The idea must therefore be discouraged, and what could be more expedient than to minimize the achievements? To express pride in doing a good job for the people is not always wise.

In July, 1926, the motion picture activity of the Department of Commerce was inaugurated as a Section of the Specialties Division. In 1929 it was elevated as a full Division in its own right. The function here was to promote and develop the foreign and domestic commerce of the United States through the medium of the screen, not by producing films, but by keeping track of the normal activities in the line throughout the world. In this place much valuable work has been accomplished by the research assistant, Mr. E. I. Way, he having done perhaps more than anyone else previously to accumulate, for reference purposes, the current information on the entire non-theatrical field.

When the Section was made a Division, in 1929, there was appointed to command it Clarence J. North, who had joined the Specialties Division in January, 1923, as an editorial assistant. North, born at Swampscott, Massachusetts, in 1892, had studied at both Harvard and Columbia Universities and had been managing editor of *Export Trade and Finance,* a trade paper in New York. He resigned

By enlisting wide coöperation of private industry, Morton Leopold built for the U. S. Bureau of Mines a large and effective film program.

from his film post in 1933. Nathan D. Golden, an Ohioan born in Bellaire in 1896, who had had motion picture connections in the years before the World War, was his successor. The foreign representative of the section was George R. Canty, stationed at Paris with the rank of trade commissioner. Canty is the same who, in 1937, became continental European manager of Universal Pictures, and who, in 1939, resigned from Universal to return to United States Government work. Much of the impetus given the film endeavors of the Department of Commerce has come from Julius Klein, who was Assistant Secretary of Commerce of the United States from 1929 to 1933, and wrote extensively in newspapers and magazines concerning the American motion picture's influence on world trade.

Motion picture work of the Department of the Interior has been most important in the U. S. Bureau of Mines which, in 1929, boasted that its 525 sets of subjects, "totalling a length of more than 250 miles," composed what was believed to be the largest collection of industrial films in the world. In April, 1941, the library was reported to contain 5,000 reels comprising prints of more than sixty different films. They had been provided through an interpretation of a clause in the act passed and approved by Congress February 25, 1913, wherein, after defining the province and duty of the Bureau of Mines as to conduct investigations into mining for general efficiency and well being of the workers in the industry, it was added that the Bureau should "disseminate information covering these subjects in such manner as will best carry out the purpose of the act."

Among the chief producing causes of the establishment of the U. S. Bureau of Mines, July 1, 1910, had been recent Alabama mine explosions—at Hulga, where forty-one men were killed, and at Palos, where approximately 150 were entombed. These calamities made safety a strong factor in the aims. Morton F. Leopold, happy always to describe himself as a safety engineer, was therefore placed in charge of motion picture production and, from his office in Washington, he performed his duty with energy and enthusiasm. The first Bureau film was made in 1916, when he took this special command. Scenarios for given subjects have long been prepared under his personal supervision, and he also coöperates intensively in production. Leopold was born at Duluth, Minnesota, in 1889. He studied for two years at the University of Pennsylvania, one year in the U. S. School of Submarine Defense, and one in the Engineering School. For five years he served in the Army. His connection with the U. S. Bureau of Mines dates from 1911.

About 1920 officials of the Bureau decided that it was of importance to have a really elaborate educational film program instead of just a few "shoestring" reels. But the question was, how to do it? As in other Government bureaus, the funds for picture-making were limited if not non-existent. However, the Bureau of Mines made up this deficiency handsomely by gaining the coöperation of leading private industrial organizations throughout the United States. They opened their plants and systems to give Leopold all the subject matter he needed, and paid the production bills besides. All charged to the Bureau of Mines was the sum of salaries and personal expenses of its own representatives who supervised the work. The first film to be provided in this way by the mining industry was "The Story of Coal," which was made principally to show safe mining practices in that field. An oddity among these coöperative productions is a four-reeler, called "When a Man's a Miner," presented to the Bureau of Mines in memory of Francis S. Peabody, well known Illinois coal operator. During 1940 over a million dollars was appropriated by members of the mineral and allied industries to carry on the work. No Government funds whatsoever are expended in production, save as already indicated, or in providing copies for distribution. Each picture is devoid of trade names and all other material which might be construed as advertising.

High officials in these compliant private industries frequently remained with the production crew to advise and to issue necessary spot authorizations. Sometimes new equipment and machinery were supplied to make desired effects possible. In one case a petroleum pipeline was thrown across the Mississippi River just to show how such a job was done and, on another occasion, several hundred tank cars were painted so that no trade name would appear upon them. To produce the subjects selected the Bureau cameramen visited many remote places. One traveled through Continental Europe and into Africa to photograph oil fields, incidentally being shot at and jailed by suspicious authorities and released only upon intervention of the local American consul. For a picture on copper the Bureau representative journeyed 25,000 miles,

which included a jaunt to Alaska. They went overland, overseas, high in the air and deep under ground. In various instances the making was undertaken by regular non-theatrical producers, although, of course, the Bureau representatives remained in command. A specific instance was "The Story of a Spark Plug," produced under the direction of the Bureau in 1925 by the Atlas Educational Film Company. Rothacker also was favored.

Distribution of the films is conducted mainly by R. A. Wood from the Bureau of Mines Experiment Station at Pittsburgh, best situated for mining interests, and from fourteen regional sub-centers. The circulation, however, has always been exceedingly wide, the excellent safety lessons making the reels especially valuable in regular schools and in centers devoted to adult education. In one three-month period, about 1929, it was estimated that the Bureau of Mines reels had been viewed by 665,000 persons. In 1938 it was reported that in the preceding year they had been attended by 10,351,732. Many sets have been purchased for exhibition in foreign countries, notably Japan, such sales having, of course, proper Governmental authority. Foreign demand is marked also for the films of the Department of Agriculture. Requests for some items are so numerous that prints are booked a full year ahead, and a number of subjects issued by the Bureau of Mines are in such favor that a hundred copies apiece are used for circulation.

However, in industrial coöperation of this sort there are embarrassments. In November, 1923, Hubert Work, Secretary of the Interior under the Republican Presidents Harding and Coolidge, was obliged in a public statement to deny favoritism in production of Government films and, in the autumn of 1924, there was further explanation demanded by the Democratic National Committee in furtherance of its disclosures on the so-called Teapot Dome scandal, charging that the Sinclair Consolidated Oil Corporation had maintained a propaganda partnership with the Bureau of Mines in producing its celebrated seven-reeler, "The World Struggle for Oil."

The U. S. Department of the Interior has had its other motion picture activities principally in its Bureau of Reclamation and its National Park Service. It was through its Bureau of Education, which acts as a clearing-house of information on visual aids and produces no films, that A. P. Hollis issued his useful bulletin, *Visual Education Departments in State Institutions*. From the Bureau of Reclamation, in 1929, might have been procured thirty-three reels of information almost exclusively on western Government projects for irrigation and soil recovery. In the National Parks Service at the same time were to be found about seventy popular reels, mostly scenic in character. Herford Tynes Cowling began his motion picture career in 1909 at the Bureau of Reclamation, which he joined at the age of nineteen in capacity as a cameraman. He remained there till 1916, in which year his films on the national parks, made for the Government, were deemed sufficiently important for theatrical release by Gaumont.

The Department of the Interior abolished its film work in 1923. But it was resumed three years later, at which time Dr. Maurice Ricker was transferred there from the United States Public Health Service. He rebuilt the laboratory and produced several pictures—until 1929, when he was recalled to the Public Health Service and detailed to duty in New York to make films in collaboration with Dr. Bruce Mayne, of the Malaria Division of the P.H.S. Fanning Hearon, who was director of motion pictures for the Department of the Interior in 1937, became executive director of the Association of School Film Libraries in 1938. Ellsworth C. Dent, who also was Department film chief for a time, later became head of the educational division of RCA-Victor.

In the Department of Labor the motion picture interests have been primarily in the Children's Bureau and the Woman's Bureau. These Bureaus, insufficiently supplied with funds for production, necessarily have had scanty screen programs. Both were served by Carlyle Ellis, among others. He made two or three of the subjects on a speculative basis, regaining his production costs out of print sales, an interesting method, but scarcely a profitable one. For the former Bureau he produced the celebrated and notable items "Our Children," a child hygiene picture, "Well Born," on prenatal care, and "Sun Babies," on prevention of rickets. For the latter he made "When Women Work," a two-reeler contrasting favorable and unfavorable factory conditions. It was said of "Our Children" and "Well Born" that, with their English titles translated into five other languages, they were being shown exhaustively in the British Isles, South America, Central Europe, China, and most of the British possessions, including India and Egypt.

The Woman's Bureau had also a single-reeler concerning its own organization and operation, a two-reeler reciting the history of women in industry, and another single reel entitled "Within the Gates," remarking the importance of women as producers of the world's goods. One other Bureau in this Department, which showed a disposition towards a continuing film program, was that of Immigration. In the summer of 1916 it announced its completion of the first subject in a series. That one was called "The Americanization of Stefan Skoles."

The U. S. Army and the U. S. Navy are, and have been heavy users of motion pictures for recreational purposes—the Navy alone was estimated in 1936 to be spending $307,000 annually for this, while Thomas H. Martell, of the Army Motion Picture Service in New York, was arranging bookings for a circuit of seventy-seven Army theatres—and, as their branches of service have great popular interest beside, theatrical producers have applied to them frequently for permission to use their personnel and paraphernalia in related stories. This aid has been given generously, despite occasional criticisms from persons imperfectly informed, so long as the purposed film has been one which would stir patriotic feeling or promote recruiting. All the Government asks in return is that one print of each completed subject shall be assigned to the given Department's archives.

The film exhibition section of the Navy, as reported in 1932, had 287 show units throughout the world. Distribution and servicing of the reels was handled from main exchanges at New York, San Diego, California, and Cavite, Philippine Islands, supplemented by exchanges assigned one to each major operating unit of the fleet and by lesser exchanges at Navy bases.

Direct production of Army and Navy, save in war emergencies, has been comparatively slight. A few subjects have been made first-hand to encourage enlistments, to illustrate technical points of training and for vocational guidance of men retiring from service—during the First World War the Signal Corps itself made sixty-three reels of training films; but the larger needs have generally been cared for by outside producers. In the Army the U. S. Signal Corps, which has its own well equipped studio and laboratory, has done most of the internal picture-making; in the Navy it has been the Recruiting Bureau and, occasionally as warrant has arisen, a few other Bureaus have been active. The Bureau of Navigation had an official motion picture cameraman—his name was J. M. Blaney, and he remained there till 1915—beginning in 1908. The Signal Corps specifically is said to have made its first contract for a training picture with the Lee Film Company, of San Antonio, Texas, April 5, 1917, when American troops were on the Mexican Border. John J. Pershing, then Major-General of the Army in that quarter, personally approved the document. War was declared on Germany by the United States the following day.

Picture work is shared by three branches of the Army, the exhibition agency, operating through the Adjutant-General's Department; the Signal Corps, which produces all the relevant pictures "on the ground"; and the Air Corps, which makes those off the ground. With the rapid expansion of military aviation the U. S. Army Air Corps has gone extensively into photographic service. There were, in 1936, fourteen Army Air Corps aerial photographic sections in the continental United States, Panama, Hawaii, and the Philippines, and a motion picture unit in the Office of the Chief of the Air Corps to coöperate with newsreel agencies and to distribute Air Corps films for publicity, educational and training purposes. The Air Corps laboratory, situated at the Materiel Division, Wright Field, Dayton, Ohio, is managed by Louis Hagenmeyer, who has been with the Division since 1918. An especial school to train the Army aerial photographers is conducted at Chanute Field, Rantoul, Illinois.

In 1929, when Maurice Ricker left the Department of the Interior and came to New York for the United States Public Health Service, talking pictures were coming in and were beginning to be used in Government work, notably by the Army and the Department of Agriculture. As related problems arose, the Government film men naturally consulted Ricker for his specialized knowledge which had come about because, while he was connected with the Health Service as a dollar-a-year scientist, his other employment was as an engineer with the United Research Corporation, a subsidiary of the enormously successful theatrical sound film producers, Warner Brothers.

One of the Government's prime motion picture difficulties had been caused by the sudden obsolescence of its laboratories. Film development there was by the old "rack-and-tank" method; and this left disturbing marks on "sound tracks" going through. Therefore it was necessary to have all Government sound films processed outside at what were prohibitive prices for Department budgets. At last, in 1934, George Goergens, of the Department of Agriculture, asked Ricker to assist in writing specifications for a proper developing machine. That was readily arranged but bids for construction of the machine were so far beyond the limits of available funds that it seemed that the project would have to be abandoned—until Warner Brothers consented to help. Their shops at United Research being at that time largely inactive, they donated the use of their equipment and, under Ricker's supervision, a group of employees there built the developing apparatus now installed at the Department of Agriculture.

The Department of Agriculture Office of Motion Pictures was then in temporary quarters in the old Bureau of Fisheries Building, the C Street structure having been demolished to make way for erection of the present "South" Building, which is today's main Department of Agriculture unit. The new edifice, where the Office was to have, in 1935, the largest and best equipped film plant in Government service, was not yet ready for occupancy, so the needed processing machine was delivered "knocked down," not being assembled until 1936, when Ricker was transferred from the Health Service to the Department of Agriculture to install it. Incidentally, Ricker was to remain in this place long after the work in question was done. Warner Brothers sold their research laboratory to the Radio Corporation of America, so the good doctor stayed on, devoting most of his time thereafter to direction of Department of Agriculture films.

And that was not all. Major (later Lieut. Col.) E. Melvin Gillette, in charge of the motion picture laboratory of the U. S. Signal Corps, saw here an opportunity to obtain for his place a similar processing machine. Ricker coöperated as usual, and helped to design and to build the apparatus which now functions at Fort Humphreys, where all negative and positive films for the Army's expanding needs are put through.

From the U. S. Treasury Department have come the films of the U. S. Health Service, notably important subjects dealing with sex education and venereal diseases. In 1922 the section of War Risk Insurance in this Department made a motion picture, and at intervals have appeared from the same quarter reels demonstrating the splendid work of the U. S. Coast Guard.

One proposal long dreaded by operatives in the Government film divisions because of political implications, came seriously to a head in May, 1937, when William Theodore Schulte, Democrat from the First Congressional District of Indiana, introduced a bill in Congress intended to consolidate all of Uncle Sam's motion picture production in the Government Printing Office. Congressman

Gilbert Tucker's Yankee fondness for gadgets may account for the variety of film techniques in his novelty shorts for New York State.

Schulte estimated that the annual expenditure for this purpose, on the existing plan, ran to about a million dollars. He proposed placing the work under a trained, practical motion picture engineer, who would receive $8,000 per annum, with three qualified assistants at $4,800 each. No especial action was taken in the matter, but the situation received a large amount of unwelcome publicity. In one form or another the Schulte proposal may be expected to reappear at every political opportunity for embarrassment of the Bureaus. A similar bill was introduced the very next year, in January, 1938, by Senator Elmer Thomas, of Oklahoma.

State Specialties

Various individual State governments have undertaken their own film production, among them those of Ohio, Massachusetts, California, Illinois, Wisconsin, New York, Pennsylvania and New Jersey. The last-named has a considerable library available to the public through its Department of Conservation and Development at Trenton. The Virginia Fisheries Commission made the first of a series in color in 1939. The California Division of Fish and Game has approximately fifty reels on its list. The Pennsylvania Fish Commission has many subjects including much footage shot by cameramen from Eastern Film Corporation. Representing that same concern I once journeyed to Wilmington to discuss with two State senators a proposed but still unproduced series for Delaware. Enthusiastic consideration has been given to a project for exploiting Mississippi in films, former Governor Dennis Murphree leading the ayes.

Illinois received its first practical impetus to State production during the gubernatorial administration of Frank O. Lowden, from 1917 to 1921. Lowden was keenly interested in fine-bred cattle, and the initial release was "The Foster Mother of the World," featuring the cow and made by the Division of Dairy Husbandry. Lennington Small, the next Governor of Illinois, was a farmer and, greatly impressed with what the first film had accomplished, he recommended motion picture production to all other State departments. The Department of Public Welfare responded with a series on institutions under its control, and the Department of Highways and Waterways with a film on road-making and traffic safety. The well organized Illinois State educational film library has had these and numerous other reels in constant circulation.

New York State has made motion pictures with fair regularity, including a series through the Marketing Division in 1920 to educate the public in food-buying methods. Particular attention has been earned by the work of the New York State Department of Health, where Gilbert M. Tucker, Jr., for fifteen years in charge of the Division of Exhibits, long made use of small appropriations to produce useful films. Most of his ingenious other exhibits he constructed with his own hands in a home workshop. I speak of Tucker out of a long, first-hand, admiring acquaintance, for I assisted Carlyle Ellis to make several of the Department of Health trailers. Ever receptive to the use of novel techniques, Tucker was responsible for much of the popularity of silhouette, cartoon and stop-motion treatment of films in the health field. It was for what later became his Division that the Edison Company produced "The Trump Card," a reel on impure milk, in 1916. In the autumn of 1937 he added to his pioneer status by having one of his films "televised."

Tucker was born at Albany, New York, the State capital where he was to serve for so long a time. He was originally a specialist in agriculture, having come of a family of authoritive writers on that subject. His father was editor of *The Country Gentleman*; and it was that celebrated farmer's weekly that gave him employment after his graduation from Cornell in 1901. His abilities were especially valuable during the First World War, throughout which distressing period he served in the work of

(*Continued on page* 21)

COMMITTEE ON FIELD EXPERIENCES

WILLIAM W. WATTENBERG
Chairman, Chicago Teachers College

FINANCING has always been one of the problems in schools making use of long distance field trips. Recognized as valuable to give young people a broad understanding of the America they live in, these trips are taken by comparatively few schools largely because financial considerations stand in the way.

Here in a letter written from one school principal in a small town in Illinois to another, a letter of advice never intended for publication, we have an example of the ingenuity which can enable a school to raise the necessary funds.

Now that war is upon us, the schools will undoubtedly have to do their share in raising funds for the Red Cross and for other defense activities. The suggestions contained in this letter will be helpful for that purpose as well. The collection of waste paper, mentioned in the letter, will be recognized as a conservation activity requested by governmental agencies. Add to this suggestion the collection of waste metal of various kinds, and the discussion of the use of that metal or the paper in class, and we again have a pattern of education, through socially useful work, emerging. W.W.W.

Media Township Community High School
Media, Illinois
JAMES B. JACKSON, Principal

"Dear Alvin:"

I have been rather tardy getting around to sending you the information you asked for over the phone the other day. I only hope that I am not too late for it to be of some use to you. If I understood you, the thing you wanted was information concerning the way in which we raised money for the Senior trip.

First of all, I might tell you that the Senior Class pays out of its funds the actual cost of transportation, bridge tolls, etc., and the cost of any conducted tours. This usually amounts to two hundred fifty or three hundred dollars ($250 or $300) altogether.

Several plans have been used here and in this vicinity for raising funds, and I am including not only the plans that we have used, but also some which I am contemplating and some which I know have been used successfully in neighboring schools. Our most profitable scheme so far has been our Senior Corn Wagon. This year we sent out the double postal cards to a mailing list of some two hundred fifty patrons of the school. The mailing list was made up from persons who had shown interest in the Senior trip in years before, and of course included the parents of farm children in school. The card carried a message from the president of the Senior Class stating the purpose of the trip and asking if the person addressed would like to contribute corn to our fund. The reply card, of course, provided space to indicate the amount of corn to be given. We sent these cards out on Thursday of last week, and to date, we have received contributions of over one hundred bushels of corn, so you can see it works.

Another plan that we are contemplating is to solicit ungleaned fields that have been picked by corn-pickers, and then during Christmas vacation, (which is two weeks here) both boys and girls from the Senior Class will glean and turn that corn into the fund. We have also served lunches at farm sales. We made about thirty-five dollars ($35.00) on one sale, and none of the food was donated. Then, of course, we have a Senior play and usually one dance each month which is open to the public.

There are several other ideas that I think are pretty good. One is the bakery sale which would be conducted somewhat similar to the Corn Wagon idea. The patrons of the school would be solicited by a postal card for their baked goods. The students would collect it, and on an advertised date would do the selling.

One of my neighboring Superintendents tells me that he runs a Senior Junk Wagon instead of a Corn Wagon. Of course, he takes up "rags, bottles, and old iron" besides anything else of slight value which the people want to get rid of. One project that can be worked out at school and which we are doing now is the baling of all waste paper and saving old magazines and newspapers from the school library. This doesn't net very much, but it helps.

I thought of a good idea the other day which I believe would work in a community which was already sold on the idea of contributions. The plan was to print up a number of gilt-edged securities in as attractive a style as possible, and offer them in denominations of one dollar, two dollars, five dollars, or ten dollars. These would simply be certificates to the effect that the holder thereof had donated a certain sum of money for financing the Senior trip of such and such a year.

One idea that I had hoped to work out this year, but didn't, was a hobby class during the summer composed of the youngsters who would be Seniors this year, and having those people work on various projects which would be saleable. Then at the various activities here, such as ball games, carnivals, dances, etc., display this material and offer it for sale.

I have thought too of some type of bazaar or white elephant sale to be held at school, either in the fall or early in the spring, so that it could be held outdoors. I have a few other ideas not very well developed yet, but I think this is enough to give you some indication of what we are doing here.

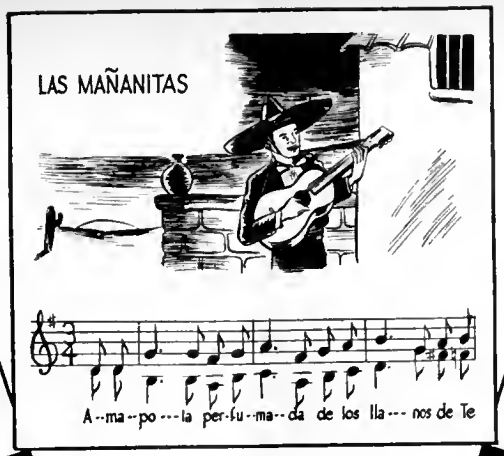
One of the most important things, I think, to bear in mind in any community is that the public must be back of the project whole-heartedly, or any money-making scheme is bound to fail, and unless that spirit of community cooperation is already established, a good deal of local publicity is needed before a campaign of the above kind can be launched. Of course you know this without my telling you.

If you run into any ideas for raising funds that sound like they would work, I would appreciate your passing them along to me.

Sincerely,
"Jim."

Las jovenes se arrodillan y exhiben sus jícaras. Cantan su alabanza «Jicaras jícaras de Michoacán...»

1



2

EL VENADO Los danzantes llevan mascaras de cabezas de venados Imitan los movimientos del venado cuando va a beber.

3

Tiende la ropa en un maguey a secar.

4

El hombre tiene prisa.

7

El padre va al mercado con su burro cargado de naranjas.

5

El niño visita el dentista de mala gana.

8

Esta es María. Lleva una falda azul y una blusa blanca.

From the Filmstrip Series on
INTRODUCTORY SPANISH
produced by
THE SOCIETY FOR
VISUAL EDUCATION, Inc.
Chicago, Illinois

The entire series consists of ten units. Scenes reproduced above are: (1) (2) (3) from the unit on "Dances and Music"; (4) (5) (6) from "A Family of Mexican Peons"; (7) (8) and (9) from "Idioms and Expressions of Courtesy."

El niño asiste al cine de buena gana.

9

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

STATUS AND TRENDS

Is There Such an Entity as Visual Education?—B. A. Aughinbaugh, State Supervisor of Visual Instruction, Columbus, O.

A bit of retrospection from a pioneer in the "visual education" movement. The author documents his belief that the motion picture is the greatest aid to communication of ideas, especially since it uses our visual sense which is the strongest of our "educative" senses. The use of motion pictures for education, Mr. Aughinbaugh contends, should be termed "visual communication."

Educational Films Today—and Their Future—Charles F. Hoban, Jr., *Cal. Journal Sec. Ed.* 16:395-9 Nov. 1941.

Two forces are in conflict (with respect to the future outlook of educational films)—those of efficiency in social function and those of economy in dollars and cents. If the former proves the stronger . . . . . motion pictures will assume a place of much greater importance in the American educational program. If . . . the latter, growth in educational utilization of motion pictures is likely to be arrested for the next decade or two.

There are at least four lines of evidence that indicate a growing awareness of the power of motion pictures—

1. The growth in the amount of projection equipment and of film libraries. The recent government survey shows at least 6,000 sound projectors in schools; in the Southeast alone, Georgia, Florida, North Carolina, South Carolina, Tennessee, Louisiana and Virginia have established libraries.
2. The increased supply of films being released for school use, by government bureaus, universities, philanthropies, commercial producers and by release of films from the vaults of Hollywood.
3. The development of films for defense-training and vocational training by government agencies.
4. The natural development that arises out of needs of national morale and civilian training programs. There is most to be done along these lines.

Educators face the responsibility of promoting the wise use of films, namely, a) using films for educational and not for recreational purposes; b) establishing school film libraries; c) buying projection equipment before the shortage becomes too acute and d) assuring teacher-efficiency in integrating films into the school program, thereby gaining public approval.

ADMINISTRATION

Visual Education—An Actuality—Paul L. Anderson—*Montana Education* 18: 15, Dec. 1941.

Facts and figures on the newly-established state film library in Montana. A grant of $6000 for each of two years, 1941 and 1942, was made by the State Legislature. The director, Harry K. Norton, traveled over the state and elsewhere to observe libraries already in existence. The film library is part of the state department.

Each school is asked to deposit one film, thus the full cost becomes $50 per year to a school. There are now 150 sound and silent films available, valued at $4000, for the library. Next year it is hoped to have $10,000 worth of films.

Contribution of Films to a School Program—Curtis E. Warren, Santa Barbara, Supt. of Schools—*Cal. Journal of Sec. Ed.* 16: 400-3 Nov. 1941

Motion pictures have become an added tool of learning for the Santa Barbara developmental curriculum, by helping to promote the objectives previously established as essential to the education of boys and girls. Films helped to develop in children an understanding of the immediate enviroment, and the ever broadening world environment. The medium was found to be effective at all age levels, but dependent upon the pupils' experiential background and skill of teacher for effectiveness. Films helped to stimulate critical thinking along many fronts. Other values growing out of the project are: increased vocational orientation, teacher growth in interpreting and evaluating the curriculum program, and improved public relations.

Running a School Motion Picture Program—Roscoe C. Lyons, Santa Barbara High School—*Cal. Journal Sec. Ed.* 16: 404-6 Nov. 1941.

By means of a question-and-answer approach, we are informed that at this high school, during the Evaluation Project, the following conditions prevailed: 1) A silent projector and a sound projector were sufficient to show 50 or 60 films a week. 2) Several rooms should be darkened so that pupils need not be moved about. 3) Licensed student operators assist in projection and in delivering equipment. 4) Orders are placed through the Visual Aids Department. 5) Films should be previewed.

The Need for a Coordinated Service Department—Don Williams, Berkeley High School—*Cal. Journal Sec. Ed.* 16:406-9 Nov. 1941.

A convincing argument for centralization of responsibility within a school. The author has reported his own activities in this connection in the The *Clearing House* (reviewed in December).

Motion Pictures: Yes, We Run a Movie Show!—L. W. Richards, Biggs, Calif. —*Sierra Educational News,* Nov. 1941 p. 28.

A description of a carefully-planned noon hour film program which is operated by school funds. Some health educators may take issue with the claim that it is better for young people to see films during lunch hour than to engage in outdoor sports.

EVALUATION AND RESEARCH

Evaluating Films Used in the Classroom—Leo F. Cain, Nat'l Training School for Boys, Washington, D. C. —*Cal. Journal Sec. Ed.* 16:410-12 Nov. 1941.

Especially valuable are the principles of good usage which teachers formulated after a two-year program: 1) There must be a definite curriculum purpose for using a motion picture. 2) The film must be an integral part of the classroom work. 3) There should be time for child reaction to the future. 4) The teacher should guide the work in the developing of the recognized purpose. 5) Free and spontaneous reactions should follow a showing. 6) Opportunity should be given for raising of new problems, altering of old ones or the setting of new purposes.

Specific Contributions of Films to Science Teaching—Abram VanderMeer, University of Chicago—*School Review,* 49:693 Nov. 1941.

A critical review of research studies that are well-known to readers of EDUCATIONAL SCREEN. The author challenges some of the conclusions of researchists, but agrees that films have a strong possibility for: a) transmitting facts; b) helping pupils to think clearly and organize ideas; and c) saving time in the learning process.

STILL PICTURES

Elements in Geography Readiness—Gertrude Whipple, Detroit, Mich.—*Elementary School Journal,* 42:25-67 Dec. 1941.

This article describes an investigation to determine when teachers and supervisors regard the child as "ready" for learning geography concepts. Among the statements submitted by educators from all parts of the U. S., there was great agreement (98%) on the fact that "an inquiring attitude toward things seen in pictures and not understood" was a good indication that the child is ready to learn geography.

In answer to the question "What experiences do children need as part of their background for 'geography readiness'?" there were listed—adequate experimental background; interests other

than reading, etc. A significant type of experience for the consideration of our readers was the "ability in interpretation of pictures" (mentioned by 10%). Further analyzed, this ability was seen as: ability to use pictures as a source of information, to note details, to select pictures bearing on a specific subject, to tell about pictures in a few connected sentences, to tell a story in a series of related pictures; appreciation of the aesthetic values of pictures; appreciation of having experienced what is shown in certain pictures; habit of reading captions to pictures.

This study points out the importance of teaching children how to read and use the understanding gained from pictures as preparation for understanding geography. It is just as important in understanding the daily newspapers, and in interpreting life situations all about us.

Building America: *America's Outposts.* Vol. 7, No. 3. Dec. 1941.

The most recent issue of this important periodical is an excellent basis for beginning the intelligent study of geography pictures, as suggested by the article reviewed above. Although it went to press before the outbreak of war, this issue of *Building America* shows through excellent pictures, maps and text the importance of our Pacific and Atlantic possessions and what it is that the inhabitants of Hawaii, Philippines, Alaska and other islands have to defend. Sources of information and materials are given.

Let Pictures Tell the Story—Gloria McIntire, Counselor, Los Angeles City Schools—*Occupations* 20:124 Nov. 1941.

A description of the way in which photographs from magazines, newspapers, or advertisements can be mounted and simple text added for imparting vocational information to retarded pupils.

PHOTOPLAY APPRECIATION

Movie Critics Are Made, Not Born—Floyd L. Smith, Principal, Woodruff School, Ypsilanti, Mich.—*School Executive* 61:34 Dec. 1941.

This article describes a movie appreciation study made by all grades in an elementary school of 350 pupils. Each grade participated in the selection and evaluation of each feature film shown, although there was variation in each room depending upon the maturity and interests of the group.

The "course" is financed by the Board of Education, amounting to about 30c per pupil. Here is how it was organized: A committee of teachers and representatives of each grade selects 15 feature films for the year. When the film arrives, the preview committee (which is changed from time to time) looks at the film and discusses ways and means of making the showing most enjoyable. They then prepare questions for discussion to be introduced to their respective classes. The showing of the film and the discussion period following take half a school day each week. The group is developing standards of discrimination which are noticeable in their movie-going habits outside of school.

History Directs the Movies—Kurt Pinthus, Institute of Social Research—*American Scholar* 10:483-97 Autumn, 1941.

A resumé of the trends in American and European motion picture production in the last 20 years. The author cites titles of films to show that producers have been influenced by world conditions—war, depression, and the like—in their choice of themes. However, the manner in which these topics were treated in movies has varied in sincerity and in effectiveness.

The Motion Picture—Iris Barry, Edwin Zeigfeld, Milton S. Fox—National Society for the Study of Education 40th Yearbook Chap. XIV. 1941.

A discussion of the motion picture as a popular art.

SCHOOL-MADE FILMS

Movies Tell School Story—Charles A. Gramet and Joseph T. Shipley, New York City—*Nation's Schools,* Nov. 1941 p. 66.

A very brief account of a very detailed production program in which all aspects of the education of a million children were illustrated through carefully-planned film scenarios.

School-Produced Motion Pictures—Robert E. Jewett, Ohio State U.—*Social Studies* 32:321 Nov. 1941.

An interesting account of a school filming project that was superior to the slapstick comedy efforts of some adolescents. The Hi-Y Club of North High School, Columbus, Ohio, decided to study and film the housing situation in their own city. They showed slum conditions and the relation of housing to child delinquency, disease and tax burdens. The author lists several of the generalizations which the pupils made after the project was over. They are certainly worthy of the time, effort and money.

NEW BOOKS

A Course of Study in Radio Appreciation—Alice P. Sterner, Barringer High School, Newark, N. J.—Educational and Recreational Guides, Inc., 1501 Broadway, N. Y. 1941 36 pp. $1.00.

This monograph appeared serially in the monthly issues of the "Group Discussions Guide." It contains suggestions for an extended course in radio appreciation. The author has included 22 units but she does not believe it essential to include them in the order given. She recommends instead that the course be adapted to the local situation.

The topics concerning radio that high-school students may find challenging are: music programs, popular programs, sports, news, comedy, drama etc. Discussions dealing with advertising censorship, the radio industry and future developments constitute a large portion of the course. This course is well conceived and ably outlined and illustrated. It belongs in each school—upper elementary and secondary.

PERIODICALS

Motion Pictures in the Secondary School—California Journal of Secondary Education, Vol. 16, No. 7 Nov. 1941. Reginal Bell and Leo F. Cain, editors. (See also Jan. 1941 issue).

The contributors to this issue were concerned, in one capacity or another, with the Santa Barbara program of the Motion Picture Project of the American Council on Education.

SOURCES

Audio-Visual Aids for Adult Education James W. Brown, Virginia State Director of Audio-Visual Aids—*Adult Education Bulletin* quarterly.

Picture File Pointers: Source Material for the School Librarian—Norma Olin Ireland, El Monte, Cal.—*Wilson Library Bulletin* Nov. 1941, p. 258.

Prepared by the School Libraries Section of the American Library Association. This compilation lists sources of pictures and a bibliography for persons interested in mounting and filing flat pictures.

Aids to Democracy: Radio, Movies, Press—a reprint of three articles by Edgar Dale, which appeared in the *News Letter* during 1940-1941. Published by the Bureau of Educational Research, Ohio State University, Columbus. 21 pp. 25 cents.

In the Introduction, Dr. Dale states that "the radio and movies are unusually effective instruments of mass communication . . . Such potential power for the spread of democratic ideas should be harnessed—but how?" The answer to this question is discussed in the pamphlet.

The list of "Sources of Inexpensive Teaching Aids," compiled by William G. Hart, is also included.

Motion Pictures—Not for Theatres

(*Continued from page* 17)

food control. He retired from the Department of Health about 1939 to live on his pleasant farm at Glenmont, New York, not far from the city of his birth and long occupation. His abiding, congenial interest in the good earth doubtless accounts for his allied absorption in matters of property, evinced by the recent publication of his highly readable book *The Path to Prosperity,* which arose otherwise out of his burning enthusiasm for Henry George.

Valuable New York State work in the utilization, as opposed to the production, of educational pictures was accomplished by Dr. Alfred Abrams, who died at his Albany home April 2, 1938, aged seventy-one years. As far back as 1909, after extended service as principal, superintendent of public schools, and State inspector, he was appointed Director for Certification of the Division of Visual Education of the State Department of Education, a post which he held actively until his honorable retirement in 1934. Ward C. Bowen is the present Chief of the New York State Bureau of Radio and Visual Aids.

(To be continued)

Light in Hand-Made Lantern Slides

By ANN GALE

Lindblom High School, Chicago

SCIENCE reading material is usually too difficult for the upper elementary grades. The material may be presented in an easy way by means of lantern slides. The following unit on light may be used for upper grades.

1.) Light is energy because it makes things change. Light gives the energy to plants to manufacture sugar and starch; it causes a change in your eyes giving sight; it sunburns and thus changes your skin.

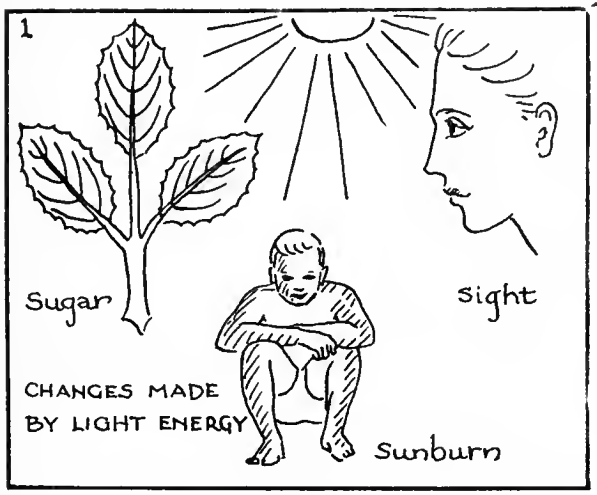
2.) Light travels in a straight line. Objects in front of the source of light cause shadows like the shadow of the earth on the moon in an eclipse, or a shadow picture.

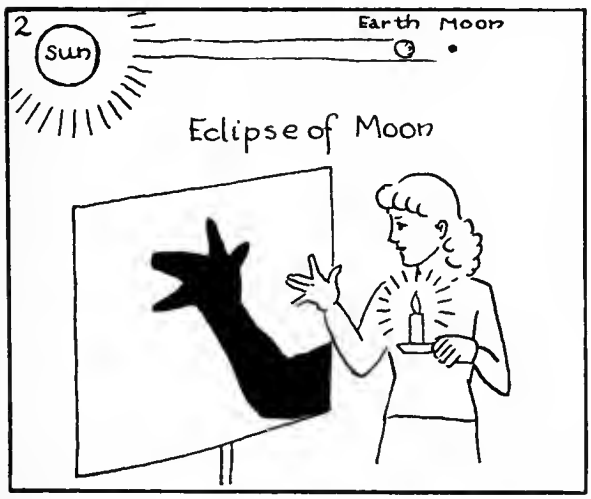
3.) Mirrors reflect light. Because light is reflected one can see objects above him with a periscope.

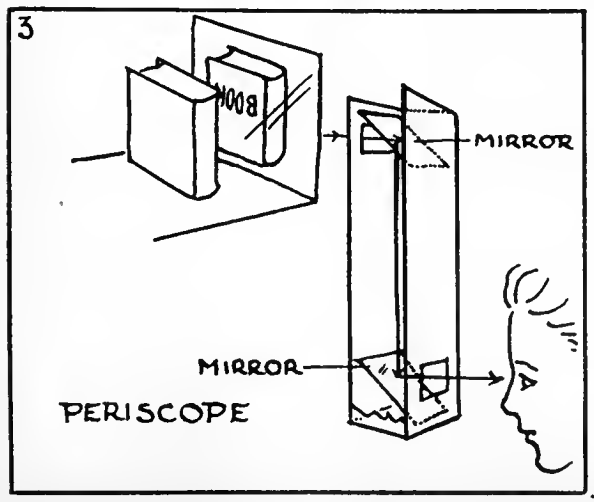
4.) Dark objects absorb most of the light rays. Light objects reflect most of the light rays. A colored object absorbs all the light rays except those of the color seen.

5.) The foundation of all interior decoration is the fact that light colors reflect light and make objects seem larger while dark colors absorb light and make objects look smaller.

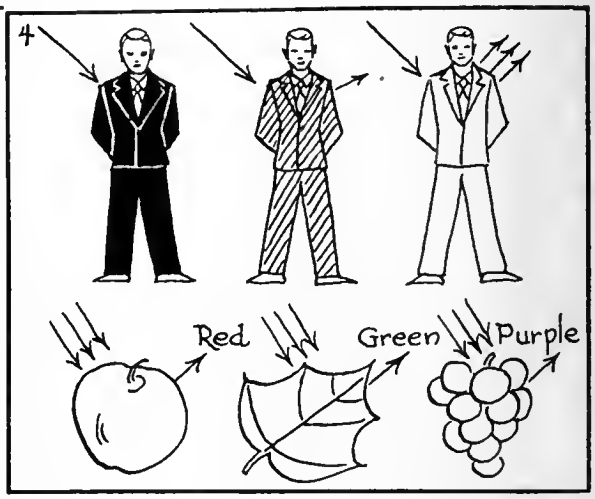
6.) Light rays may be bent and brought to a focus by means of lens. A camera with its lens focuses light on the film. The lens in your eye focuses light on the retina.

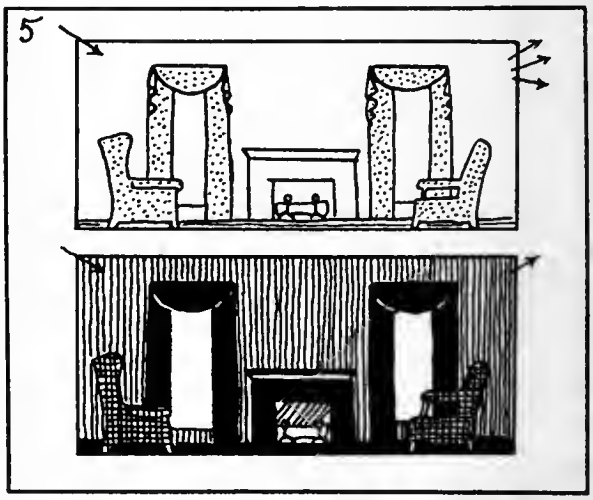


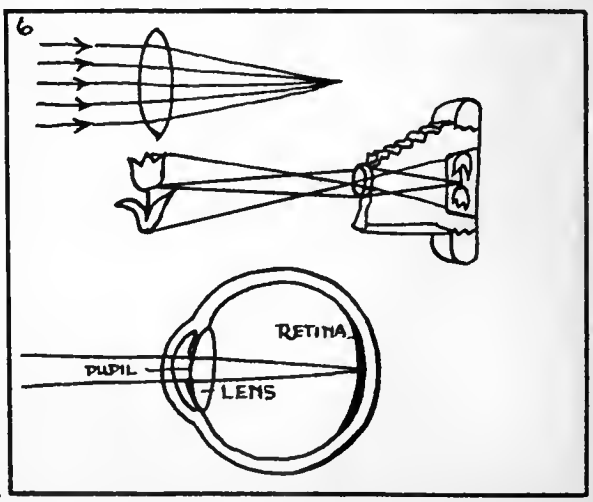




The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.







Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

DVI President Called to Government Work

President W. Gayle Starnes has been given leave by the University of Kentucky to take up his new position as Civilian Training Administrator at the Lexington, Kentucky, Signal Corps. We are happy to report, however, that he has received permission to continue as President of the DVI.

A Veteran of the Visual Field Retires

With the retirement of John A. Hollinger in September, 1940, the Pittsburgh Public Schools lost a great Director of Science and Visualization, and the visual field lost an outstanding leader. We, personally, miss him as a friend for more than twenty years. We shall miss his independent thinking, his scholarly discernment, his straight-from-the shoulder utterance, and his readiness to help in any emergency.

Dr. Hollinger's department constituted one of the first moves on the part of a large school system to recognize the value of visual aids as a definite part of the educational program. Prior to this he had served as a school principal in Pittsburgh for twelve years. With his retirement he rounds out a service of thirty-four years in the Pittsburgh schools, a total of forty years in active educational work, and more than two decades of service specifically in the field of "perceptual aids to learning," Dr. Hollinger's own term for the conventional "visual education."

He is a past president of the old National Academy of Visual Instruction, and of the Department of Visual Instruction of the National Education Association. He has contributed numerous professional articles, and has been greatly in demand as a speaker and conference leader. He has conducted courses for the Pennsylvania State College, the University of Denver, the University of Pittsburgh, and Allegheny College. He cooperated in the organization of the Association of School Film Libraries, and has been a member of the Board of Directors since its beginning.

Dr. Hollinger's future plans include a vigorous pursuit of his hobbies, horticulture and golf. Thousands who knew him throughout the country will sincerely wish him many happy years of well-earned retirement.

N.L.G.

New Appointment for Hoban

Charles F. Hoban, Jr., has been appointed Special Assistant in the Division of Visual Education of the Philadelphia Public Schools, succeeding Dr. John T. Garman who became Director of the Division upon the death of Dr. James G. Sigman a year ago.

Mr. Hoban reports the work of the Philadelphia Visual Division is expanding to include the supervision of radio education in addition to school journeys, motion pictures, slides, and transcriptions. He will continue to serve as Director of the Motion Picture Project of the American Council on Education, which he joined in 1936. Prior to that Mr. Hoban taught at Clarion State Teachers College and in the high schools of Harrisburg. He received his Ph.D. from Duke in educational psychology in 1935 .

From the National Secretary

H. J. Daily, National Secretary, has mimeographed copies of the Constitution and By-Laws of the Department for distribution to the zonal secretaries. These in turn are to be furnished to new members as fast as they come in.

The national office reports that the membership campaign is coming along very well but that some zones are out in front. Next month we hope to give you a zone by zone account of the membership campaign.

The following is a list of the secretary-treasurers for the various zones. Anyone interested in becoming a member should communicate with the secretary of his zone.

Zone I: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont (Secretary—Howard A. Smith, 208 Churchills Lane, Milton, Massachusetts)

Zone II: Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia (Secretary—Don Carlos Ellis, 21 West 46 Street, New York, New York)

Zone III: Indiana, Kentucky, Michigan, Ohio, West Virginia (Secretary—Wallace L. Arnholt, Bellevue City Schools, Bellevue, Ohio)

Zone IV: Illinois, Iowa, Missouri, Wisconsin (Secretary—Lewis V. Peterson, Visual Aids Service, University of Illinois, Urbana, Illinois)

Zone V: Minnesota, North Dakota, South Dakota (Secretary—Donald K. Lewis, Central High School, Red Wing, Minnesota)

Zone VI: Idaho, Montana, Oregon, Washington (Secretary—Glenn C. Jones, Acting Secretary, Director, Division of General College Extension, State College of Washington, Pullman, Washington)

Zone VII: Arizona, California, Nevada, New Mexico (Secretary—George M. Jamieson, Jr., Eureka City Schools, Eureka, California)

Zone VIII: Colorado, Kansas, Nebraska, Utah, Wyoming (Secretary—James D. Finn, Director, Audio-Visual Education Service, Colorado State College of Education, Greeley, Colorado)

Zone IX: Arkansas, Louisiana, Oklahoma, Texas (Secretary—Paul V. McRoy, 1500 Louisiana Street, Houston, Texas)

Zone X: Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee (Secretary—Bernice Mims, Department of Visual Instruction, General Extension Division, University of Florida, Gainesville, Fla.)

A PLEA TO ZONE OFFICERS

We are not yet receiving enough material from the various zones to make "Among Ourselves" the column we want it to be on the activities of the DVI. Won't you please, therefore, communicate with me as soon as possible regarding activities in your zone? J. D. F.

Zone II

E. Winifred Crawford, President, reports that the campaign in Zone II is taking a different direction than in most of the other areas. Negotiations are underway to see if some arrangement can be made whereby the powerful New Jersey Visual Education Association may be affiliated with Zone II. If this affiliation is successful, Zone II will no doubt become one of the outstanding sections of the organization.

The New Jersey Association publishes a visual aids bulletin four times a year which contains a great deal of vital information for workers. The format is such that pictures and diagrams may be reproduced. The Association held its annual convention on Saturday, Sunday, and Monday, November 8, 9, and 10 at Atlantic City. Included on the program were a series of motion pictures, a business meeting, and illustrated presentations of life and customs in remote geographical areas. The New Jersey Visual Education Association also produces an annual bulletin known as the *Visual Aids Digest*. This excellent publication, with emphasis on practical applications of visual aids, may be obtained by contacting Miss Crawford.

Another item of interest from Zone II which has possibilities for membership drives is quoted direct:

"One supervising principal of a small community in New Jersey has had his local board of education pay the membership for Zone II of a teacher from each of his three schools."

Zone IV

L. W. Cochran, President, reports that the Executive Committee of Zone IV is carrying on a campaign throughout the four states of Illinois, Wisconsin, Missouri, and Iowa. The campaign is designed to further audio-visual instruction in the area, as well as the activities of the DVI. A number of different programs were placed by the organization on state educational meetings during the fall, and the zone organization will be functioning full force as this goes to press.

The official annual meeting of Zone IV will be held in Chicago in connection with the Midwestern Forum on Visual Teaching if present plans can be carried to completion. The probable dates of the Zone IV meeting will be March 27 and 28, 1942.

Zone V

The news from Zone V came to us indirectly through the publication, *News Bulletin*, from the Bureau of Visual Instruction and the Visual Education Service of the University of Minnesota.

According to an item in the bulletin, a membership campaign is underway under the direction of the Zone President, Miss Ella Callista Clark, Winona State College, Winona, Minnesota. An appeal is being made for members, using the subscription to the EDUCATIONAL SCREEN as the drawing card.

Won't you let us hear more from Zone V?

Zone VI

While nothing has been reported to us directly from Zone VI, it is interesting to note that the Washington-North Idaho branch of the DVI is functioning. At a meeting of this sub-organization held in Ellensburg at Central Washington College of Education on November 1, *Reel News*, published by the Bureau of Visual Teaching at Washington State College, Pullman, was designated as the official publication for the organization. Committees of the Washington-North Idaho branch include producer relationships, exchange of material, correlation of audio and visual aids, and distribution problems. Each committee chairman made a report on the work of his committee.

According to the report of the meeting, some discussion was held on the relationships of the branch organization to Zone VI and also the Inland Empire Education Association. As a result of the discussion, it was decided that the branch shall function as a group within the structure of Zone VI. Relationships will be clarified after a conference with the Executive Committee in February. Glenn Jones of State College of Washington is secretary both of the branch and of Zone VI.

Zone VIII

The first annual meeting of Zone VIII was held at the University of Colorado in Boulder on December 29 and 30. The general theme of the conference was "Practical Suggestions for Teachers and Administrators in Planning and Executing a Visual Instuction Program." Program items included "Administration of an Audio-Visual Program in a Small City School" by Arthur L. Payne, Director of Visual Instruction, City Schools, Greeley, Colorado; "Kinks, Twists, and Shortcuts" by Harold L. Walton, Director of Visual Instruction, Public Schools, Garden City, Kansas; "Presentation of a Silent Motion Picture" by Vera Kalal, Chairman of the Visual Education Section, Third District, Nebraska State Teachers Association; "Colored Still Pictures in the Classroom" by Clinton Larson, Public Schools, Salt Lake City, Utah; "Integration of the Sand Table, Relief Models, and the Map in Geography" by H. A. Hoffmeister, Associate Professor of Geography, University of Colorado, Boulder; "Visual Aids in Reading" by Paul McKee, Professor of Elementary Education, State College of Education, Greeley, Colorado; "The Radio in Education" by Robert Hudson, Director of the Rocky Mountain Radio Council, Denver; "Demonstration Lesson Using a Recording in a Teaching Situation" by Douglas Ward, Associate Professor of Secondary Education, State College of Education, Greeley, Colorado.

In addition to these program numbers, a long business meeting was held and the organization of Zone VIII was completed. It was decided to urge the national organization to make the fiscal years of the NEA and the DVI the same, and that the entire organization become more closely affiliated with the NEA. Laramie, Wyoming, was chosen as the place for the next meeting. It was decided to hold the annual conferences in the home state of the new president. The order in which the conferences are to be held is as follows: Colorado, Wyoming, Kansas, Utah, and Nebraska. Officers are to be elected by mail ballot. The first election will

be for the balance of 1942 and as much of 1943 as coincides with the fiscal year.

Although attendance at the meeting was small due to the terrific storm in this part of the country, the meeting was conceded by everyone to be extremely successful. The membership campaign was considered at length, and various members of the organization agreed to get ten new members during the year.

Zone X

Secretary Don White furnished us with copies of the minutes of the meeting of the Executive Committee. The meeting was held at the Ansley Hotel, Atlanta, Georgia, in November, in connection with the Southern Conference on Audio-Visual Education. After a lengthy discussion of possible steps to be taken in the membership campaign, the committee outlined several steps to be followed. Because these procedures might offer suggestions to other zones, they are included as a direct quotation.

1. Each member of the Executive Committee is to be asked to undertake the solicitation of memberships from about 25 persons in his area who should be particularly good prospects for membership in the Department. These contacts may be made by individual letter, or in person.

2. A mimeographed letter soliciting membership, and suitable for general mailing by all Executive Committee members, is to be prepared by the Secretary of the Zone. Blank spaces are to be left for address and for signature. Any desired quantity of these, with envelopes, will be sent to each Executive Committee member, to be addressed, and mailed to prospective members.

3. The Secretary is to supply copies of the printed DVI leaflet together with application forms. These are to be supplied for use as enclosures with the letters soliciting memberships, and for other mailing.

Zones 1, 3, 7, 9

Why don't you let us hear from you? J.D.F.

February Meeting of D.V.I.

Mr. Boyd B. Rakestraw, Assistant Director of the Extension Division, University of California, Berkeley, is working on the program for the winter meeting of the Department of Visual Instruction, to be held on Monday and Tuesday, February 23-24, in the Veterans' Building in San Francisco.

The general theme of the program is "Visual Aids to the Emergency." Those speakers who have accepted the invitation to appear are:

Mr. Kenneth MacGowan, Director of Production, Motion Picture Section, Office of Coordinator of Inter-American Affairs, who will talk on "The Motion Picture Industry in National Defense."

Colonel W. P. Burn, Office of Civilian Defense, Washington, D. C., whose subject will be "Audio-Visual Aids and Civilian Defense."

Dr. Frank Freeman, Chairman, Department of Education, University of California, who will address the Tuesday luncheon group on the topic "Implications for Education."

Mr. Thomas Rishworth, National Broadcasting Co., who will speak on "Transcriptions in Education."

Pertinent Paragraphs on Perceptual Learning

WILBER EMMERT,
State Teachers College, Indiana, Pennsylvania

AN underlying principle of perceptual learning is that sensory experiences are necessary for mental activities. It is often forgotten, however, that sensations do not interpret themselves. Many teachers of "Visual Education" (Perceptual Learning, Audio-Visual Education, or whatever name is used for the course), as well as other classroom teachers, fail to realize that language has an important place and function in true education. Words are an important part of all learning. Words are necessary to interpret and clarify the simple percept, develop concepts, and attach them to the concepts derived from previous experiences and existing as memory images in the mental storehouse of the individual. Contrary to the belief of many "converts" to visual education, merely "exposing" a picture, an object, or a situation to a pupil or a class does not necessarily result in true learning. Words are an inevitable complement of all learning, and must be given their appropriate place in the learning process if true education is to be achieved.

Countless subjects and topics in the school's educational curriculum need both the descriptive explanation and the presentation of concrete materials to make them thoroughly understandable. Hence, teachers of Visual Education would do well to glean "pertinent paragraphs" on perceptual learning on each of the major units of the course as they read and study the General Psychology books and publications dealing with the psychology of specific subject—matter fields, and use them for distribution or reference assignments during the conduct of the course. In some cases the author will be stressing the function of word description, whereas at other times emphasis will be placed on the use of the concrete to clarify the word description given. In either event, sight is not lost of the importance of language in the true learning situation.

Need for the "Concrete" in Learning

For example, Stuart H. Rowe, in discussing *The Concrete as a Factor in Purposive Learning,* states:

"There should always be provided either actually or in imagination, the concrete situation which gives point and meaning to that which is taught. The unanimity with which the world's great teachers have used the parable, the fable, the dialogue, the historical illustration, emphasizes the value of the concrete situation for establishing truth. Any situation presents data of one sort or another. It may be organized with a view to the present adaptation, or its present significance may be disregarded in favor of a future possible situation for which more data are needed; or a general truth may be sought which is to adapt itself to so many applications in varied concrete situations that we are sometimes in danger of forgetting its definiteness in our contemplation of it as an abstraction. My idea of triangle is just as definite as my idea of any given triangle; the idea that all bodies are subject to the law of gravitation is psychologically just as definite as the thought that this pen is attracted in some degree by the moon. The definiteness of the abstraction is, however, approximately proportionate to that of the concrete example illustrating or contributing to it. Those truths that lack the red blood of concreteness, those that we fail to apply in our lives, have been aptly termed "bedridden truths", anemic, not for contact with men. Abstractions must not be regarded as necessarily hazy. When they are obscure, it is proof positive of an inadequacy in our experience, an inadequacy capable of removal only by more concrete experiences. In general, the more concrete the situations, the more definite the organization of them will be; and the history of education, like the history of philosophy and the history of religion, is witness to the general futility of attempting to organize abstractions without regard to the concrete data on which they are based, and the concrete situation, real or imaginary, to which they are to apply".

Magic in Graphs

In speaking of graphs and their functions, Henry D. Hubbard, National Bureau of Standards, Washington, D. C., says[1]:

"There is magic in graphs. The profile of a curve reveals in a flash a whole situation—the life history of an epidemic, a panic, or an era of prosperity. The curve informs the mind, awakens the imagination, convinces.

"Graphs carry messages home. A universal language, graphs convey information directly to the mind. Without complexity there is imaged to the eye a magnitude to be remembered. Words have wings, but graphs interpret. Graphs are pure quantity, stripped of verbal sham, reduced to dimensions, vivid, unescapable.

"Graphs are all inclusive. No fact is too slight or too great to plot to a scale suited to the eye. Graphs may record the path of an ion or the orbit of the sun, the rise of a civilization, or the acceleration of a bullet, the climate of a century, or the varying pressure of a heart beat, the growth of business, or the nerve reaction of a child.

"The graphic art depicts magnitudes to the eye. It does more. It compels the seeing relations. We may portray by simple graphic methods whole masses of intricate routine, the organization of an enterprise, or the plan of a campaign. Graphs serve as storm signals for the manager, statesman,

[1] Quoted from: Brinton, Willard C., *Graphic Presentations,* 1939

engineer; as forceful engines of research for science, technology, industry; and as potent narratives for the actuary, statist and naturalist. They display the results. They disclose new facts and laws. They reveal discoveries as the bud unfolds the flower.

"The graphic language is modern. We are learning its alphabet. That it will develop a lexicon and a literature marvelous for its vividness and the variety of applications is inevitable.

"Graphs are dynamic, dramatic. They may epitomize an epoch, each dot a fact, each shape an event, each curve a history. Wherever there are data to be recorded, inferences to draw, or facts to tell, graphs furnish the unrivalled means whose power we are just beginning to realize and apply."

Stereograph and Stereoscope

Oliver Wendell Holmes, who perfected the stereograph and the stereoscope, once wrote:[2]

"O infinite volumes of poems that I treasure in this small library of glass and pasteboard. I creep over the vast features of Rameses, on the face of his rock-hewn Nubian temple; I scale the huge mountain-crystal that calls itself the Pyramid of Cheops. I stroll through Rhenish vineyards, I sit under Roman arches, I walk the streets of once buried cities, I look into the chasms of Alpine glaciers, and on the rush of wasteful cataracts. I pass, in a moment, from the banks of the Charles to the ford of the Jordan, and leave my outward frame in the arm-chair at my table, while in spirit I am looking down upon Jerusalem from the Mount of Olives."

I Am Photography

While the importance of Photography is generally recognized, the accompanying rare bit, *I Am Photography*,[3] is quite stimulating:

"I turn back the pages of the Book of Memory. I bring you thoughts of past years and old time friends. I keep forever green the happy hours of childhood. I dull the pangs of bereavement and blunt the edge of the grim reaper's scythe. I carry the news of the world, and bring you visions of far distant lands. Our modern civilization is largely dependent on my efforts. Though men may pass and empires crumble to dust, my magic will preserve their likeness for future generations. Not purse proud, I am within the reach of all. I solve mysteries impenetrable to mortal eyes; I ferret out the criminal when the other means have

[2] Quoted from: Dorris, Anna V., *Visual Instruction in the Public Schools*, pp. 137-138

[3] *Popular Photography*, January 1938, p. 8

failed. I illuminate the pages of history, and make learning possible for the multitude. Born instantaneously in a ray of light, I become everlasting. As necessary in war as in peace, I am man's servant and yet his master. I am an art—and yet a business. I am photography!"

These "pertinent paragraphs on perceptual learning", word descriptions of a few of the items considered in the course on Visual Education, suggest what the writer has done to aid the students to more thorough mastery of the work of the course. They are a strong stimulus to extra "outside reading." During the present semester both the teacher and his students are on the alert for "pertinent paragraphs", and now have quite a large collection of such reference materials. While emphasis is here placed on the verbal selections, the importance of the concrete as a factor in purposive learning has never been neglected.

Correction

In the December issue of EDUCATIONAL SCREEN, the address for Dora G. Netterville, co-author of the article "Motion Pictures Utilized in College English", was incorrectly given. Miss Netterville is Assistant Professor of English at the Southwest Texas State Teachers College, San Marcos, Texas—not at the University of Texas, as stated.

Audio-Visual Enrichment of the Curriculum

(*Continued from page 9*)

year pupils. Dioramas, stereopticon slides, photographs and book illustrations of Indian life were shown. College students cooperated with Indian songs, and third year children sang, danced, and gave original poems—all interpreting Indian life. A lesson in Creative Expression followed, with these media—charcoal, paint, clay, crayon, colored chalk.

Often Audio-Visual programs result in individual and group research, as for example, when the 8B classes were eager to visit the Metropolitan Museum of Art to find the original Persian and Indian Miniatures in rich color in the beautiful Eastern books which they had seen in black and white on the screen, as background enrichment for the reading of Sohrab and Rustum. Or, when the seventh year pupils thrilled at finding copies of the Throne Chair of King Minos—yes! the very King of "Theseus and the Minotaur" or Bull of Minos—golden cups of that long ago time, even a wall painting in very bright colors of girl and boy toreadors contending with a very fierce bull. How exciting it is to visit a room filled with these treasures and realize that there was a real King Minos who lived in a palace on the Island of Crete over five thousand years ago, and that the well-known story of the hero, Theseus, King Minos and his daughter Ariadne, and the fierce bull, is really based on truth! It makes the stories of the Iliad and Odyssey much more real and interesting, especially when the "Treasure Trail" includes the Greek black-and-red-figured vases, with their pictured-stories of Odysseus, Athene, Poseidon, Paris, Hector ,and all the story people who thus take on added significance and interest.

What fun to see the period rooms in the American Wing, which make the time of Miles Standish and that of George Washington take on meaning and reality; or the models of old New York in the Museum of the City of New York, which, again, urge another Treasure Trip to the lower tip of our Manhattan island where old Peter Stuyvesant surrendered to the English "for his people's sake," and New Amsterdam became New York. Joan of Arc lives again in picture and sculpture, as many boys and girls discover, when they find on Riverside Drive the statue of her on horseback, leading her army to victory, the relief of her as a young peasant girl in the Chapel of her name in the Cathedral of Saint John the Divine; the painting of her, in the Metropolitan Museum of Art, receiving the message in her father's garden that she, who knew nothing of soldiers or warfare, was chosen to lead her country to victory, her king to be crowned. And so we might go on with other areas in which audio-visual integrated programs stimulate the desire to see original material in proper settings. Then, words take on meaning, reality, life. Then, the real experience becomes the learning situation.

Thus we, at Hunter, feel that we are, to some degree, realizing the value of Audio-Visual Enrichment, especially in connection with the teachers-in-training who will "carry on" in other schools, and the gifted children in the Hunter Elementary School, who need this enrichment. It is not as a separate subject that

it is valuable, but as an effective, vital, teaching method, integrating and vitalizing many areas of learning in the curriculum. Surely, these areas are thus given greater meaning and interest to the child, and each is related more meaningfully to the whole experience of learning.

Most important of all the results of this enrichment have been a more joyous attitude towards learning and the ability to experience more happily, and to express more creatively. Who can estimate its value to children with their eagerness to see, to hear, to touch—their willingness to learn, their capacity for wonder and discovery, their ability for free and joyous expression? This year, opportunity for greater enjoyment in learning will be extended to the two new pre-school groups of three-and-a-half and five-and-a-half-year-olds. They will be able at an earlier age, to benefit from these richer experiences since their I.Q.'s range from 138 to 190.

A visitor to the Hunter College Elementary School would find the "heart" or "core" of this Enrichment in the colorful Library-Museum, a "cosy," "homelike" place, the children say. The Parents' Association of the School are so vitally interested in this work, and in making the Library a livable, inspiring room, that they have contributed a radio for each room; and for the Library—books for all age levels, seats for the smaller children, window drapes and plants, and, of especial interest, a unit of bookcases, "bin"[6] for large photographs, and cabinets.

In this room, at eight-twenty in the morning, college students and eighth grade pupils assigned to this activity, are busy. The "bin" is opened, and the color prints carefully removed for distribution to the different rooms according to the chart which was planned by one of the student-teachers, and which really "works"! Teachers and children have a chance to choose the large color-print (often a fine Medici print) they prefer. Each afternoon these are collected, checked on the chart, and put back in the bin. Those pictures chosen for the Library, where many children and college students may enjoy them, are displayed on cabinets and easels. This service has also been extended, as required, to the Educational Department of the College.

Next, the Visual Aid Room is opened by appointed children of a lower grade. They don their smocks, mount their stools, and are ready to put slide-sets carefully away upon strong shelves, distribute stereoscopes, show where the stereopticon lanterns are kept, or distribute literature about the kind, quality, and place of available Audio-Visual Aids.

How the children enjoy this enrichment! They tell stories about the beautiful color-pictures which visit them in their classrooms, make original pictures inspired by them; choose their favorites in the Library-Museum and freely express their reasons for such choices; do research for and following their Integrated Programs. Creative attitudes are stimulated in thought and action, which will bear direct influence upon human behavior, add greater happiness to everyday life, and wider understanding not only of their immediate environment, but of the many different peoples who make up the world in which they live.

[6]Designed from the Metropolitan Museum of Art's photograph cabinets.

Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

Title of Thesis
MOTION PICTURES VERSUS LANTERN SLIDES IN TEACHING CERTAIN UNITS OF BIOLOGY

Thesis completed 1941 for the degree of Master of Arts, University of Texas, Austin, Texas.

Investigator: Miss Katherine Rose

Purpose of Study

To determine the comparative effectivness of lantern slides and moving pictures when used in teaching certain units of biology. An attempt was made to compare the achievement of Group I, which was taught with lantern slides, with that of Group II, which was taught with moving pictures, by means of such statistical measures as medians, quartile deviations, means, and standard deviations. A study was made of the relationship between the intelligence of subjects and their achievement in biology when motion pictures were used and when lantern slides were used. An effort was made to determine whether corresponding pairs of students in the two groups made similar gains.

Procedure

Each of the two experimental groups consisted of twenty-five students in biology enrolled in the Polytechnic High School, Forth Worth, Texas during the 1940-1941 session. These groups in turn were each divided into normal and inferior sub-groups to permit the recording of additional statistical data. An intelligence test and an achievement test in biology served as a basis for grouping the students.

The subject matter employed in the experimental study was based on the structure and functions of the nervous system, the eye, and the ear. Three excellent biological films were employed in the Film Group, and three sets of photographic lantern slides made directly from these motion pictures were used in the Slide Group.

The final test over the units was administered to both the Film Group and the Slide Group at the beginning and at the end of the experimental procedure. Three comprehension tests, objective in nature and based on the content of the three films used in the experimentation, were given both groups immediately after showing the corresponding film to the Film Group and the corresponding set of slides to the Slide Group.

Conclusions

1. The general achievement of the Slide Group exceeded that of the Film Group, as revealed by the medians, means, and quartile deviations of the final test over the units and of the achievement test in biology.

2. The scores made by the Slide Group on the tests over the nervous system, the eye, and the ear exceeded those of the Film Group.

3. The greatest amount of progress on the final test made by sub-groups, classified according to intelligence scores, was made by the normal sub-group of the Slide Group and by the inferior sub-group of the Film Group. The difference in the percentages of gain, however, was found to be statistically reliable in only 55 cases in 100.

4. A statistically insignificant difference existed between the means for the two normal sub-groups on the test over the nervous system, whereas the mean score for the inferior sub-group of the Slide Group exceeded the mean score for the inferior sub-group of the Film Group.

5. Greater mean scores on the tests over the eye and the ear were recorded for both the normal and inferior sub-groups of the Film Group.

6. Except in six cases, members of corresponding pairs of students acting as subjects in this investigation did not make the same gains or the same scores when one was taught with slides and the other with films.

7. In recording the gains made by corresponding pairs of students on the various tests, it was found that greater gains

were made by members of the Slide Group in approximately three-fourths of the cases.

The results of the experimental investigation, condensed in the form of conclusions, seem to indicate that the lantern slide-lecture is more effective than the motion picture in teaching certain units of biology.

Title of Thesis: A FEASIBLE PROGRAM FOR VISUAL EDUCATION IN THE INTERMEDIATE GRADES.

Thesis completed 1940 for the degree of Master of Arts, University of Arizona, Tucson, Arizona.

Investigator: Faye B. Huetson

Problem of Study

To set up a working program for the use of motion pictures in the fourth, fifth, and sixth grade geography classes.

Procedure

A study was made of the various research investigations dealing with the use of motion pictures and of the work of educators who have established visual education departments. Definite criteria for the establishing of a program were set up as follows:

(1) Well-known principles in visual education should be the basis of the program;
(2) Proper financial support should be obtained if possible;
(3) Proper preparation of the teacher should be required;
(4) Good equipment should be a prime requisite.

The report includes a discussion of the types of films offered, of standards for the selection and evaluation of films, and of methods to be used in carrying out a film lesson. Many phases of teacher preparation and responsibility are set forth. A survey of equipment suitable for the work was made. How a well planned program may contribute to the general objectives of education and to the more specific objectives of geography is definitely shown.

Conclusions

1. The teacher should know how to secure, select, evaluate, organize, and present a film lesson, and how to inspire the pupil to continue study on the unit.

2. Through visual education there can be an improvement in geographic instruction and thus bring about a greater realization of the objectives of education.

Visual Education in the Air Corps

(*Concluded from page* 10)

missioned officers who are specialists in different phases of visual education, and approximately twenty-five civil service employees and soldiers. This Training-Film Preparation Unit has as its mission the writing of motion picture plans which will be made into scenarios and produced by the Signal Corps. In addition to this, the unit prepares the plans and pictorial material for film-strips. This material consists of final positive prints on standardized mounts, which are re-photographed by the Signal Corps on 35 millimeter strips as film slides.

Typical projects under way at Chanute Field at present are the film-strips "Aircraft Storage Batteries", "Aircraft Carburetion Principles" and "Principles of the Internal Combustion Engine." Picture plans for motion pictures are being prepared on "Parachutes", "Altitude Flying" and "Aircraft Sparkplugs." More than 150 films and film-strips are being planned for production for Chanute Field.

The techniques and methods familiar to the commercial and educational screen have thus been taken over by the Air Corps and utilized to the fullest extent in the production and screening of subjects which will help speed the national defense program. Educators, psychologists, photographers, writers and artists combine their specialties to help Uncle Sam train his soldiers better, quicker and more thoroughly than before the advent of visual education.

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by
GODFREY ELLIOTT, Oakvale, W. Va.
Readers are invited to submit questions.

HOW can a college explain its educational facilities to its alumni and the public? Campus-made films are helping many educational institutions to solve this problem today.

At Antioch College, Yellow Springs, Ohio, students are enrolled under the co-operative plan; that is, they alternate between college and industry in five or ten-week shifts. Two Antioch students are assigned to one job. While one is at school, the other is at work in Dayton, Chicago, or some other city. Then at the end of a five- or ten-week period the position of the two students is reversed, the one at school going to work, the one at work going to school. This arrangement is continued throughout the year.

George C. Klein, who filmed "Co-ops at Work."

To show the co-operative plan in operation was the problem of George C. Klein, Antioch student. Armed with a 16mm. camera, Klein spent eight weeks making a documentary film. During that period he traveled over 6,000 miles and visited sixty-one employers of Antioch students. Arrangements were made with employers in advance, and many of them co-operated by giving suggestions, furnishing equipment, and appearing in the picture. The Personnel Department of the College planned the general organization of the film, but on location, Klein was his own cameraman, director, and technician. Cities visited included Chicago, Cleveland, Detroit, Rochester, New York City, Framingham, Mass., Dayton, Ohio, and Greensburg, Pa.

Approximately 4000 feet of kodachrome were used. After editing, 1200 feet were selected for the final release. A recorded commentary with musical background has been made. A description of the film, as furnished by Mr. J. D. Dawson of the college Personnel Department, follows:

Part I Introduction—Some campus scenes, college classrooms, statute of Horace Mann (founder of college), quick shots of various jobs and of skylines of different parts of the country as well as of different modes of transportation. One student is followed from an interview with a member of the Personnel Department—in which various jobs are discussed—to packing up to leave campus, taking a bus, getting off in a strange city, getting a room, and reporting for work.

Part II Business—Includes shots of several types of department store jobs, office and secretarial jobs, a job in a consumers' co-operative, accounting, commercial art, and newspaper jobs.

Part III The Social Sciences—Shots of a variety of jobs to show spread of job activity; then jobs in child development, social welfare, dietetics, and education and public administration.

Part III Science and Engineering, and Finale—Quick flashes of industrial plants and laboratories followed by pictures of jobs in chemistry, engineering, pre-medicine, and research—metallurgical, bio-chemical, and physics. Finale is a recapitulation of the whole co-operative program picturing the different fields of endeavor in which Antiochians are engaged.

The film is available for showing before educational groups. All inquiries regarding it should be addressed to Director, Personnel Department, Antioch College, Yellow Springs, Ohio.

Texas

The Central Visual Education Laboratory of the Houston Public Schools has completed a 1400 ft. 16mm film in Kodachrome dealing with secondary education in this system. Mr. J. O. Webb, Assistant Superintendent in charge of the Senior Schools, wanted to show a cross section of the normal activities of the Senior High Schools at the State Teachers Convention held in Houston November 20-22. Accordingly, the film was produced showing typical classroom and extra-curricular situations in each subject field. Sound accompaniment was achieved by using two turn tables for continuous background music and a microphone for the spoken narration. Paul F. McRoy was the director of the film.

Question Box on School Film Production

5. What lenses would you recommend that the school buy for its 16mm camera?

The typical single-lens camera will be equipped with the standard one-inch lens, which is the size that will see the greatest use in ordinary production. If this is a fixed-focus lens, as is most often found on inexpensive cameras, the first lens purchase should be a one-inch in a focusing mount. If additional lenses are to be bought, the next lens (in order of usefulness) should be a wide-angle (15mm) lens. This latter lens is extremely desirable in filming interior scenes where groups are involved. Many amateurs favor the 15mm lens for certain close-up work because it gives better perspective and greater depth of field. A telephoto lens should be purchased only after the other two lenses are acquired. A three-inch or four-inch telephoto is useful for many types of outdoor shooting, such as football, parades, band maneuvers, etc.

2. How can we have the camera precede a character who is walking down the school corridor?

No doubt you have reference to the "dolly" shot, which Hollywood accomplishes with the aid of rubber-tired buggies and elaborate mechanical cranes. The amateur can achieve a simplified version of the dolly shot by seating the cameraman in a child's rubber-tired wagon and having a helper pull him slowly and steadily down the hallway in front of your characters. It is not difficult to improvise a shot such as this if pains are taken to use a mount that is steady. Great care must be used to see that the lens is maintained in proper focus. For a good illustrated article on camera dolly shots for the amateur, see the December issue of *Movie Makers*, pages 548-549.

3. We encounter considerable confusion surrounding the terms "synopsis", "continuity", "scenario", and "script". Can you help straighten these out for our production committee?

The nomenclature of amateur production is not clearly established. Many of the terms are hold-overs from the Hollywood silent days, and many are adaptations of present-day terms. Different writers use the terms in different senses. Many writers use "synopsis" and "continuity" synonymously, while others separate the two terms with different meanings. "Scenario" and "script" are synonymous for all practical purposes, though some confusion results from their being used interchangeably.

"Synopsis" refers to the outline of the story idea. It is the skeleton around which the fuller development of the story will be written. The English teacher would call it the paragraph outline of the theme that is to be written.

After the story idea has been outlined as a synopsis, it is devoloped more fully as a straight piece of action prose. This is the final narrative form of the story. This is the "continuity."

The continuity, in turn, must be rewritten in terms of camera angles and other mechanical details, clearly blueprinting the action for the benefit of the cameraman. This is the point where each action paragraph (sequence) of the continuity is broken down into clearly defined camera scenes. When this has been done you will have the "script" or "scenario." Any attempt to define the two terms as distinctly separate steps in school production will only serve to confuse the production committee.

4. Can you expect the war to cut off our supply of film?

The government and manufacturers say that it will not. At least that is what they were announcing just prior to the actual declaration of war last month. At present there is reason to believe that this statement still stands, and that drastic curtailment of film stock is not yet in sight.

However, priority orders on aluminum have completely stopped the production of lighting equipment, reels and humidor cans, camera and projector housings, and all other photographic articles made of aluminum. Substitutes are making their appearance rapidly. Plastics and zinc are permitting limited production of camera and projector bodies. One manufacturer of lighting reflector units has announced an enamelware reflector, even claiming that it is superior to aluminum units in certain respects. Plastic film reels are announced for the 8mm field, and doubtless will soon be tried for 16mm. Photographic lenses are becoming scarcer every day.

News and

Fifth School Broadcast Conference

For the fifth consecutive year the School Broadcast Conference was held in Chicago on December 3, 4, and 5, at the Congress Hotel. This Conference provides an annual meeting place for educators, broadcasters and directors of radio in education who are responsible for the development of educational radio programs, and all those interested in the utilization of such programs.

The three-day meeting was opened Wednesday morning by chairman Major Harold W. Kent, formerly director of the Chicago Radio Council and now with the Radio Branch of the U. S. War Department. George F. Cassell, Assistant Superintendent of Chicago Schools, delivered the address of welcome, which was followed by a symposium on "How We Use Radio," presenting nine different utilization procedures, from the experience of the classroom teacher, in various studies of the curriculum. The early part of that afternoon was devoted to a demonstration of "The Value of the Radio Workshop" by student-members of the Chicago Central Radio Workshop, an all-city high school activity. Presiding over these two General Sessions were respectively James R. Angell of NBC and John Watson, Texas Technological College, Lubbock.

Among the sessions which attracted keen interest, as evidenced by the attendance, were the classroom demonstrations showing the utilization techniques of various types of radio programs. Of particular note was one which correlated the radio lesson with a film, presented Thursday afternoon by Frances Stange, teacher in Longfellow School, Oak Park, Illinois, and her seventh grade students. The Erpi film on "Argentina" was projected preceding the broadcast on "The Story of San Martin," one of the regular Thursday programs of the School of the Air series on "Tales from Far and Near." Class discussion of the broadcast followed. Lack of time prevented complete development of the unit. The film received only brief discussion after its showing but was referred to again after the broadcast. It was used mainly to stimulate interest in the historical background of Argentina, birthplace of San Martin, the South American liberator.

Among the concurrent meetings and demonstrations held during the Conference was an "Experiment in Audio Visual Teaching," conducted by Miss Regina Somers, teacher, and class of 6th grade pupils from the Cameron School in Chicago, in coopeartion with the Society for Visual Education, Chicago. In this demonstration 2 x 2 Kodachrome slides were used as illustrative material correlating with classroom reception of an educational broadcast on "Christmas Reds and Greens," from the weekly series "The Science Story Teller."

Other demonstrations in which Chicago school children participated were: "The Greedy Goat," a transcribed program from the Minnesota School of the Air Primary Series; "Mexican Folk Art," one of the weekly productions of the Art Department of the Chi-

Notes

cago Schools, and "The Constitution of the United States," a transcription from the popular "Cavalcade of America" series. Audience discussion was invited at the end of each session.

Work Study Groups assembled every afternoon to consider different aspects of radio in the school, such as: The In-High School Workshop, Use of the Transcribed Program, School Use of News Programs, Radio and the Administrator, Radio and Printed Material, Art and Radio, Foreign Languages, The Simulated Broadcast, Junior Colleges and Radio, Teacher Training in Radio, Evaluation of School Broadcasts, School Radio Chairman, Sight Saving-Talking Books.

Speakers on the program included Edward M. Kirby, Chief, Radio Branch, U. S. War Department; General Frederick Osborn, U. S. Army Morale Division; William H. Johnson, Superintendent Chicago Public Schools; W. W. Charters, Ohio State University; Gordon Studebaker, Radio Script Exchange, Washington; John W. Gunstream, Director Texas School of the Air; William D. Boutwell, U. S. Office of Education; I. Keith Tyler, Ohio State University.

The work of the Pan-American Council of the School of the Air, organized last April, was summarized by Sterling Fisher, Educational Director for CBS. The purpose of the Council is to plan programs and to aid in the exchange of educational materials in the preparation and use of the programs of the School of the Air, which is now extended to Havana, Mexico, Canada, and South America.

Awards and citations in the Second Utilization Competition were given at the closing banquet session Friday night.

Proceedings of the Broadcast Conference will be available soon. Price will be $2.00 in mimeograph form, or $3.00 printed and bound in cloth.

Museum "Rediscovering America" Program

"Rediscovering America," a good-neighbor film survey of all the Americas, the first motion-picture program of its kind ever to be organized, had its premiére at the Philadelphia Museum of Art, the Parkway at 26th Street, on Saturday, November 29th. Units of this twenty-seven week free film program, approximately one hour in length, are being shown on Saturdays and Sundays at 2:00 and 3:30 p. m. through May 31, 1942.

Designed to make Americans more familiar with their country and their Latin American neighbors, the "Rediscovering America" film program is the Art Museum's contribution to the broadening of our cultural horizons through a better understanding of the world we live in, and a means of meeting today's challenge to our way of life.

This new series of important feature films, carefully selected by the Art Museum's Division of Education in collaboration with the American Film Center of New York City, provides a comprehensive and memorable portrait of our nation and our hemisphere. The program subjects, each dealing with a major phase of life in the Americas and each composed of one or more

program units, follow a logical sequence: The Democratic Way of Life, The American Scene, Public Welfare, Public Works, Conservation of Natural Resources, Industrial America, National Defense, U. S. Possessions and Outposts, Canada, Mexico, Central America, South America, Americans All.

Outstanding among the motion pictures to be shown are many new government films, such as *Harvests For Tomorrow,* a documentary masterpiece about the character and culture of New England with commentary by Frank Craven; *Women In Defense,* with commentary by Eleanor Roosevelt and narration by Katherine Hepburn; *Power And The Land,* the simple saga of electric power in the service of man; *A Place To Live,* the Philadelphia story of housing; *Hydo,* story of the harnessing of America's greatest power stream, the Columbia River; and *Bomber,* with commentary and narration by Carl Sandburg.

Other new and recent films of distinction showing at the Art Museum include: a unique series of color films on Mexico, Central and South America prepared by the U. S. Office of the Coordinator of Inter-American Affiairs; two programs of Canadian films made by John Grierson; several important films on the democratic process, such as *March Of Freedom, Design For Education* and *The Last Stronghold;* and other significant films relating to America's past and present.

The "Rediscovering America" film program is being made available to schools, clubs, museums and similar organizations through the American Film Center, 45 Rockefeller Plaza, New York City.

Film Material on South America

The Coordinator of Inter-American Affairs wishes to make it known to all non-theatrical users of motion pictures that the first of a series of films devoted to South America and its culture, is now available for free distribution.

Americans All, a two-reel documentary film produced and narrated by Julien Bryan, is the first to be so released for the use and benefit of North American audiences. It is planned and intended that the wide circulation of this and other films to follow, will provide the friendly tie between neighboring Republics and help us to know and understand the other Americas.

Prints will be available through the nation-wide services of the Museum of Modern Art, the Y.M.C.A. Motion Picture Bureau and other distributors to be selected. The Coordinator asks but one essential in providing these free films and that is a full report from all users as to the character of audiences and their reception of films.

For more complete information, address the Coordinator's office at the Museum of Modern Art, 11 W. 53rd Street, New York City.

Association for Education by Radio

Charter memberships are now open in a new professional organization to serve that expanding group of educators, broadcasters, and others interested in school use of radio. The organization, christened the Association for Education by Radio, was formed in May 1941 at a meeting called by Harold W. Kent of the Chicago Radio Council. Its primary objectives are the development of an instrumentality through which persons interested in education by radio may have adequate communication, and the cooperation with institutions and groups active in education by radio.

The first annual meeting of the Association will be held February 23, 1942, at the Francis Drake Hotel, San Francisco, in conjunction with the meeting of the American Association of School Administrators.

Those interested in more information about the new organization should write to the Association's headquarters at 228 N. LaSalle St., Chicago.

Visual Program on Defense Theme

The New York Society for the Experimental Study of Education held a Visual Instruction section meeting on the evening of December 12 at New York University, with Mrs. Esther L. Berg, Assistant Principal, Public School 159, presiding as chairman. The theme of the meeting was "Visual Aids in the Defense Program." Dr. C. Frederick Pertsch, Assistant Superintendent and Administrator of Civilian Defense in the Schools, gave a comprehensive talk on how to meet aerial attack, as far as schools were concerned.

Motion pictures and other visual aids were shown to demonstrate measures for defense. The showings included films produced by the United States Office of Education, the Canadian Government, British Library of Information, the Coordinator of Inter-American affairs, and a filmstrip series on "Mechanics" produced by Jam Handy Co. Keystone stereographs for use in Tests of Visual Efficiency were displayed. Audience

discussion, led by Miss Rita Hochheimer, Assistant Director of Visual Instruction, concluded this timely session.

University Inaugurates Visual Department

A Department of Visual Education of the Allan Hancock Foundation has been established at the University of Southern California, Los Angeles, with Warren Scott as chairman. It is an organization devoted to co-ordinating the use of films on the University Campus and the distributing of exceptional films throughout selected areas of the United States.

The first two series of the films for distribution are now ready. They include twelve productions of the Hancock Foundation for Scientific Research and eight initial offerings, of *The Music of the Masters* series, produced by Artists' Films, Inc. From time to time other films will be added to the materials available through the organization.

The Department of Visual Education is also endeavoring to co-ordinate information about films which are available within the United States. This means maintaining an extensive card catalogue, so that films on all subjects can be found quickly and information about them may be readily supplied.

Draftees Learn from Nazi War Films

Hitler's prized "terror films" depicting the invasion of neutral countries may become merely classroom blueprints for American soldiers as army officials study plans to show the pictures in draftee camps throughout the country. Speaking at the third session of the Westinghouse Photographic Lighting Conference, Bloomfield, N. J., Col. M. E. Gillette, Commanding Officer, U. S. Signal Corps at Fort Monmouth, N. J., told 200 amateur photographers that for the first time in history photographs, slides and motion pictures will play a major part in the training of soldiers. Movies showing panzers, dive bombers and tanks in action, intended as fear propaganda, actually can give selectees and enlisted men a first hand opportunity to analyze and discuss with their instructors Nazi operations in the field.

Films covering 200 subjects from personal hygiene to loading a rifle will be produced for the army curriculum this year. Hollywood will produce a few of these reels but most of them will be army-made under the direction of Washington officials.

Kentucky Audio-Visual Clinic

An "Audio-Visual Aids Clinic" was conducted by the Eastern Kentucky State Teachers College in Richmond, Janaury 10. Dr. F. L. Lemler of the University of Michigan was guest speaker, taking as his topic, "What Is Good Film Utilization?" Dr. D. W. Rumbold presented "Mechanics and Problems in Operating a Co-operative Film Library."

Eastern Kentucky State Teachers College serves as a repository of the films owned by the thirty school systems composing the cooperative group. This institution has made educational films an integral part of its courses since 1930, and last year appointed a full-time director of audio-visual aids.

Current Film News

■ Castle Films, Inc., 30 Rockefeller Plaza, New York City, is now distributing eighteen of the series of 16mm sound films produced by the U. S. Office of Education for the training of defense workers. A library of fifty subjects has been planned to cover intensively all phases of machine shop practice in precision metal working. The eighteen ready are:

Engine Lathe—5 subjects.
Milling Machine—5 subjects.
Vertical Boring Mill—3 subjects.
Precision Measurement—5 subjects: *The Steel Rule; The Micrometer; Fixed Gages; Vernier Scale; Height Gages and Standard Indicators.*

State committees made up of representatives of industry, vocational training and labor coordinated the material to be used in the film scripts. The films are designed to show actual demonstrations of specific jobs on specific machines by expert operators; to emphasize such points as safety, the importance of blueprints, the need for cleanliness; to explain the basic principles of correct machine operations; and to assist instructors in overcoming some of the instructional difficulties of the subjects covered.

Shots from U. S. Defense Films:
"Engine Lathe" (top)
"Milling Machine" (middle)
"Vertical Boring" (bottom)

Right on the heels of America's formal entrance into war comes the announcement from Castle Films of a special news release under the title:

Japs Bomb U.S.A.!—8mm silent, 16mm sound and silent. Subject only to military regulation, this film will cover today's world-shattering occurences near both shores of the Pacific, on the broad expanse of the ocean itself, and on the important islands that dot its surface.

This new movie brings the number of Castle war films to sixteen, comprising an invaluable motion picture chronicle from the very inception of hostilities five years ago when Japan first invaded China down through each tragic chapter of the dark years that followed.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, announces several new film releases this month, including the following eight additions to their series of *History in the Making* shorts, with Tex McCrary commentator:

Our War—Round I—the fight against Japan; probable lines of strategy in the Pacific; roles for each of the Allies.

Our First Line of Defense—America's defenses in the air; work of the air force and civilians; protection of factories and homes against aerial attack.

Front Line Women—how British women work for the Army, Navy and air force; how American women are following in their footsteps.

Bernard Baruch—war on the economic front; industrial mobilization.

Production Soldiers—labor's role in defense; what labor leaders are doing in the present crisis.

Front Line Children—what is being done to protect them.

The New Disorder—Nazi rise to power and the reactions now taking place in conquered lands.

All God's Chillun Need Wings!—story of the Air Cadet League of Canada, composed of boys 12 to 18, who learn everything about flying but never touch the controls of a real plane.

Two new travel pictures in 16mm silent color are ready. They are:

Greece—contrasting ancient Greek architecture with modern Greece.

Yugoslavia—presenting native customs and folk dances, and scenes in Belgrade.

Two recent Bobby Breen features in 16mm sound are also announced by Gutlohn:

Escape to Paradise—a romantic and exciting adventure story with tuneful melodies, set against Latin American background.

Way Down South—Louisiana in the pre-Civil War days. Courageous little hero successfully fights to keep a vast plantation inherited from his father. Features spirituals by Bobby supported by Hall-Johnson Choir.

Walter O. Gutlohn, Inc. moved on December 12, 1941, to larger quarters at 25 West 45th Street, New York.

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, has introduced a novel application of the quiz techinque, so popular on radio programs. Some seventy-odd films are being fitted with quiz-sheets containing from ten to thirty questions designed to test the powers of observation and retention, as well as the general knowledge level of the group viewing the film. Prior to the running of the film the questions are answered

Scene from "A Journey by Train," Bell and Howell release.

by each participant, the replies being revised where desired after the picture has been shown. The answers are compared with a master-sheet, and are scored. A "quiz-kit" consists of thirty question blanks, an answer key, and a folder giving rules for scoring. An additional charge of 25 cents is made for each kit.

War Without Warning is the general title under which Bell & Howell are offering forty to sixty-minute assembly programs composed of newsreel and other documentary film material, combined into logical composites by eliminating titles and recutting. Three chapters are now available: I War in the Atlantic. II War in the Pacific. III The Home Front.

Journey by Train—4 reels, 16mm silent, produced by Text Film Corp.—has been taken over by Bell & Howell for exclusive distribution. It shows all the details of a conventional railway journey as seen through the eyes of two young children—even to how the baggage-man takes care of pets that cannot be taken into passenger cars.

Pilgrim Fathers—2 reels, sound—is available for rental and sale. It deals with conditions in England leading to the sailing of the Pilgrims in the "Mayflower," and of their relations with one another and with their new neighbors in the new world. It was produced in England by the Mayflower Society of Plymouth.

Approximately 3000 films are listed in the 1942 Bell & Howell Filmosound catalog, published in four sections. This year the educational section takes up 72 pages, the "Utilization Digest" and index 24, the recreational catalog

(*Concluded on page* 40)

The World-Wide Fight for FREEDOM

IN 16MM SOUND FILMS

"Lights Out in Europe"

World-wide acclaimed screen story of the Nazi attack on Europe and Britain. Brings home the truth, honestly, without hysteria. Dramatically portrays the British Civilian Defense and preparation for total war. Critics, educators, commentators have termed it the best picture of the war crisis. 7 reels.

"The 400,000,000"

Absorbing and timely screen story of China's epic defense against Japanese invasion. Tells the story of China's culture, modern achievements, famous leaders, and above all the great national unified effort to save itself from invasion. A notable contribution to understanding of the situation inside China and its stirring fight for freedom. 6 reels.

"Crisis"

Stirring screen drama produced on the spot by eye-witnesses in defiance of Nazi censorship, this memorable portrayal of the brave stand of the last democracy in Central Europe before the Nazi invasion is living history. H. V. Kaltenborn says: "Beyond doubt one of the most important historical films of our time. Every American who believes in Democracy should see this film." 8 reels.

"After Mein Kampf--!"

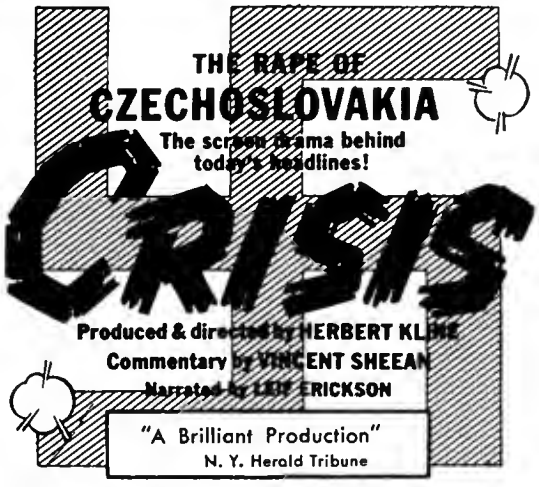
How the Nazis climbed to power; the Reichstag Fire; the trial of Van der Lubbe; the Roehm Purge; persecution of religious and racial groups; annexation of Austria; Nazi fifth columnists; plans for aggression and conquest. A daring expose of Hitler and his program of conquest, powerfully and truthfully told. 7 reels.

HISTORY IN THE MAKING

A Series of Short Documentary Films
5 minutes each **Rental: $1.00 each**

(or one free as "additional short" with feature)

AMERICA'S FACTORY FRONT
Necessity of concerted effo.t . . .
AMERICA'S NEW NOBILITY
Building a giant airforce . . .
BATTLE OF THE ATLANTIC . . .
The need for convoys . . .
BATTLE OF THE MEDITERRANEAN
War in the Near East . . .
BUNDLES FOR BERLIN
The R.A.F. in action . . .
"GUNG HO!"
China's appeal for aid . . .
HITLER'S SECRET WEAPON
Nazi propaganda work . . .
MASTER OF TIMING
The Hitler technique . . .
MIGHTIER THAN WORDS
Role of radio and personalities . . .
NIGHT HAWKS
England vs. enemy night bombers . . .
OUR EMPIRE IS THE AIR
Our contribution to modern aviation . . .
PROPHET WITHOUT HONOR
Gen. Mitchell, air pioneer, vindicated . .
THE PUNCTURED YELLOW PERIL
Stopping Japan in the East . . .
SEA POWER VS. AIR POWER
The lesson for U. S. A. . . .
SECRET OF THE BLITZ
Coordination for mechanized war . . .
THE SLUGGERS
Importance of tanks and anti-war defense
SWASTIKA OVER SOUTH AMERICA
Problems of our good neighbor policy
THAT TATTERED LACKEY
Mussolini's rise and present position . . .



Feature Rental Rates on Request

Address Nearest Exchange:

BERTRAM WILLOUGHBY'S COAST-TO-COAST SERVICE

28 East 8th Street
Chicago, Illinois

2402 West Seventh Street
Los Angeles, California

1600 Broadway
New York, New York

18 South Third Street
Memphis, Tennessee

2615 Regent Street
Berkeley, California

613 Montana
El Paso, Texas

7 Coors Building
Littleton, Colorado

89 Cone Street, N. W.
Atlanta, Georgia

404 Film Bldg.
2108 Payne Ave.
Cleveland, Ohio

(*Concluded from page* 38)

80, and the religious catalog 36. The first two have just appeared, to be followed soon by the other two. To meet the demands of film patrons, the recreational catalog will include a listing of 75 rental subjects in 8mm. in both black-and-white and color. A special list of 77 color films in 16mm is offered in Bulletin No. 133. All catalogs are available without charge.

■ Ideal Pictures Corporation, 28 E. Eighth St., Chicago, have added several 16mm sound films on significant events in contemporary history to their rental library of national defense films, such as:

Crisis—8 reels—drama produced in Germany, showing the brave stand of Czechoslovakia, the last democracy in central Europe, before the Nazi invasion.

Lights Out in Europe—7 reels—a study of how war came to the common man; Nazi attack on Europe and Britain.

The 400 Million—6 reels—the story of China's culture, modern achievements, and the national unified effort to save itself from invasion by Japan.

After Mein Kampf?—7 reels—an expose of Hitler's program of terror and conquest.

History in the Making—a series of 18 short documentary films, 5 minutes each—digests of world events, personalities and conditions.

■ Erpi Classroom Films, Inc., 1841 Broadway, New York City announce the production of several new 16mm. instructional sound films on health and first aid.

The Eyes and Their Care—treats in detail the physiology and hygiene of the eye. Animated drawings clarify structure and function. The film explains learning to judge distance, eye movements, light receptors, field of vision, night blindness, double vision, near and far-sightedness, infections, and protection of the eyes.

Defending the City's Health—describes factors which affect the health of cities. The work of a model city health department is portrayed, and the role of the individual citizen in a health program stressed.

Posture and Exercise—explains muscle activity and the physiology of exercise. Concepts presented include the relation of the nervous system to the skeletal muscles, motor units of work, development of endurance, muscle tonus in relation to posture, and peripheral circulation as it is related to general physical efficiency.

First Aid for Wounds and Fractures—focuses attention on the need for first aid knowledge and describes proper procedures in caring for injured person until medical aid arrives.

■ Commonwealth Pictures Corp., 729 Seventh Ave., New York City has obtained exclusive 16mm distribution rights to the RKO serial:

The Last Frontier, written by Courtney Riley Cooper, a thrilling story of the last stand of the Red Man in the days when fighting men like Custer, Wild Bill Hickok and Buffalo Bill roamed the plains. The serial is in 12 episodes and will be released to rental film libraries sometime in February. Schools whose recreational film programs include the use of serials can write to Commonwealth Pictures Corporation for information as to nearest library which will offer the subject for rent.

■ Post Pictures Corp., 723 Seventh Ave., New York City, has acquired exclusive world-wide distribution rights to Hal Roach pictures which are available for the first time on 16mm sound film. These four will be released during the current season through leading film libraries:

There Goes My Heart—Fredric March and Virginia Bruce in a lively story of a reporter in search of a missing heiress.

Topper Takes a Trip—a fantasy employing amazing camera tricks—with Constance Bennett and Roland Young.

Zenobia—an Oliver Hardy and Harry Langdon comedy with Billie Burke and Alice Brady also in the cast. The title part is played by an elephant.

Captain Fury—Brian Aherne as Australia's Robin Hood who fought for the freedom of his people.

■ Brandon Films, Inc., 1600 Broadway, New York City, is releasing a new group of Russian-made war newsreels, cultural shorts, and civilian defense documentaries. The films have English commentary and are one reel each. The following subjects are available for rental and sale:

For Honor, Freedom and Country—views of Russia's forces engaging the enemy; "scorched earth" policy in operation; labor brigades.

Russia's Millions Mobilize—industrial and farming mobilization; guerilla groups; bomb shelter preparation.

Report from Moscow—scenes of metallurgical plants; rush harvest; nurses drilling.

On the Line of Fire—Russian air and artillery forces in action.

The Red Army—Soviet Army, Navy and Air Force in maneuvers and action.

Soviet Woman—women in civilian defense work.

A special *National Defense Bulletin* of motion pictures dealing with the world-wide fight for freedom, is available from Brandon Films. The films listed are dramatic and authentic portrayals of events "Inside Europe," "Inside Germany," and "Inside Asia," in 16mm sound. It also includes a group of "Films from Britain and Soviet Russia."

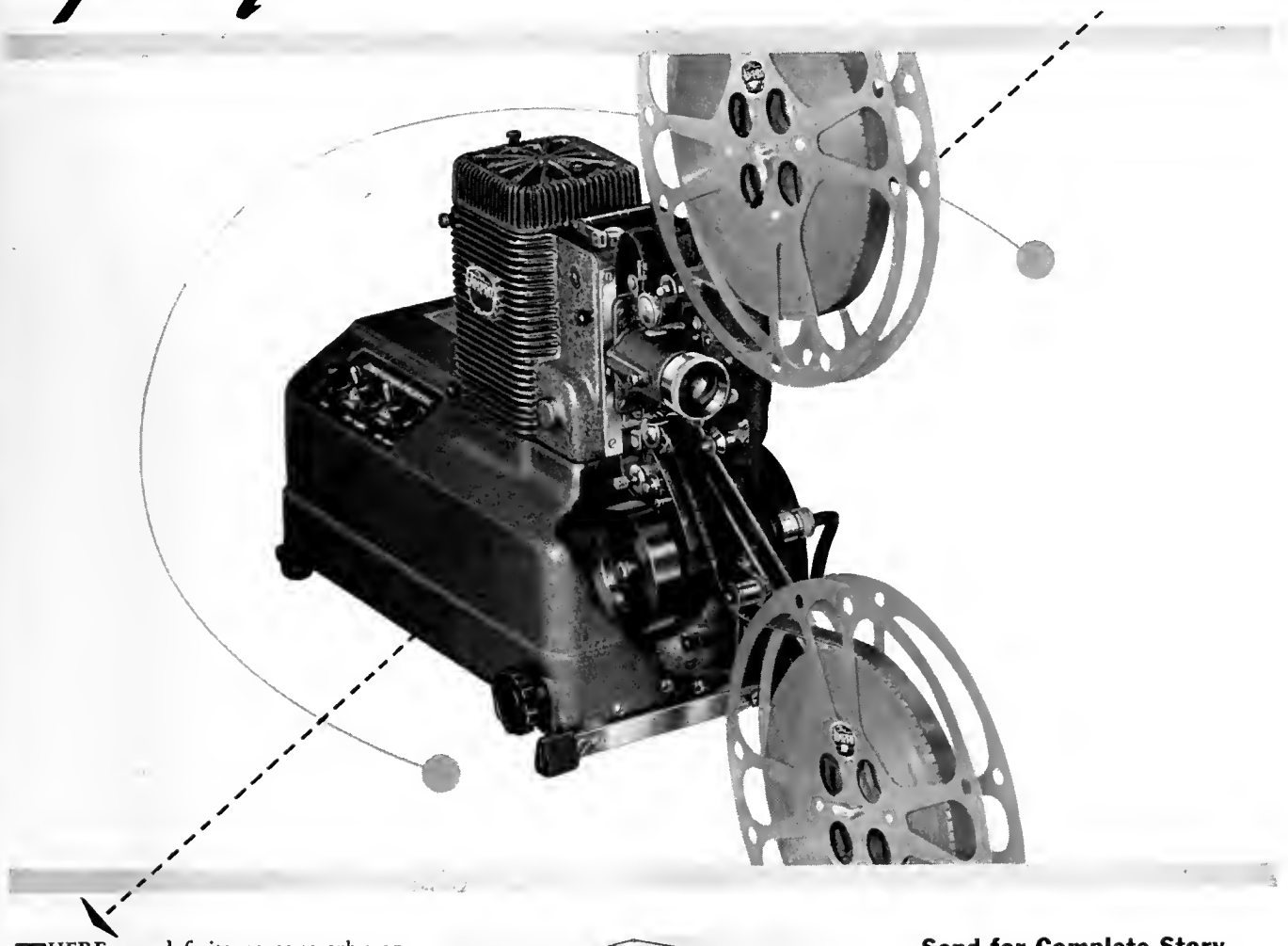
Alert—a reel on basic precautions and procedures for the average citizen—is scheduled for January release by Brandon in cooperation with civilian defense organizations. It was produced by Thomas J. Brandon, in association with Ben Kerner and Julian Roffman.

■ Eastman Kodak Company, Teaching Films Division, Rochester, New York, has produced a new teaching film designed for use in high school and agricultural school courses in biology and ornamental horticulture:

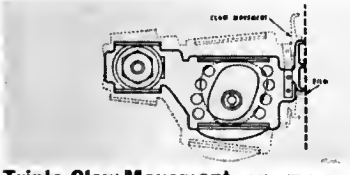
Vegetative Plant Propagation—2 reels, 16mm silent—illustrating the techniques used in various types of vegetative plant propagation, based throughout on scientific findings. The film brings out in full screen close-ups the steps in the processes being studied. Reel 1 demonstrates correct procedures in making soft green and woody stem cuttings; leaf cuttings; fleshy and fibrous root cuttings. Reel 2 shows tip, mound, and aerial layering; separation and division of garden plants such as phlox, dahlia tubers, narcissus and tulip bulbs; top grafting of apple trees, side grafting of evergreens; grafting of apple roots; bud grafting of roses.

A close-up from the Eastman teaching film, "Vegetative Plant Propagation."

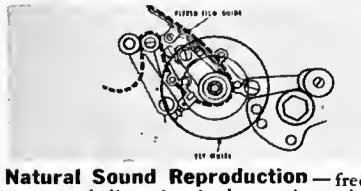
Here's Why AMPRO★SOUND *Gives You* Better Performance



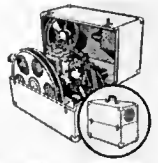
THERE are definite reasons why an ever-increasing number of Ampro 16mm. sound projectors are being selected to aid in the U. S. "Training for Victory" program—in schools, technical colleges, U. S. Army, Navy and aviation forces, government departments, as well as by America's leading industrial concerns. These reasons include:



Triple Claw Movement—The Triple Claw engages three sprocket holes simultaneously which materially lengthens the life of the film. This is of first importance not only from the standpoint of operating costs but affords better reproduction because of improved film condition. One evidence of Ampro's improved film movement is the absence of "film slap" which also contributes to unusually quiet operation.



Natural Sound Reproduction—free from waver and distortion is due to Ampro's finely balanced flywheel and patented "film guides" which control the path of the film to prevent any speed fluctuations or lateral deviations.



Quiet Operation and Portability—The quiet Ampro mechanism of the model illustrated permits operation without blimp enclosure. Packs with reel arms folded for extreme portability. Since there is no sound-proofed case to confine heat, this projector provides extremely cool operation even with 1000 Watt lamp.

And Many Other Features, such as: Tube Operation Approved by Radio Mfr's. Assn. • Flexibly mounted Motor • Direct Light to the Photocell • Underwriters' Approval for 1000 Watt Lamps • All Tubes Convenient for Quick Replacement • Non-Overloading of Amplifier Tubes • Standard Lamps procurable everywhere at no Extra Cost • All Electrical Features Built on one Removable Chassis for Simplified Service • Unusual Ease of Threading • Fast Automatic Rewind • Tubes Carry Oil to all Points from Centralized Oil Cup • Oilite Bearings and Precision Ground Shafts Employed Throughout • Convenient One Hand Tilting Device • Special Threading Light and Pilot Light.

Send for Complete Story

Although the demands of the U. S. War program may make it impossible to fill your requirements immediately—every person interested in better 16mm. projection should get full details of the Ampro story *right now!* The coupon below will bring it to you promptly.

AMPRO

Precision Ciné Equipment

ES142

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Gentlemen: Please send me the complete details on entire line of Ampro "Precision Quality" 16mm. Sound and Silent Projectors.

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Among the Producers

De Vry Versatile Amplifier

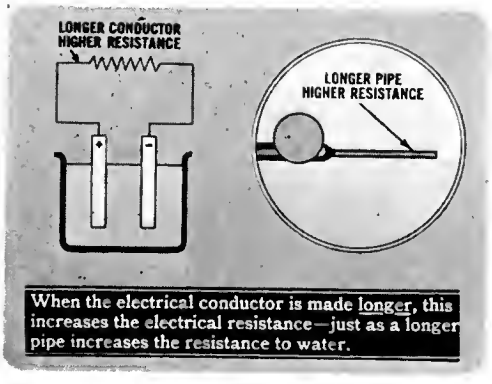
From the DeVry Corporation comes word of a new moderately priced auditorium type 30 watt amplifier, the Model ND 30. This new amplifier, in addition to its use as a motion picture sound reproducing unit, has facilities for use as Public Address System employed in public speaking, sports announcing, commentating, music appreciation, and to provide dance music.

Its versatility is such that with it one can use microphone and phonograph or radio and mix in sound while projecting film; use two microphones and phonograph or radio when using amplifier as Public Address System; equalize volume when using two projectors due to separate volume controls for each machine; regulate both high and low frequency response independently; show silent films with one projector and play music on other projector for musical background while controlling volume.

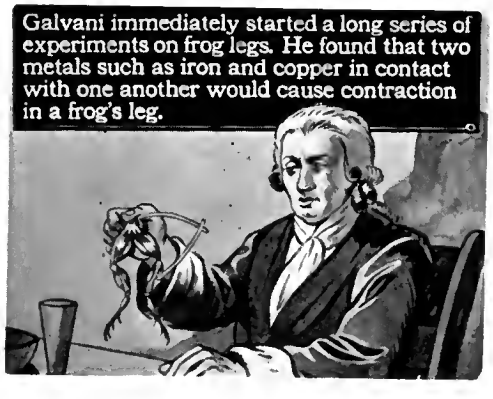
It has a rated flat response from 50 to 10,000 cycles and is said to provide ample volume for audiences of up to 5,000 persons. For further information write to the DeVry Corporation, 1111 Armitage Avenue, Chicago, Illinois.

Electricity Slidefilm Set

An educational slidefilm Kit-set on Electricity, recently released by The Jam Handy Organization, 2821 E. Grand Blvd., Detroit, Michigan, is finding wide use in academic high schools and colleges, technical and vocational schools, and industry to give basic instruction in electricity. This visual instruction tool not only greatly clarifies the subject of electricity to the average understanding but quickens the rate at which the student learns.



Above, A frame from the slide film on "Current Electricity; Below, Some historical data on "The Electric Cell."



The set is made up of 12 slidefilms dealing with magnetism, static electricity, current electricity, the electric cell, the storage battery, electro-magnetism, the generator, alternating current, electric motors and electric meters. Various applications of electricity in the automobile, in the radio, in the home, and industry are demonstrated in the last two films in the series.

These slidefilms are effective aids for teaching electricity in physics and general science classes as well as in specific electrical courses, providing thorough and factual study of the basic principles of electricity, its history, how it works and its uses.

Hundreds of photographs, diagrams, wash-drawings and cross-sectional views, accompanied by explanatory captions, compose the electrical course. Pictures (frames) are numbered for convenient cross-reference with the lecture and demonstrations. The pictorial course greatly simplifies the instructor's task, and makes it possible, when necessary, to handle larger groups as more students can see the films than can conveniently watch small table top demonstrations.

Educational slidefilms are coming into wider use in schools as a result of the national defense emergency which is giving a tremendous impetus to visual education because it is both effective and time-saving. Automobile mechanical training slidefilms, born of the emergency, are now in use by the United States Army for the training of mechanics for our motorized and mechanized units and by high schools, vocational and technical schools, universities, CCC Camps and apprentice training groups. Pilot Training slidefilms are being used for ground school instruction of pilots in about 175 universities and other centers of aeronautical training. Slidefilms on Bench Work, Good Teaching, and Basic Aircraft Metal Skills have been found valuable, and a Machining Kit-set is in production. Films for Distributive Education and a Sales Management series have just been released, and motion picture series on traffic and industrial safety, automotive mechanics, and popular science are available.

RCA Engineer Cited by SMPE

Glenn L. Dimmick, sound engineering expert at RCA Laboratories, received the Progress Medal of the Society of Motion Picture Engineers at its semi-annual convention in October, in recognition of his outstanding contributions to the advancement of the motion picture art. Dr. Dimmick is the second RCA engineer to be so honored, and follows Walt Disney on the Society's roll of medalists. Recently, he has been engaged, with other members of the RCA research staff, in perfecting a practical commercial means of increasing the efficiency of motion picture camera and projector lenses by coating them with a chemical film which virtually eliminates light reflection.

New G-E Photoflash Lamps

Development of a blue Mazda "mighty midget" Photoflash lamp No. 5 was announced last month at Nela Park by General Electric's lamp department. Need for the new tiny blue flash bulb, Nela photo experts said, has grown out of the widespread use of miniature cameras designed for color photography. The blue No. 5 is, however, also adaptable to use with larger cameras. Color coating on the new blue mighty midget has the same characteristics as that of the familiar G-E Mazda photoflash lamp No. 21B. It has been carefully matched by Eastman Kodak Company to the color characteristics of Daylight Kodachrome. Size and shape of the new G-E No. 5 bulb are identical with the clear No. 5. More than two dozen may be conveniently carried in the coat pockets.

Another G-E development is a blackout photoflash lamp in two models designed to permit the taking of pictures at night without revealing the customary flash to the eye. The smaller flashbulb is called G-E "mighty midget" blackout photoflash lamp No. 5-R. The larger blackout flashbulb, identical in size and shape with the conventional G-E Mazda No. 21 photoflash lamp, will be known as G-E blackout photoflash lamp No. 22-R. Bulb of each blackout photoflash lamp is equipped with a special purplish-black coating. Characteristic of the coating is its ability to screen out visible light yet to let the infra-red, or heat rays, through to flood the subject with invisible radiation. Film, sensitive to infra-red rays, then takes the picture.

Some Valuable Literature —

"1000 AND ONE"—The Blue Book of Films

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The current (17th) edition lists and describes over 5,000 films, classified into 162 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film title in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

128 pp. Paper. Price 75c. (25c to E. S. subscribers)

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A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 500 teachers after actual use of the films with classes.

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(3) indicates 16mm sound and silent.
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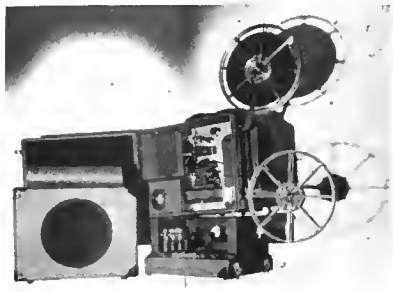

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FILMS ON ELECTRICITY

16mm. Sound or Silent — with Lesson Plans

Reading the voltmeter is depicted in this scene from one of the six DeVry film lessons in electricity.

Available on rental or purchase from the DeVry Film Library. These films are listed in the reference film guide as issued by the U. S. Office of Education.

CONTACT

YOUR STATE VOCATIONAL DIRECTOR

The films listed below may be obtained through public funds provided for defense instructional materials, allocated at the discretion of state vocational authorities and subject to such approval according to the provisions of Public Law 146.

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If your school is teaching Electricity, these approved, authentic films should be a MUST on your film list.

SUBJECTS COVERED

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- ★ ***Principles of Electromagnetism***
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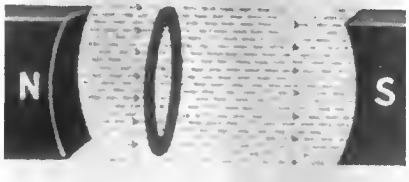
Each Film 2 Reels in Length



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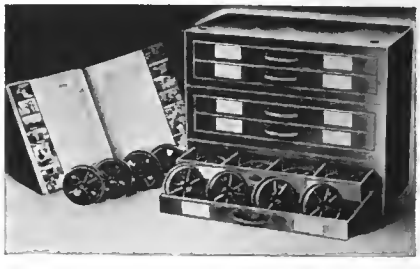

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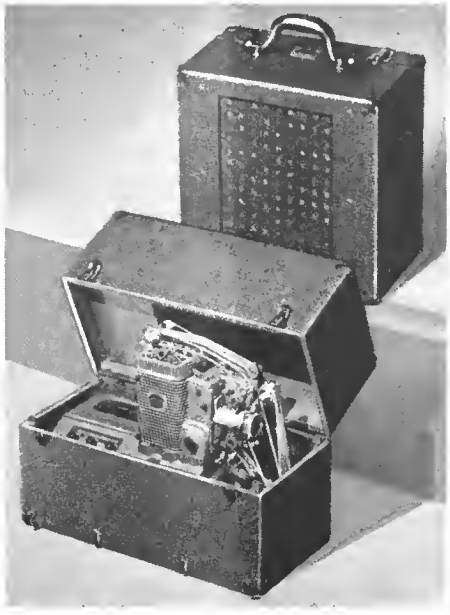

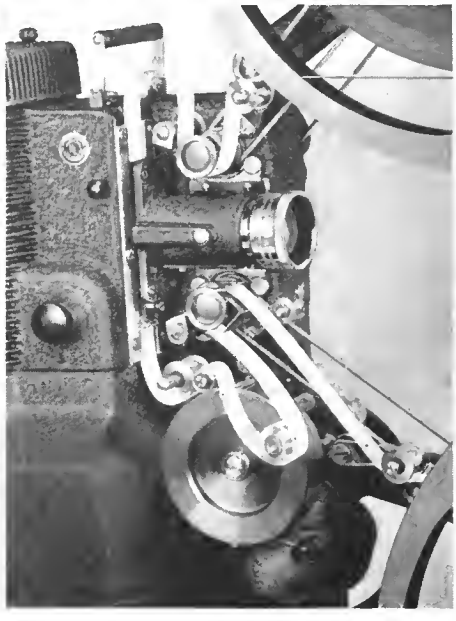

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The EDUCATIONAL SCREEN

VOLUME XXI FEBRUARY, 1942 NUMBER TWO
WHOLE NUMBER 199

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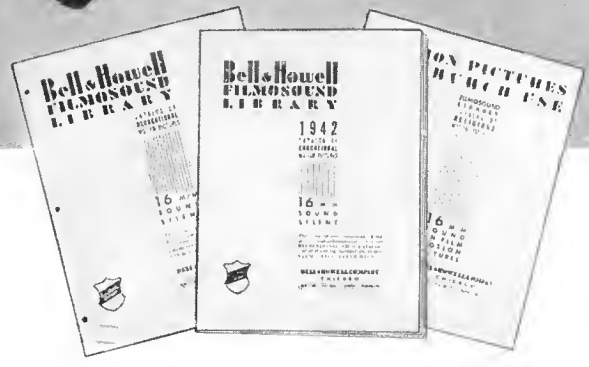

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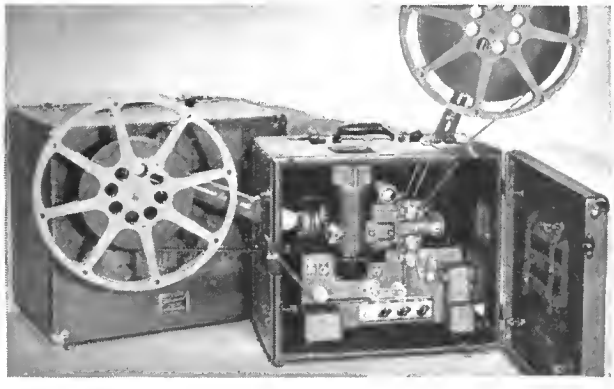

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The Greatest Job in Educational History — An Editorial

THERE has never been anything like it—this colossal task of giving optimum training to maximum numbers in minimum time. An entire nation must be educated in specialized skills, in national cooperation, in international attitudes, and it must be accomplished speedily but still efficiently. It has never been done before but it will be done now. It is not enough to say that visual aids will *help*. Without visual aids education at such speed and on such a scale would be *impossible*. This realization has come home to the Government, to the educational field, and to the nation at large.

The problem is the swift training of hundreds of thousands for new factory production—of millions in our national forces in technical knowledge and skills—of more millions for local defense procedures—of our entire 130,000,000 for the understanding, enduring, prosecuting and winning the world's first World War. And the entire effort must be so designed and oriented as to contribute directly to patriotism, morale, national unity, hemispheric solidarity, Pan-American defense, and world-wide intensification of the allied effort. A formidable problem, indeed! It is probably insoluble unless by visual methods!

Technical and mechanical training is doubtless the most immediate and fundamental need. It is a war of the machine. Masses must be taught to operate factory equipment to produce war machines; other masses to operate the machines produced. The motion picture is the visual aid needed first and basically for this purpose. Why? A machine functions only while it moves. To learn its functioning the movement must be seen and observed. The best method to this end, of course, is to place the student close to a machine being expertly operated, free to move around it, study every detail from all sides, digest the operator's explanations, and try his own hand at operation. That method can be largely used in education at the peace-time pace. But this is war-time! The time element alone would prevent supplying a machine apiece for the immense army of students to observe, even if there were wealth enough on earth to defray the cost of such procedure. The relatively simple solution is to put the machine—the whole of it, parts of it, important details in close-up, and all in action—on a film, make multiple prints, and show the one machine to the millions. Many institutions are also assembling large collections of standard and miniature slides, for prolonged study of essential elements, to accompany motion pictures now available and to come. The still pictures must likewise be screened so that every trainee in the class—whether it numbers ten or a thousand—can have the same clear, close-up view of the subject as if he stood beside the machine.

The outstanding films now being made by the U. S. Office of Education, designed for teaching machine shopwork, constitute the most notable series of films on a single topic yet produced expressly for educational purposes. The best technical skill and authoritative scholarship are embodied in these productions. There are 50 films in the series, some 18 are ready, the balance to appear as rapidly as is consistent with high quality. The series supplies ideal material for training machine workers. Ready now are 5 films on Precision Measurements, 5 on the Engine Lathe, 5 on the Milling Machine, 3 on the Vertical Boring Mill. To be released soon are 2 more films on Vertical Drill, 3 on Sensitive and Radial Drill, 3 on the Shaper, 1 on Centering and Layout, 7 on Benchwork, 10 on Shipbuilding, 2 on Cutting Tools. Official distribution of the series for the U. S. Office of Education is handled by Castle Films, Inc., at a sale price which touches an all-time-low for films of such quality.

There is already available, from other than Government sources, a vast store of film and slide material pertinent to every item on the training program. More is coming daily from many sources at a production rate never before approached. The University Extension Divisions and many commercial distributors are doing yeoman service to the cause by reclassifying their materials into units to serve the precise needs of the hour, by putting additional prints into circulation to meet the growing national demand, and by adding new subjects as fast as they are produced. A truly nation-wide distribution of any and all material needed is on the way to full realization. Enormous expansion in personnel and equipment is at hand. An army of teachers must be had, many of whom, perforce of less experience, must lean heavily on these visual aids. Projectors, stereopticons, screens will be called for by tens of thousands. Classrooms are multiplying at an unheard-of rate, not only in schools and colleges, but in clubs, lodges, community centers, auditoriums, gymnasiums, town halls, theaters, sales offices, display rooms, even private homes. And the direction and management of the gargantuan undertaking is to be intrusted to a new government bureau now in formation in Washington, with appropriations adequate to the greatest educational emergency ever confronting America. It is all-out education. Nothing less will do.

And when it is all over? America will have witnessed the greatest educational spectacle of all time, a nation-wide visual demonstration of the power of the picture. The experience should help American education to shake off the incubus of tradition and enthrone visualization above verbalism. The last war marked the beginning of real progress—this war should date the beginning of real greatness for the visual movement in American schools. N.L.G.

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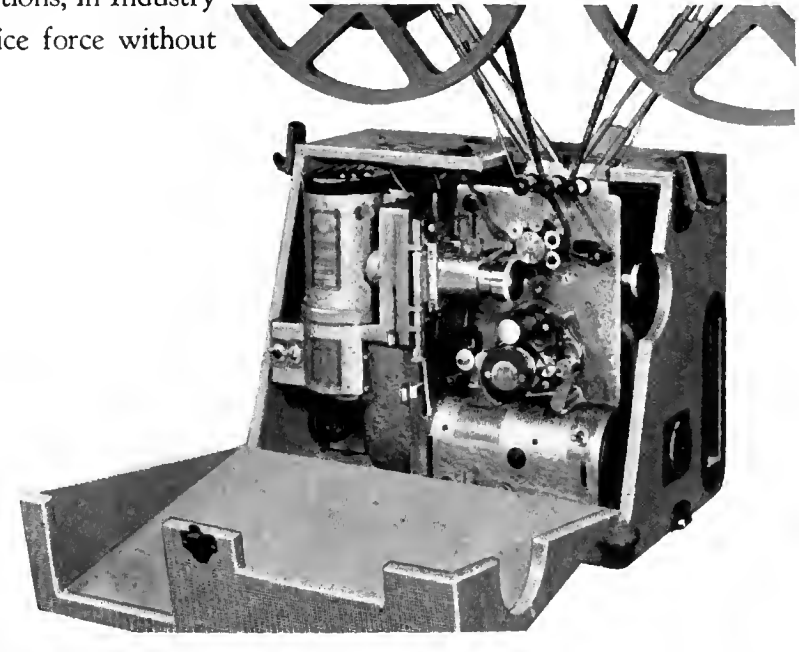

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The sentry at his post at Harrod's Station. (From the Erpi sound film "Kentucky Pioneers")

Films and Slides Together

A noteworthy example of visual teaching procedure in the development of a unit on American pioneer life.

ESTHER ASCHEMEYER
Baden School, St. Louis, Missouri

IN preparing a demonstration* of the role such visual aids as slides and sound films may play in the learning process, one must necessarily have cognizance of the functions performed by these tools. Films may be flexibly used to present information, to stimulate interest in a field, to supplement information previously obtained, to promote understanding, to summarize and to review. Slides afford mastery of details and background to any degree of minuteness desired. One must bear in mind that extension and completion of learning comes about in the subsequent learning activities tied up with the film and slides to be used.

For the demonstration, just as for a classroom lesson, careful planning of the entire unit of instruction was necessary. What aids might be most effective in developing the objectives set up for the unit? When might they be introduced most effectively? How many showings of the selected film would serve most advantageously? What supplementary material was available and what follow-up work was needed?

A seventh grade class in social studies ready to make a study of the Westward Movement of the United States was selected for the demonstration. Three objectives were set up as desirable for realization in development of the unit, "America Turning Westward."

1. To develop an understanding and appreciation of how the early pioneers contributed to the progress of the American experiment in democracy;
2. To develop an understanding of how the settlement of the West helped to determine our national character;
3. To compare the early American pioneers with American pioneers of the twentieth century.

In general the procedures to be followed were individual reading, class discussion, the use of flat pictures, group activities, and the use of a sound motion picture film and projected slides. Catalogues of films and slides were carefully reviewed in order that the best material available pertaining to the subject could be selected. The Erpi classroom sound film, *The Kentucky Pioneers*, after careful previewing, was selected as the most effective film available and a series of Keystone slides was picked.

To introduce the subject, the quotation, "Between 1790 and 1810 more than a half million settlers went into Kentucky and Tennessee," was placed on the blackboard. This was discussed by the class and a number of thought-stimulating questions were developed by the students. These questions, which were recorded that they might be kept before the class throughout the first part of the study of the unit, included:

1. From where did these settlers come?
2. Why did they leave their homes?
3. What kind of people were they?
4. Why did they go to Kentucky and Tennessee? How had they heard about these lands?
5. How did they travel to the new lands?
6. What possessions did they take with them?
7. What dangers confronted them as they traveled?

*Given before Missouri State Teachers Association, St. Louis, December 3-6, 1941.

8. What routes did they follow?
9. How did they seek protection in the wilderness?
10. What kinds of homes did they build?
11. How did the pioneers help one another?
12. How did they furnish their new homes?
13. What industries did they engage in after establishing themselves in their new homes?
14. What recreational activities did they have?

Some discussion and consulting of reference books followed. A wall map was frequently used to trace routes of the pioneers and to locate place names. At this point the sound film, *The Kentucky Pioneers*, was introduced for the first showing. (Student operators were used throughout.) The students were given definite points to be observed in the picture; in addition they were instructed to be on the look-out for answers to their questions. These special points were:

1. How the stout spirits of the pioneers and their grim determination predominated;
2. Where the pioneers lived temporarily after completing their journey to the new country;
3. The household equipment used by the pioneers in the picture;
4. The co-operative spirit among the pioneers;
5. Their "fun-fest";
6. Their provision for the education of the children;
7. The significance of the closing words of Mr. Taylor, "If things go wrong, we can always move on. There will always be freedom out there".

Some time was then spent discussing the film, bringing to a focus what the students had derived from the showing in terms of the questions set before them. Interest leads were brought out. For example, one child was particularly interested in learning more about the building of the pioneer's cabin. Others expressed interest in the household equipment. It was discovered that some of the pupils were vague on certain points covered in the picture. One child inquired about the names of the families in the picture; another was undecided about the process of chinking logs; still another suggested that other modes of travel had been followed by the early pioneers in addition to the ones shown in the film. Thus this first showing of the film had stimulated the class to thinking and had served to introduce phases which would require additional study and research.

The second part in the development of the unit had as its specific objective the clarification of confused ideas obtained in the previous lesson, the answering of questions and the supplementing of the facts depicted in the picture. To open this lesson there was a restatement of the questions raised at the close of the film discussion. The slides had been selected to permit study in more detail of certain phases of the subject and to add further facts for the discussion. Particular children, who had made evident an individual interest in specific points, had been asked to do some research in their particular interest field, and were given the slides applicable to their research topic.

Then came the showing of slides selected for the demonstration. These slides were: Boone Leading Pioneers beyond the Alleghenies, Moving by Covered Wagon, Emigrants Going Westward, The Emigrant Camp at Night, Flatboats Moving down the Ohio, Cincinnati as an Expanding Frontier Settlement, Building a Cabin, A Reaping Match, Flaying Grain by Hand, The Husking Bee, Learning A B C's, The Home was the Center of Industry, Hand-dipping Candles, The Arrival of Mail by Post, A Pioneer Dreams.

The research children acted as commentators when the slides were projected for the class, interpreting them and pointing out interesting points in the slides, thus tying them up with the work done previously.

The class was now ready for a second showing of the film. The direction, "Observe the picture with an idea of determining how the facts we have just seen in these slides fit into the film," was given. Further, the children who had vague conceptions from the picture were cautioned to be alert for answers to their individual questions. Again the picture was discussed at the conclusion of the showing. This time the children who had raised questions were satisfied that their questions were clarified for them. When asked how they felt about seeing this picture a second time, several students responded, "Oh, we understood it better this time. We knew more about it."

These first lessons were intended to serve an introductory function in the development of the entire unit. They led to an activity program into which various subjects of the curriculum, including social studies, art, literature, music, physical education, current events and English were integrated. The activities were determined by the needs and interests of the group. The

(*Concluded on page 77*)

Slides from Keystone Social Studies Units; left—Emigrant Camp at Night; right—Flatboats Moving down the Ohio

Why I Use Miniature Color Slides

Stressing again the value of 2x2 slides in teaching, with specific reference to their possibilities in home economics classes.

MARY INEZ MANN
Grover Cleveland High School, St. Louis

ONE of the newer and most promising aids to visual education, the 2x2 color slide, is coming into its own. Slides are now used in all fields by increasing numbers of educators alert to better means of instruction. Visual aids function only in the degree they approach reality, and color adds greatly to this reality. A good picture will bridge the gap between the concrete and the abstract.

Any verbal picture is foggy if the listener's background does not include information on which to build a true conception, but the visual picture will not be misunderstood. Furthermore, in a class where homogeneous grouping applys mainly to age, the color slide will reach all mental levels more effectively than will words. The immature will always find some meaning in a color picture and the more mature will see beyond the content of that one slide.

At every instructional level, from the lowest to the highest, well composed pictures in natural color develop artistic taste, broaden knowledge, and open eyes to the beauties and interests which are everywhere. Briefly they help to answer the questions: How do people enrich their lives? Earn their livings? Protect themselves? Govern themselves? In return comes a richer living experience!

Every school that has electricity could furnish the necessary slides and equipment at nominal cost. Anyone owning a camera which carries the correct size film will find it an interesting venture to build a miniature color library of his own, supplemented by the commercial slides which are fast becoming available in a variety of subjects.

The color picture can be repeated for different classes and for various reasons with endless uses. For instance, a picture of wheat threshing might be valuable for physical or industrial geography, social studies, art, nutrition, literature, and so on as occasion arises. These little slides can overcome the barrier of distance and at far less cost and trouble than with more elaborate equipment. They can bring one country to another, the rural life to the city or vice versa; they can portray the culture and social aspects of past days or modern times.

Ordinary pictures or other illustrative material shown to classes lose much of their value in their remoteness from the pupils. Either they can't see at all or they can't see well, and if the object must be passed it has lost interest appeal due to the time elapsing between a discussion of it and the time it reaches the hands of a large portion of the class. With increased size by screen projection all the students are looking at the same thing at the same time, and a discussion by the entire class can be carried on simultaneously with no divided attention. A maximum of learning in a minimum of time!

Often the material brought to the classroom is splendid but only available while that pupil is in the class. To the mutual delight of student and teacher, a color slide will preserve a record to share with future classes. Pupils often feel great pride in things they have never appreciated when those things are admired by others for a very real value.

Think what some color slides would mean in showing the geological and geographical wonders of the Americas,—the breadth-taking beauty spots of nature; or the man-made features, both old and new, in which this country abounds. What an impetus that would be to the study of our country's history!

No one enjoys that of which he is ignorant; everyone enjoys that which he understands. Often in developing some special hobby not only the fun of that hobby but an ever-widening horizon stretches before one as a result. To use my own experience as an illustration, for years I have been interested in historic and contemporary textiles, but to have a large collection of fine pieces would be prohibitive in cost and in the time it takes to search them out. People and institutions are most generous in allowing pictures taken of even their rarest pieces. I find this growing film library of textiles very satisfactory in showing texture, color, design, depth and weight. Moreover, it can be transported and shared with others easily, whereas the cloth itself is bulky and there is always danger of loss. From this collection kindred interests have developed, such as a collection of slides on costumes, lovely interiors, table settings, and flower arrangements. Slides showing good and bad buymanship make consumer problems more readily taught. Posture, good taste, selection—on and on, and how easily a few slides put the idea over!

In taking one's own pictures some practice is necessary, but any amateur will find that clear directions easily followed come with the films. Still life subjects are best taken inside, after dark, when controlled conditions are possible. Side light will accent texture and will not flatten a subject as will a direct overhead light. Extreme accuracy as to distance, light and exposure are essential for the best results. The films are returned processed and ready to show, but it is best to mount them between glass to protect against scratches and finger marks. A good projector and screen should be used for satisfactory results. A file case is necessary if you are to have the slide you want when you want it; and the easy availability of these tiny slides is one of the reasons they are superior for class use.

The pleasure of taking and collecting this type of visual teaching aid reaches far outside the schoolroom and is neither expensive nor intricate. Schools might well have their own film library, and the cost is not prohibitive for individuals to supplement the school collection with their own slides or with some of the fine slides to be bought now at nominal cost.

Think twice about these little 2x2 Kodachrome slides for visual education, and for fun.

Sources of materials for the opaque projector include trade magazines, personal drawings and sketches, shop blueprints, (small size), manufacturer's books of instruction, trade and technical texts, trade handbooks and reference manuals, free pamphlets and literature from commercial firms. Some of these sources are shown here with the machines.

A Visual Aid for Defense Trade Training

Concrete suggestions for using the opaque projector as an effective tool in the defense training program.

H. W. MALSTROM

Acting Director of Industrial Education
Public Schools, Bremerton, Washington

AN important Defense educational problem is to organize specific instructional material applicable to the job needs of the local Defense industry. In the past most organized visual education material has been of a general nature with little direct application to job needs. The marine machinist, airplane machinist and the machinist in a tank factory have many things in common but at the same time a great difference in job knowledge is required. This specific job knowledge is the one most difficult to secure instructional material on, though more and more such material is becoming available now. The major part of it depends on the instructor's memory of job methods, standards and many other items. The teacher can only organize instructional material around his own technical knowledge and experiences.

Trade Training May Be Divided Into Three Situations:

1. Actual jobs, projects or experiments, requiring the manipulative skills, are done by students in a shop or laboratory.
2. Students make regular layout patterns and drawings which constitute a part of the trade. For example: sheet metal layout and shipfitter lofting.
3. Students are in a classroom in which the technical knowledge associated with the trade jobs is presented.

The most difficult to present so that it will be retained is the technical knowledge in a classroom situation. The tendency is for many teachers to lecture too much with the students in a more or less passive attitude. Visual education machines and more especially the reflectoscope, or opaque projector, help the instructor to present efficiently the technical knowledge of a trade. Such instruments are the Balopticon of Bausch and Lomb and the Delineascope of Spencer Lens Co.

Most of us are familiar with the 16mm silent and sound movie films, glass slides and the 35mm strip film slides. In the academic fields these have been developed to a very high efficiency but in the vocational trades much of the visual material is either obsolete or too general. It is also difficult to secure adequate bookings and material is not available in sufficient quantities for any one trade. The reflectoscope is universally adaptable to any trade without the necessity of booking in advance available visual material or of preparing costly and time-taking films and slides of one's own making. This machine uses material from magazines, books and drawings as they are and reflects it enlarged on a screen just as if it were a regular slide. For quick organization of instructional material in a trade, the reflectoscope is superior to other machines. It allows the instructor to select pictures, drawings, etc., that apply directly to shop needs.

Any related subjects class that uses drawings, graphs, diagrams and pictures can make effective use of the reflectoscope. We have five of these machines in constant use by the related subjects teachers in the trades.

Instructional Features of the Reflectoscope

1. Only one copy of material is needed for the entire class.
2. The projector is simple to operate.
3. Can be used with any size of class.
4. Colors are reproduced same as on the original.
5. Both sides of the paper used may have instructional data.
6. Material may be used from books, magazines, pamphlets, etc. without cutting or otherwise damaging it.

(*Concluded on page* 81)

Teaching Care of Pets

The Case History of a "kitten" film used with primary grades

ELEANOR D. CHILD
Supervisor of Audio-Visual Department,
Public Schools, Greenwich, Connecticut

THE use of the film *Fluffy, the Kitten** in one class resulted from an unusual circumstance. A teacher discovered one of her second grade boys on his home porch, teasing a kitten which was protesting unsuccessfully. Her first impulse was to rush over to the boy and ask him how he would like to be treated in a similar fashion. But, on second thought, she realized that the mother might be not far off and might resent her intrusion; besides, she remembered that a film on the care of a kitten had recently been purchased by the school's audio-visual department. So she discreetly disappeared, unseen by the boy—and by his mother.

Two mornings later, her plan of attack had been carefully prepared. She asked, "How many of you boys and girls own a cat or kitten?" About one-third answered in the affirmative; most of the others said they wished they owned one. One child started to describe his kitten. Others chimed in with remarks about their cats. A few questions were asked by the non-owners. The conversation up to this point could not have been classed as very intellectual. The average inquiries were: "What is the color of your cat?" "Can it play any tricks?" The latter brought forth several ideas about the abilities of some of their pets. Thus far the teacher had not said anything except to ask the opening question.

Within a few minutes the teacher asked whether they would like to see a film about a kitten. Naturally the response was "yes"; all of them loved the movies. Then she asked them what they hoped the movie would show. This provoked greater interest. "I'd like to see it playing tricks", laughed one girl. "I'd like to see it eating!" exclaimed another. "What does the kitten eat?" asked one child who had said nothing until then. "Milk", answered a boy. "Mine likes to catch and eat birds", a little girl explained. That brought a chorus of protests that cats should not kill birds. "My cat catches mice to eat," said one boy. "Mine eats canned salmon," supplied a girl. "My cat eats meat," declared another child. "I'd like to see a kitten washing itself," volunteered one boy. Whereupon one poor child who apparently had never owned a kitten asked, "Can kittens wash themselves?" One boy informed her how this was done, several others adding details. Some wanted to see the kitten sleeping. One boy asked, "Where do kittens sleep," As questions were asked, the teacher wrote them on a blackboard.

The teacher then brought out the film, which she had been able to obtain immediately from the audio-visual department. The preceding day she had previewed it and planned the class work. While the teacher set up the projector and screen, the children pulled down the shades and moved their chairs to advantageous positions, as they had been taught to do when a movie or other visual aid was to be shown. "You will be able to read all the titles, I believe," said the teacher, "But there are a few words which may be new to some of you. I'll write them on the board." She pronounced the following words and discussed them: Persian, vegetables, newspapers, roughly, mischief, bother, and curious.

Reading poems and stories about kittens

Then the picture was projected. The children were delighted with the film. They could read all the titles because the wording was unusually simple. They loved the cute three-months old Persian kitten, the star of the picture. Besides, the movie introduced many new and interesting ideas about cats. During the showing of the film, several pupils made remarks or asked questions, but the teacher answered them briefly so that such distractions would be at a minimum. However, the children weren't discouraged from this practice; the teacher felt questions should be asked, and answered if possible, whenever they arose.

After the film had been finished, a number of other questions were asked by the children. "Why don't more people put a log near the kitten so it will scratch the log instead of a rug?" "What do you do with a kitten when it is first born?" "How do you train a kitten to use a newspaper that has been placed on a pan?" Many remarks were made about the kinds of play enjoyed by the kitten and the ways the kitten was punished when he was naughty.

One girl said she liked to draw pictures of kittens. The teacher had been hoping for some such cue; she asked whether all of the pupils would like to draw a picture of the kitten. It was decided to have each boy and girl make a picture of the different things the kitten was doing in the film and to hang these above the blackboard around the room. After all of the

*A one reel, silent educational film produced by Foster Films.

children had chosen the poses they wished to draw, the film was shown again so that they could study the kitten's appearance more carefully. These drawings proved to be very good and were exhibited as planned.

The teacher had collected a number of books with stories about kittens. These were read with great interest. One girl asked whether she might bring her kitten to class the next day. Of course, every other owner of a cat wanted to bring his too. To select the boy who had mistreated his kitten, the teacher had already devised a sentence, the last word of which would come to this boy, if she started the sentence at the back of the first row. (This method of beginning a sentence at one child and choosing the person where the last word arrived was often used when selecting several persons for a job.) The teacher said she would choose two people to furnish kittens and then started the sentence. A girl and the aforementioned boy thus elected said they would bring theirs.

Holding her kitten as she learned in the film.

The next day, following the points presented in the film, the pupils practiced holding the kittens properly. A newspaper was placed in a corner for kittens. The boys and girls shared their milk with the kittens at recess time and later had fun watching the kittens wash themselves. The children were delighted to play with the kittens as suggested in the film.

The pupils decided to make a scrapbook about kittens to give to the Red Cross; they thought that it would be fun. Each one decided to write a story and also to place in the booklet the best of the first drawings together with any others they wished to make. It was suggested they decorate the cover with an original drawing or with cut-out pictures from old magazines. Some of the more ambitious children copied the idea of the film by writing, in the first person, such sentences as: "I do not like to be held by the neck." "I like to be held like this." Each of these sentences was illustrated by a drawing. Some wrote short poems for the notebook. Later the music teacher had the pupils write tunes for the poems. (She also had them sing such songs as "Pussy cat, pussy cat, where have you been?")

During the discussion period for the pupils, they talked about whether milk, meat and vegetables, were also good for children. They noted the beautiful fur of the kitten in the film and decided it was due partly to its good food, daily washing, and general care. They talked about keeping themselves as clean as the kitten kept himself. Mauling of cats was discussed and all agreed it was mean; they would not like similar treatment. The conversation led to "how other pets should be treated." Stories about dogs, white mice, and other pets were told by each child, and the care of each was discussed.

Later it was discovered that this lesson on the care of a kitten had the direct result of children taking better care of their pets at home. Several mothers remarked to the teacher that the film and allied work had caused their children to have new ideas on the treatment of pets.

The teacher was especially curious as to whether the film had any effect upon the boy whom she had seen roughly treating the kitten. She knew that he now realized other children would disapprove of his actions. She believed that he was not naturally cruel, but he had not realized what harm he might be doing the cat. She noted that when he brought his kitten to class, he handled it carefully. Had he realized his mistake and been afraid he might hurt his pet? She passed his house several times but did not see him playing with his kitten. Sometime she hopes to find him petting his kitten in proper fashion.

Stage coach and "prairie schooner" models for transportation unit.

One of the series of miniature houses illustrating human shelter from cave to modern dwellings.

The Craftsman Contributes to National Defense

How WPA Museum Extension Projects, through visual aids, can assist in the program of education for defense.

FLORENCE KERR
Assistant Commissioner
Works Projects Administration

IN considering the usefulness of any public work now under way, the first question that rises in the mind is whether or not it does, or can, contribute anything to preparations for national defense. That question has been asked more than once about the WPA museum extension project. The answer seems to be a decided "yes."

In its assistance to education—in sharpening the perception of children and young people in schools and colleges, in quickening their comprehension and broadening their outlook—the project for several years has been contributing to national preparedness. Visual aids to education, such as are produced by WPA workers on museum extension projects, help to train students, young and older, to use all their mental faculties in the pursuit of knowledge. However, before discussing the educative and cultural work being done in the schools, let us see what this project is capable of doing to forward the direct and immediate work of national defense.

WPA museum extension projects develop skilled craftsmen—men and women trained and experienced in the making of models, reproductions, miniatures, dioramas, and other types of visual aid to fit into educational programs of all kinds. It also develops cartographers, trained and thoroughly experienced in making maps and charts of all kinds.

Costume dolls representative of many nations.

Back of the craftsmen and cartographers are skilled research workers who know how to find and compile information on any suggested topic. Their training further enables them so to interpret and present this information that artists, designers, cartographers and craftsmen can put it into visual form. Thus trained and experienced, the skills of these workers can be readily turned to the production of visual aids to fit into education for national defense.

Take, for example, military instruction. These project workers can construct, and train others to construct, dioramas and models of forts, complete in every detail, making it possible for the recruit, or men longer in the service, to see with their eyes and know with their minds much that they might never learn by mere listening. Models of fortifications, trenches, emplacements, such as museum extension workers

could construct, can not fail to be of assistance to busy officers assigned to instruct classes in this type of work. Such models and dioramas could be in miniature, easily packed and portable in their own cases, or for stationary training camps, they could be a part of the fixed installations.

Project cartographers could prepare charts and designs, accurate to the most minute detail, showing the construction of heavy guns, bombing planes, and other mechanical material necessary to defense. Having such charts and designs made for him is a great saving of time for the officer-instructor.

Charts and diagrams of the human body, such as these project workers are trained and experienced in producing, may be used to great advantage in teaching men how to care for their health and strength, and how to get the best benefits from physical training. The same type of charts, as well as models and figurines, may also be used in teaching first aid to recruits.

Relief maps, showing natural earth formations, the location of streams and bodies of water, are a production feature on most museum extension projects. Such visual aids, first used to teach children natural geography, can be of much assistance in teaching range-finding and bomb-dropping and bomb-dodging, and in training soldiers in reconnaissance or scout work.

Photographers on these projects have had extensive experience in enlarging small negatives, and constructing large educational displays, properly mounted, weather-proofed, and designed for ease of transportation and constant classroom use. These, and other workers, are also skilled in making lantern slides. Military instructors quickly recognize the value of such visual aids.

The project is prepared and ready to furnish teachers, skilled in arts and crafts, to give lessons in various kinds of occupational therapy for patients in Army and Navy hospitals. Teachers can be furnished to conduct classes anywhere in arts and crafts, photography, cartography, and all other kinds of work done under **museum extension.**

In short, the WPA Museum Extension Program, through its visual aids for education, carries on the type of work military men characterize as a service of information. Everything produced on these projects is informative and educational. Much of it can be of great value wherever men are in training or under instruction. And, without lessening its service to schools, colleges, and museums, all this work can be extended to Army posts, concentration camps, and centers for workers in defense industries.

The program now operates in 32 States and the Territory of Hawaii. In a dozen States it is state-wide, and sponsored by the department of public instruction or some other tax-supported State institution. Everywhere it has the technical direction of whatever established museum or museums may be in the territory in which it operates.

Some idea of the volume of production on these projects may be had from the fact that in 1940 workers in a single State turned out more than 100,000 different pieces, highly technical in character, most of them to be used for group and classroom instruction within the State. In several States the project provides the only museum service of any kind available to the public schools.

Typical of the visual aids in circulation through the schools are miniature models of houses illustrating types of dwelling from the cave used by primitive man to the stream-lined apartment house and private residence; the growth and development of transportation —land, water, and air; bridge-building, from the rude wooden structure to span a creek to the great suspension bridge at Golden Gate; road-making, from the buffalo and Indian trails to the latest thing in cross-continent highways; man's costume down the ages; farm implements, from the forked stick used for digging to motorized farm machinery. Miniature models also illustrate the development of man's control and use of natural resources in industrial development.

Widely recognized for it educational value is the diorama. Project workers produce portable dioramas to aid in the study of Indian tribal life; American history; agriculture and industry; life in other lands; and the evolution of man, animals, insects, and plant life. In fact, these workers can design and construct a diorama to put life into, or simplify, any objective study, no matter how dry or involved.

Of inestimable value to preparedness and future defense is the study of soil erosion now being carried on by county agents in certain States, and by schools and colleges throughout the country. This important study is made understandable even to children in the upper grades of elementary schools by means of plaster maps, such as are produced on certain museum extension projects. Teachers use these maps to show the cause of soil erosion, how it may be prevented, and how checked. Also used as visual aids to education are project-produced exhibits showing the development of our natural resources, such as aluminum from crude ore to the finished product.

Types of picture maps made on museum extension projects for circulation through schools include those which show, respectively, political divisions and chief cities; principal highways, railways, air-ways, with mountains, rivers and important cities; national forests and game refuges; industries and agriculture; timberlands, showing the distribution of types of trees; power plants, reservoirs, artificial lakes, aqueducts, and canals, with a few cities dotted in, the better to locate these features. Electric maps produced by project cartographers include those showing important features of this country, Latin America, Asia, and the British Isles.

Research workers on these projects have prepared clearly written monographs to accompany and supplement a series of charts on a number of subjects, including nutrition and food analysis, a study of no little importance to national defense.

To sum up, it might be said that every State project is capable of making simple visual aids. Larger State projects, having a variety of technical employment, are able to produce virtually any type of exhibit that might be required for educational purposes by the Defense Program, including the construction of models in the field of camouflage. As museum extension is now integrated with the WPA Art Program, craft workers have the expert direction of artists experienced in the testing of pigments, which should make their work in camouflage all the more effective.

The Inter-American Cultural Film Program

Latin-American children play games, too.

(A scene from "Americans All")

THE release of *Americans All,* Julien Bryan's two-reel documentary sound film on the Latin-American Republics to which reference was made in the January EDUCATIONAL SCREEN, marks the beginning of what may prove to be the most important non-theatrical advance in the war period. According to information received from the Office of the Coordinator of Inter-American Affairs, this keynote production is the first of an introductory program of fifty subjects prepared expressly for distribution in the United States of America, the costs of which have already been budgeted and the individual pictures of which are rapidly nearing completion.

Nelson A. Rockefeller, appointed to head the Office of the Coordinator of Inter-American Affairs in conformity with President Roosevelt's desire to stimulate and improve cultural and trade relations between the twenty-one republics of the Western Hemisphere, has been occupied with many phases of this important work, the motion picture representing only one line of development. In that place his chief lieutenant is John Hay Whitney, whose Hollywood successes, in addition to the breadth of his earlier experience, have given him unusual qualifications for prosecuting the opportunity. Mr. Whitney's chief assistants, in turn, are Kenneth Macgowan, well-known author and stage and screen producer, in charge of production, and Phil Reisman, currently RKO vice-president in charge of foreign sales, in command of all distribution.

Mr. Reisman's duties in this connection will be to provide a ready and continuing service of 16mm. sound films to all responsible non-theatrical projection groups in Mexico, Central and South America and in the United States. For this service to the southern republics arrangements already have been completed to offer bookings through thirty-five consulates; and because 16mm. projection facilities in those areas are limited at this time, the consulates are prepared to give applicants the use not only of proper films but also of machines for their exhibition.

The North American program endeavors to acquaint citizens of the United States with a broad view of places and conditions from the Rio Grande to the tip of South America. The southern material has been obtained by reviewing all likely extant films and a relatively small portion through assignment to responsible travelers. The first fifty subjects for the United States will be approximately one-half of their number in Kodachrome, including Venezuela, Mexico and special presentations of South American orchids, the Pan-American Highway and Mexican fiestas. The black-and-white program names, among other subjects, one on the Brazilian newspaper *A Gazetta,* and a novelty short entitled *Mexico by Day.* Because of the great variety of theme and the corresponding appeal to an extremely wide public there has been no attempt to organize courses of study, although no doubt educators will find it relatively easy in the extraordinary range of subject matter to provide their own teaching syllabi.

Pictures for the United States will be available free, save for the usual transportation charges, to all schools, churches, clubs and other non-theatrical centers able to supply a reasonable number of spectators and willing to report promptly on circumstances and audience reactions. Individuals cannot be supplied for "home" exhibitions. Applications for the reels are to be addressed to the Motion Picture Section of the Office of the Coordinator of Inter-American Affairs, 444 Madison Avenue, New York, specifying the film desired and giving a choice of dates. Present United States distribution is through four centers, New York, Chicago, San Francisco and Dallas, plus some sub-distributors. A suggested plan for schools gives them the opportunity to purchase prints on a "permanent loan" basis, an arrangement designed to keep the use of the films under the Coordinator's control and to prevent their misuse.

MOTION PICTURES—NOT FOR THEATRES

The thirty-fourth month of our non-theatrical films history moves from Government to Big Business, naming persons, places and dates as usual.

By **ARTHUR EDWIN KROWS**

THE Ohio situation, where the work is headed actively by B. A. Aughinbaugh, has unusual aspects that call for their notice in later pages of this history. Mr. Aughinbaugh has produced a considerable number of reels for the Ohio State Board of Education, where he regularly serves as Director of Visual Instruction, using the best available professional facilities.

Outsiders

As to our immediate North American neighbors, publicity pictures in considerable variety have long been provided by the Canadian Government. In 1917 Louis Kon, Commissioner of Immigration and Colonization for the Province of Manitoba, arranged with an American producer for the making, under his own, personal supervision, partly in Winnipeg and the rest in Chicago, of a one-reeler showing how Manitoba solved the labor shortage at harvest time. In this same year the Dominion Government sent a motion picture exhibition car over its railways to teach safety to the employees. Among the regional efforts, the film work of the Ontario Provincial Government which maintained a laboratory and studio at Trenton, Ontario, with headquarters at Toronto, also has been notable.

The Canadian Motion Picture Bureau, situated at Ottawa, the Dominion capital, was established about 1918, in the Federal Department of Trade and Commerce, in consequence of a decision by the Government that something must be done to counteract alleged screen misrepresentation. Sir George Foster, minister of the Trade and Commerce Department of Canada, seems to have been the moving spirit. It was through his action and in his department that there was organized the Commercial Exhibits and Publicity Bureau, and B. E. Norrish, a civil engineer was given charge. Presently, under him, was started actively there what some enthusiastic but misinformed observers have hailed as "the first people-owned film laboratory on this continent."

It was decided to concentrate on one-reel productions showing the true attractiveness of the country. This led to the celebrated "Seeing Canada" series, of which a number were produced by Hal C. Young, subsequently an important executive of the National Screen Service. To these pictures has been attributed much of the later increase in the Dominion's profitable tourist trade. Distribution is largely through the Canadian National Railways and the vast system of the Canadian Pacific Railway. If this latter name reminds the reader that about 1918 the Canadian Pacific Railway took over the American Gaumont Laboratories at Flushing, New York, but soon relinquished the property, and suggests that the hand of the Canadian Government may have engineered the turn of events, I have no evidence to submit, one way or the other. The Canadian Pacific Railway, of course, had been using pictures for a long time. It cooperated, as the reader will recall, in helping the Edison Company to produce a travel series in 1910.

B. E. Norrish retired from the Bureau in 1920, and Raymond S. Peck was appointed head. He was to remain in

(c) Karsh

This is John Grierson, prize pupil of Sir Stephen Tallents, England's master propagandist. Both labored for the old Empire Marketing Board.

this post for the next half-dozen years, serving with distinction. Peck was born at Ridgetown, Canada, February 2, 1886. After an education in public schools of Chatham, Ontario, he entered journalism first with the Windsor *Times* and then with the Detroit *Free Press*. An experience in advertising with the Nash Motor Company added to qualifications for his next employment as publicity director of the Canadian Universal Film Company, at its headquarters in Toronto; and this led to a further expansion as editor of the *Motion Picture Digest*, Canada's foremost film trade paper. He entered the Government service in 1919, being then appointed Film Editor of the Exhibits and Publicity Branch of the Federal Department of Trade and Commerce, from which grew the Canadian Government Motion Picture Bureau under B. E. Norrish. During Peck's tenure of office he was "loaned" to the Government of the British West Indies, where he made a series of useful and widely distributed films. He died May 27, 1927, at the age of forty-one. Norrish at that time was with the Associated Screen News at Montreal.

The busy official Canadian motion picture department of today owes some of its early vigor to circumstances involving the British war films which Charles Urban brought to America in 1916. One of the members of the British War Commission to the United States in 1917-1918 was Frank C. Badgley, a young soldier, about twenty-two years of age, who had been gassed and wounded at the front, and had therefore been retired from the firing-line to this more congenial post. For the Commission he was in direct charge of the British war films and still photographs intended for American distribution. After the Armistice he remained in the United States and followed his publicity connections with work in press departments, successively, of Selig and Metro Pictures. In 1919, when D. W. Griffith was working at Mamaroneck, New York, on his elaborate motion picture "Orphans of the Storm," Badgley won a place in the production department. There he learned practical lessons about what the camera could and could not do, and even served for a time as an actor. In 1922 Raymond Peck engaged him to install a new laboratory for the Canadian Bureau at Ottawa. As this connection continued, Badgley found opportunity to apply his many acquired talents, cutting and editing the films in hand. Thus he arose to the position of assistant director of the Bureau and, in 1926, to the place of director, succeeding Peck.

There has been plenty of motion picture interest on the part of the Mexican authorities ever since the film industry began; but the instability of their Government has militated against sustained production there. Mutual Film Corporation made the country conscious of some of the propaganda values of the silver screen in its fantastic contract of 1914 with the insurgent Francisco Villa. It was soon after that that President Woodrow Wilson tried to cut the knot of American-Mexican relations by giving official recognition to Venustiano Carranza as head of the southern neighbor's Government. August, 1919, word was released to press correspondents that the Carranza regime was to produce films showing native opportunities for immigrants, but in May, 1920, Carranza fled before an uprising and was killed. Civil wars, insurrections and presidential assassinations which followed were obvious reasons for undeveloped Govern-

mental film productions. Nevertheless, under an administration which seems to be fairly stable at this writing there may be significance in the effort of the Mexican Ministry of Education begun in the Spring of 1936, to produce short subjects on the country's attractions. The first of these was a talkie made at Michoacan, the home State of President Cardenas. It featured the activities of an important local women's organization, with accompanying music by a celebrated State orchestra.

In the countries overseas, native government production has been considerable despite turbulent conditions there since the First World War. References to such work have been made earlier in the pages devoted to educational film making. I am speaking now, of course, of the period prior to the Second World War, the special circumstances of which will be touched upon in a closing chapter. In France there has been a rather curious obstacle to the growth of this service which is worth mentioning as a warning to others. Under the laws which have bound the Ministry of Public Instruction there, it has seemed virtually impossible to throw anything away, or even to pass it into other hands where it may have a continued usefulness. Consequently, in the very place where the pedagogical film received its first recognition, the costs of mere storage of obsolete material has handicapped, and sometimes has actually prevented, a natural, proper support of up-to-date production and distribution.

Great Britain had produced various technical and propaganda films through her Admiralty for years, and had circulated them to excellent effect throughout the Empire. She was so far sensible of the importance of screen publicity that, when the then Prince of Wales visited South Africa and South America in the twenties, his Government supplied him with two cameramen to record his movements in the approved manner. It was in this same period that Australia recognized the values and, through the Commonwealth, produced a useful series of shorts entitled "Know Your Own Country."

The probably most notable non-theatrical picture development of the British Government in the late nineteen-twenties came in the Empire Marketing Board headed by Sir Stephen Tallents, which contemplated the institution of a Film Office in London. The officials moved in the matter with characteristic caution, first conducting a survey of educational film production methods in other countries. This investigation was entrusted to John Grierson, a young Scotsman, barely thirty, who, in addition to having had experience in newspaper work in both Great Britain and the United States, had worked for Paramount Pictures. I believe he was related to Major R. Grierson who had important motion picture connections in London. When the Film Office was eventually set up in 1928, to make propaganda and school films, John Grierson was given command. And that was natural enough, because the Empire Marketing Board film unit had been his own idea.

In this place Grierson quickly gained reputation for producing subjects of strong social significance, a reflection, perhaps, of his earlier social psychology researches in American universities, and investigation of American "yellow journalism" under a Rockefeller Research Fellowship in Social Science, and a possible source of embarrassment to conservatives in Downing Street because the reels so persistently showed "oppressed" workers in the approved Russian photographic manner. In this production period Grierson had associated with him Basil Wright, maker of outstanding official pictures in the West Indies, Arthur Elton, distinguished for subjects made in Scotland and Wales, Albert Cavalcanti, noted for accomplishments in France, and Robert Flaherty, celebrated maker of "Nanook," who, in an interval before the filming of his "Man of Aran" in the Hebrides, produced, in collaboration with Grierson, a striking subject entitled "Industrial Britain." Grierson himself won especially favorable notice for a study of the English herring fleet called "Drifters," a single subject in the approximately 150 attributed to him.

In 1933 the Empire Marketing Board was disbanded and it was decided to discontinue the Film Office. However, in the storm of criticism which followed the first word of this intention, the matter was reconsidered and the department was taken over by the General Post Office of Great Britain, Grierson remaining as reorganizer and head.

In 1938 to 1939 it was stated that Grierson would visit Canada, Australia and New Zealand to confer on production and use of Government films in those places and especially, so the official statement said, "to study possibilities of the screen as an aid to closer Imperial relations." The beginning of the Second World War obviously made Canada of greater importance as an area for this work, so, in October, 1939, Grierson was appointed Government Film Commissioner of the Dominion. He was at once given a three-months leave of absence from this post to go on to Australia. On his return he expected to be joined by his sister, a passenger on the *City of Benares*, the ship which was to bring eighty-eight British children to Canada out of the European war zone. She took motion pictures of the embarkation, intending to complete the film on arrival, but the ship was torpedoed by the enemy and Miss Grierson and eighty-three children were lost.

To make matters worse, the Canadian film situation apparently had not progressed, and possibly even had developed obstructions. Accordingly Grierson tendered his resignation as Commissioner. But he evidently was persuaded to reconsider. A month later, the Hon J. A. MacKinnon, Minister of Trade and Commerce, announced that Grierson would continue in the post, and unofficially, it was reported that Grierson would find himself thereafter with a freer hand.

Chapter IX — Lessons In Big Business

IN a period of such varied and rapid material progress as the second and third decades of the twentieth century, active men felt no obligations to stay in traditional ruts or in lines for which their early training presumably had fitted them. Bicycle mechanics made airplanes, bankers ran railroads and steamship lines, automobile men manufactured radios and automatic refrigerators, furriers and glove-makers produced motion picture plays, public utilities magnates ventured into "visual education," and there were literally thousands of other proofs that specialized success in America might be a matter of mere inclination. Big Business therefore had no sense of being incongruous when it looked at the stirring non-theatrical field, decided that it required only a good commercial sense to make it profitable, and coolly moved to take it over. What follows in this chapter is part of the story of what happened when it did.

For the occasional success which emerges from the headlong experience of corporations which thus fling themselves into alien lines, there is usually a heavy toll of failure, and, what is especially regrettable, the failures frequently include the collapse of previously established producers and distributors whose reasonable existence has been wrecked by the invasion. In the nineteen-twenties the non-theatrical field was dotted here and there with small organizations possessed of slender reserves, but having healthy accommodation to their modest needs and in a fair way to get along. Upon this pleasant scene of humble, patient industry descended the promoters who were by nature interested in profits more than in service,—although they sometimes did acknowledge that service was a means to profits.

When the promoters first squatted in the new territory, their enlisted money flowed freely, and customers, beguiled with prospects of higher efficiency from financially responsible service, turned thither with their contracts. To deliver on these contracts the new business soon required experts, and so took on some of those who were already in the field and who were glad now to follow the trade which had deserted them. Months elapsed, and the expected profits not accruing, the promoters decided that as their original calculations could not possibly be wrong, the fault must lie in their personnel. Fresh upheavals ensued in the form of discharges and reorganizations. But still no profits. At last, those back of the promoters, those who had put up the actual money, became impatient and refused further

funds; and the promoters, then admitting that the lately cleared field could not be expected to respond at once to intensive cultivation, disgustedly moved on to other new lines where their talents might find speedier opportunities. In the field thus deserted by its self-imposed leaders, then followed the inevitable collapse and pathetic radjustment.

This is the familiar cycle. It explains why to those long connected with nontheatricals the coming of Big Business from the outside—which does not grow naturally out of it—is generally something to be dreaded as the plague. The incursion commonly stunts the growth of the field for years. In the final accounting the customers, having paid more for what in reality is only the old service dished in a novel, more glamorous way (and probably that much worse for the garnishing), suspend their plans for further pictures; the producers who have come to work for the invader are now out of jobs; those who declined to come have lost their best accounts and have been either sold out by the sheriff or have been obliged to seek their livings elsewhere.

A Step that Made History

In the winter of 1918 a firm of book publishers in New York wished to inquire into the production of motion pictures. They talked casually with their writers, and one who had something to do with the faculty at Columbia University, Richard Webster, mentioned that a professor of journalism, up there on Morningside Heights, was connected with a leading theatrical production company. Upon request he introduced the publishers to the gentleman in question who proved to be Robert E. MacAlarney, former managing editor of the old New York *Tribune* and at that date scenario editor for Famous Players-Lasky, the production division which supplied Paramount Pictures. Through him a luncheon and conference with Famous Players officials were arranged. At this conference, or at another which followed soon after (it occurred at the Harvard Club by the way), MacAlarney introduced H. Whitman Bennett, then production manager for Famous Players-Lasky.

The publishers, Glasgow & Brook, late of Toronto, where they had issued a highly successful series of histories in thirty-two volumes known as the *Chronicles of Canada,* and an earlier, twenty-three-volume set known as *Canada and Its Provinces*, were now in throes of publishing, along similar lines, the *Chronicles of America.* The last-named, to comprise a set of fifty volumes written by various hands, had been prepared and were being sold by subscription under the auspices of Yale University Press. At this time, although only ten books had actually appeared, it was said that the subscriptions in hand represented a pledged total of something over two and a quarter million dollars. The publishers explained to the motion picture men that the ten books already delivered to subscribers in all parts of the world, had brought a surprisingly uniform com-

Robert Glasgow founded the Chronicles of America. Bent on making it his crowning accomplishment he died before the cameras started. Business policy effaced his name.

ment on their strongly visual character and repeated urgings to have them translated into motion pictures for the schools. What did they think of the idea, and what, in their professional opinions, could be done to realize it?

The first step, MacAlarney advised, should be to make a survey of material upon which to hase estimates of cost and of time. The others agreed, and asked whom they might engage to do it. By a coincidence, which seems to have cinched the matter, both MacAlarney and Bennett independently named me. I was duly approached, and thus began my acquaintance with the *Chronicles of America.*

For completeness of record it is necessary to interpolate here reference to a claim that the Chronicles picture plan was not occasioned by a spontaneous enthusiasm of subscribers for the vividness of the published narratives, but was suggested by Louis Duncan Ray, husband of Glasgow's sister and recently a writer and editor living in Detroit. According to Ray, the suggestion of making a series of American historical films was made in 1914 in Toronto, as part of a proposal that Glasgow should take stock in a motion picture enterprise in which Ray was interested. How this may have been, I cannot say. I know only that the Toronto conception, if it occurred—and I have no reason to doubt that it did—could have had no more bearing on what subsequently took place in New York than any other casual thought of producing films of this type. The project took more than Glasgow's mere inclination. Granting his conviction that it would be a good thing to attempt, the entire development thereafter was an original growth, which I know positively because I was one of those who labored long and arduously to shape it.

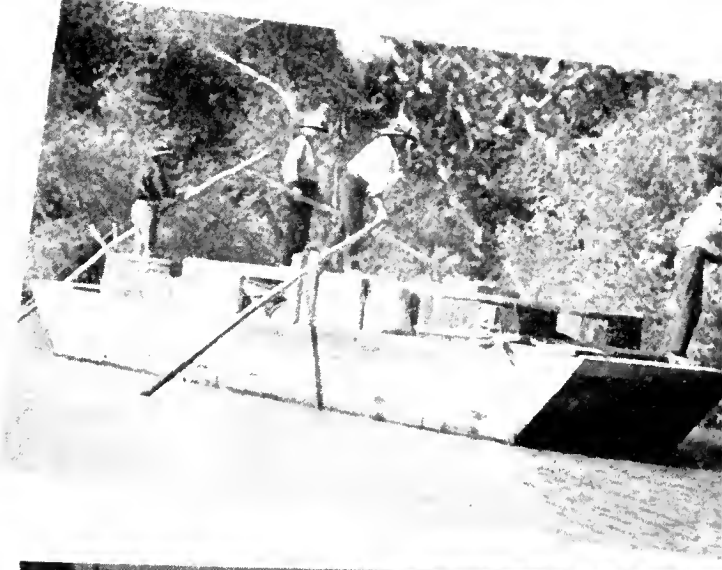
As to the idea of producing historical pictures in series, it had occurred in the very early days to Blackton at Vitagraph, to Edison and to others. After their time, similar ideas continued to assert themselves, as they no doubt will again and always. As soon after the advent of the Chronicles pictures, themselves, as the summer of 1924, there was even a Columbia Pictures Corporation formed at Los Angeles to produce "true-to-fact pictures on American history under auspices of the local American Patriotic League," although I do not know what became of that particular plan.

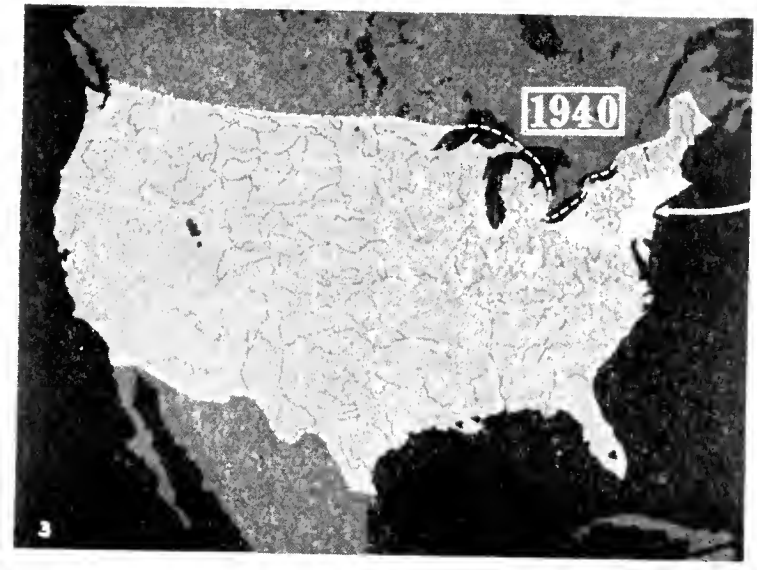
At the time of my first meeting with the Glasgow & Brook project, I was continuity editor of the Vitagraph Company of America, assisting the late George Randolph Chester, author of the *Get-Rich-Quick Wallingford* stories, who was in charge of the scenario division. I naturally did not want to sever that connection to make the survey, so it was arranged that I should do the work on the side. But I soon discovered that I had undertaken a heavier job than I had bargained for, or, indeed, than anyone else had anticipated. It so filled my days, holidays and nights that I found my Vitagraph connection cutting into it and, with too much enthusiasm, probably, because Chester had other plans for me, I recklessly broke free from the theatrical studios and cast my lot into writing history pictures for the schools.

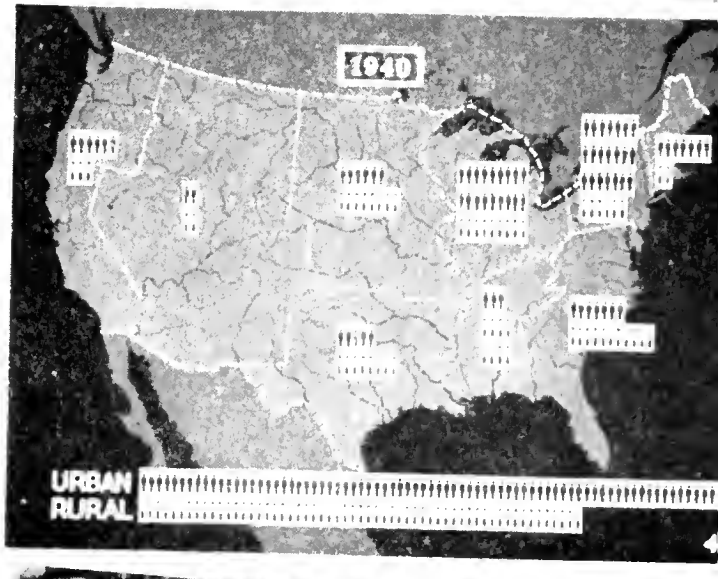
There was no Chronicles of America Corporation then. Glasgow & Brook, coming from Canada and arranging with Yale University Press to sponsor the new series, had incorporated as the U. S. Publishers Association, which was to function principally while the books were in preparation. The acknowledged genius of the concern was Robert Glasgow, one of the most interesting personalities I have ever been privileged to know. Arthur H. Brook was a younger man, who had been taken under Glasgow's wing in the Toronto days, and trained by him to head the remarkably productive sales division.

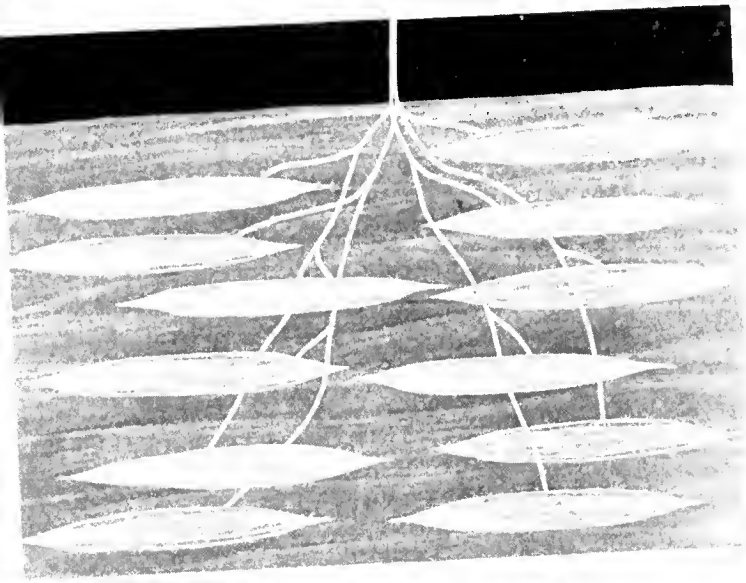
Glasgow had been born of Scot ancestry about 1876, in the Canadian Province of Quebec, of the same stock which had produced Admiral David Glasgow Farragut, hero of the Battle of Mobile Bay. Now he was a naturalized American citizen, believing in the United States and the brilliance of its future with that kind of earnestness which I had thought previously could arise only from a man's born instincts. One of his beloved sons had been among the first to die for the Allies in the First World War. When I came really to know Robert Glasgow, I conceived a fondness for him which may be described only as filial; and that regard never wavered while he lived.

(To be concluded)









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The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

TEACHER TRAINING

New Tools of Teaching: Editorial Comment—W. W. Charters, *Educational Research Bulletin,* 20: 255 Dec. 17, 1941.

Radio and motion pictures have established a place for themselves as mediums of instruction. The time has come for teacher-training institutions to include the use of the two mediums as units in their curriculums, not as new and strange members among the tools of teaching studied as an elective by a few enthusiasts, but as required items in the course of study of each student.

The most desirable place for such instruction is in connection with "special methods" when curriculum and methods of teaching are treated. For instance, in courses dealing with the teaching of general sciences the instructors will have a library of slides, motion pictures, and other visual aids which can be effectively used in the schools. Or, they can be introduced in courses for administrators. Then in subject-matter courses audio-visual aids can be introduced. A separate unit in modern mediums of instruction may be set up as a curricular offering. While this is good for those who wish to specialize and should be provided, it is futile to expect this unit to carry the whole load of responsibility for teaching the tools. The best method of developing the ability is to use it in all places where it will be useful.

How to introduce these new tools into the training program of teachers is clearly a matter for faculty study, which should be made promptly. They are too useful to be ignored.

ADMINISTRATION

Status of Audio-Visual Aids in Arizona Schools—Walter D. Smith, Director of Visual Aids, Tempe Elementary Schools—*The Arizona Teacher-Parent,* 30:13 Jan. 1942.

After a careful analysis of the replies from a state-wide survey of equipment, the author has made some very interesting observations. Although the status of audio-visual aids in Arizona has improved since the 1936 survey made by the U. S. Office of Education, he does not believe this to be in keeping with the needs of the schools. The non-mechanical aids, such as maps, excursions and still pictures are used most frequently. The major problems (according to the replies to the questionnaire) are insufficient budgetary provisions and insufficient teacher training in the use of audio-visual aids.

Recommendations to the school systems of Arizona are:

1. That Arizona school systems realize the advantage to the pupil of a well organized audio-visual aids program.
2. That where it is possible, school systems provide adequate budgetary provisions.
3. That more use be made of the inexpensive non-mechanical aids which are easily attainable.
4. That a director be put in charge of the visual educational program, for even though the schools are large or small, the success of audio-visual program depends on proper organization. An efficient director can solve practically all the problems involved in the school use of audio-visual aids which this study has brought to light.
5. That more schools collect and produce their own materials.
6. That the Arizona schools keep abreast with the new advances in the field of audio-visual aids.

A Brief Review of Audio-Visual Aids—Earl E. Sechriest, Ensley High School—*Alabama School Journal,* 59:11 Dec. 1941.

A summary of the field, with recommendations that Alabama undertake more than it has in the past.

RADIO AND TELEVISION

Radio and Its Progeny—Lewis H. Titterton, Nat'l. Broadcasting Co.—*American Scholar,* 10:498-506 Autumn, 1941.

This is a timely report on the role of radio broadcasting in war time, as well as a summary of the status and future possibilities of television, FM broadcasting, facsimile broadcasting and international shortwave broadcasting. This article should be read as a time-saver for those of us who become overwhelmed by the speed of new developments, because it brings us in capsule form a digest of some of the most important instruments for in-school and out-of-school education.

Television—A New Tool—J. Raymond Hutchinson, Elizabeth, N. J.—*Nation's Schools,* Dec. 1941 p. 60.

This is probably the first statement of policy for the use of television in education. The author is chairman of the committee on television of the Dept. of Secondary Teachers of the N.E.A.

San Francisco Experiment in Radio Education—George G. Mullany—*Cal. Journal of Sec. Ed.* 16:336-40 Oct. 1941.

A description of the use of FM facilities by the Board of Education in San Francisco.

PHOTOGRAPHY

Why Teach Photography?—Howard J. Ivens, Illinois State Normal School, Normal, Illinois—*School Management,* 11:139 Jan. 1942.

The author recommends the teaching of photography in connection with science education for a variety of reasons, among which are: 1) to help provide illustrative material for the classroom; 2) to help train students and teachers to interpret better the visual aids they come in contact with in their everyday lives; to understand better the relationship of photography to the illustrative material used in texts; 4) to assist teachers in increasing the interest and holding the attention of students in their work; 5) to teach methods and to provide means for making slides; 6) to teach and to understand how the small movie camera can be used to record school events; to record classroom activities; to provide an artistic means of self-expression; to give some specialized training in an important modern field.

PERIODICALS

Visual Aids Digest, 1941—New Jersey Visual Education Association (Jean Parnes, Secretary, Burnet Street School, Newark, N. J.) 50 pp.

Here is a "workshop" in magazine form. A few of the articles are addresses given at a meeting of the Association. Most of the sixteen articles, however, are accounts by teachers in the field with some worthwhile experiences to share.

"Helps in Reading" by M. Blanche Cordery, describes in detail a procedure for teaching reading with the use of home-made slides and a flashmeter. How a school librarian can organize a system for ordering and distributing audio-visual aids is described by Edward Scofield of Newark in "Wecquahic System." Teachers of agriculture, industrial arts, health education, biology, special education have also contributed helpful articles. Among the aids which they describe are field trips, school museums and school-made films.

"Exploring Ocean County" by Charles A. Morris, Ocean County Superintendent of Schools, Toms River, is an article worth reading. It tells of an extension course given for teachers and parents, for which the charge was $1.00 for seven meetings. Each session was designed to acquaint the students with the resources of Ocean County. Excursions, illustrated lectures and discussions made up the course. The author has ample proof that the teachers were highly pleased with the experiences which the course

(*Concluded on page* 86)

Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

PROGRAM

Winter Meeting of the Department of Visual Instruction of the N. E. A. San Francisco, February 23-24, 1942. Veterans Building

Monday, February 23, Room 314
(Mr. Boyd Rakestraw presiding)

MORNING SESSION 9:30-11:30

Address of Welcome—Mr. John Brady, Chief Deputy, San Francisco Public Schools

President's Report

Social Services—Mr. R. R. Ford, British Library of Information. (Illustrated with wartime films.)

AFTERNOON SESSION 2:15-4:45

The Motion Picture Industry in National Defense—Mr. Kenneth MacGowan, Director of Production, Motion Picture Section, Office of Coordinator of Inter-American Affairs. (To be illustrated with a film designed for Latin-America and one for the United States.)

Industry and National Defense—Randall Irvin, Director of Industrial Relations, Lockheed Aircraft.

Audio-Visual Aids and Civilian Defense—Colonel W. P. Burn, Office of Civilian Defense, Washington, D. C.

The Use of Audio-Visual Aids in Training our Armed Forces (Possibly Lt. Colonel Charles Stodter, liaison officer of the Office of the Chief Signal Officer with the motion picture industry in Hollywood.)

Tuesday, February 24, Room 314
(Mr. Gardner Hart presiding)

MORNING SESSION 9:30-11:30

Introduction to group leaders and three group meetings with a general discussion period or report from the chairman of each group at the end of the session.

A. *Classification of Audio-Visual Aids*—Mr. H. M. McPherson, Superintendent of Schools, Napa, California and Co-Chairman. Room 311

B. *School Production of Museum Materials*—Mr. Francis W. Noel, Director, Visual Education Department, Santa Barbara Public Schools and Co-Chairman. Room 313

C. *What Should We Teach in Our Audio-Visual Aids Courses*—Chairman, Mr. Gardner Hart, Oakland Public Schools; Co-Chairman, Miss Marian Evans, San Diego City Schools. Room 314

LUNCHEON MEETING 12:15-2:00
Corinthian Room, Hotel Whitcomb
(Miss Margaret Girdner presiding)

Dean Frank N. Freeman, University of California School of Education, will address this meeting on *The Bottleneck in Visual Education*

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

AFTERNOON SESSION 2:45-4:45 Room 314

Audio-Visual Aids in California—Miss Margaret Girdner, San Francisco Public Schools.

Transcriptions in Education—Mr. Thomas Rishworth, National Broadcasting Company.

The National Association of Visual Education Dealers and its Relation to the Field—Mr. C. R. Reagan, President of this organization.

To the Silent Zones:

I refuse to believe that silence gives notice that some Zones are asleep. I really think that you are doing things in Oklahoma, Massachusetts, Washington, and Michigan. But why keep quiet about it? That goes for all ten zones and all forty-eight states. *Please* write to me, fellow zoners. You are doubtless doing much that will be helpful to another zone halfway across the country. How can we give out the news if we don't get it? JDF

From the National Office

H. J. Daily, the national secretary, has been very kind about keeping us informed on the state of the DVI. At the risk of being repetitious, I'm including some information about the war and the DVI.

As probably most of you know, national president Gayle Starnes has left his post at the University of Kentucky to serve with the Signal Corps at the Depot near Lexington, Kentucky, but continues as President. Don White, formerly director of the Audio-Visual Aids Department of the Division of General Extension at the University of Georgia has gone into the Air Corps as a visual information specialist. Mr. White also relinquished his position as secretary-treasurer of Zone X. Mrs. Bernice Mims, Department of Visual Aids, General Extension Division, University of Florida, Gainesville, Florida is the new secretary-treasurer for Zone X.

Mr. Daily included a very pertinent paragraph in his last letter which sums up some of the problems relating to the war and the DVI. I quote, "It seems very clear that we have a multitude of problems in continuing our work. Our visual aids dealers are having great difficulty in obtaining materials which may further the effective use of visual aids. On the other hand such materials as those being produced through the Office of Education clearly indicate the Government's recognition of the importance of visual aids in defense training. The present situation reminds me of a football game at the half with the score 0-0. We have been on the defensive and emphasized defense training during the first half, now at the beginning of the second half we must immediately lay our plans to take the offensive. This change from training of

National defense to training for National offense gives the believers in visual aids the opportunity to show that these ideas when properly used can be the solution to this tremendous problem of training men in a short time. . . . . I am amazed to find the additional demands on my time brought about by the war. I am sure that this is true with every person connected with our organization. We must continue to carry forward the work of building a stronger organization in the face of mounting difficulties. This can be done only if all those who want to see the organization grow will take a very active part in it. This is a challenge to every member of the Department of Visual Instruction."

Zone II

Several very helpful forms to be used in securing new and renewed memberships have been worked out by Zone II, of which E. Winifred Crawford of Montclair, N. J., is President. Two of the forms are reprinted here in case other Zones may care to benefit by them.

Your membership in the Department of Visual instruction of the National Education Association expires ..... You are earnestly invited to renew your membership. Enclosed is application blank for its renewal.

Membership in the Department carries with it the right to attend the national and zonal meetings of which there will be three during the year and subscription for one year to our official magazine, the EDUCATIONAL SCREEN, regular subscription price of which, separately, is $2.00. The price of membership, including subscription to the SCREEN is $2.00. The EDUCATIONAL SCREEN is the only periodical in the field of audio-visual instruction.

Your continued support is urgently needed in the work of this Department in promoting visual instruction and we trust that your membership is also of value to you.

Check or money order should be made payable to the undersigned and sent with the membership renewal blank.

Very truly yours

I hereby apply for membership (renewal) in the Department of Visual Instruction in the National Education Association. Enclosed is $2.00 membership dues for one year, including one year's subscription to the EDUCATIONAL SCREEN.

I am / am not a member of the National Education Association

Name..... Position.....

Address .....

Zone V

The Horace Mann School, Fargo, North Dakota, and Concordia College, Moorhead, Minnesota, were the twin sites (across the river from each other) of the first official meeting of Zone V on January 21. The theme of the program was "How We Can Implement the Defense Program through More Effective Use of Visual Aids in Education." A series of classroom demonstrations on the use of various visual auditory aids opened the afternoon meeting. Following these lessons, a panel, led by Dr. C. P. Archer, University of Minnesota, conducted a clinic to answer questions and to lead the discussion. President Ella Callista Clark addressed the group at the dinner meeting. At the evening session, a symposium of five persons gave short illustrated talks on the specific uses of certain visual aids, followed by a round table discussion.

A complete report on the program and plans for further work will be given by Miss Clark in the next issue of EDUCATIONAL SCREEN.

President Clark reports that about five hundred announcements appealing for memberships have been sent out into the territory of Zone V. She also reports excellent support from the commercial agents.

Zone IV

WE are pleased to present below the program for the annual meeting of the Midwestern Forum on Visual Teaching Aids on March 26 to 28 next at the Congress Hotel, Chicago. We expect to see this meeting break all attendance records for the four years of the Forum's existence to date. Our confidence is based not only on the increasing prestige of the Forum, not only on the able management, the careful and timely preparations which characterize the organization, but on two other outstanding reasons.

First, the program offered below is perhaps the finest in content, range and balance that the Forum has yet presented. It will richly repay the time and effort of attendance by teachers from a wide radius around Chicago, who are interested in the forward march of visual education in these critical times. Second, for the first time the Midwestern Forum meets in combined session with the national Department of Visual Instruction, Zone IV, of the National Education Association. The unification of effort by the Forum and the national Department will inevitably assure faster progress under these double auspices.

To All Teachers, Principals and Superintendents in the Midwest we would say: Make definite plans now to join the procession to the Congress Hotel for the evening of March 26th and two days following. N L G

Fourth Midwestern Forum on Visual Teaching Aids
In Co-operation with
The Department of Visual Instruction, Zone 4
March 26-28, 1942—Congress Hotel, Chicago

General Program

Florentine Room—2nd Floor—North End
Thursday Evening, March 26, 8:00
William C. Reavis, General Chairman

Present Trends in Visual Teaching Aids
Dr. L. W. Cochran, Supervisor Visual Instruction, State University of Iowa, Iowa City, Iowa

How Visual Teaching Aids May Be Used in Furthering Our Total War Program
Mr. Floyde E. Brooker, Senior Specialist in Visual Aids, United States Office of Education, Washington, D. C.

Visual Education in International Affairs
Mr. Kenneth Macgowan, Director of Production, Motion Picture Section, Office of Coordinator of Inter-American Affairs, Washington, D. C.

Reports

"How Priorities Have Affected the Manufacturers of Visual Education Equipment". Speaker to be supplied.
"How Priorities Have Affected the Dealers in Visual Educa-

tion Equipment". Mr. Harry E. Erickson, Director Educational Sales Division, Ampro Corporation, Chicago, Illinois
"The Effect of Priority Restrictions on Visual Education in Schools". Mr. Joseph H. Dickman, Director of Visual Education, Chicago Public Schools, Chicago, Illinois

FRIDAY, MARCH 27

Elementary School Clinic

Casino—1st Floor

Orville T. Bright, Superintendent of Schools, Flossmoor, Illinois, Chairman

9:00—10:30 A. M.

1. Introductory statement by Mildred C. Letton, University Elementary School, University of Chicago
2. A Film Experience Correlating Sixth-grade History and Literature
3. General discussion

10:30 A. M.—12:00 M.

1. Introductory statement by Miss Florence G. Hedtke, Bowen School, Riverdale, Illinois
2. Demonstration: "The Use of Slides in Teaching Primary Reading"
3. General discussion

1:30 P. M.—2:45 P. M.

1. Introductory statement by Miss Aileen McAllister, Nichols School, Evanston, Illinois
2. Demonstration: "The Use of Visual Aids in Physical Education"
3. General discussion

2:45 P. M.—4:00 P. M.

1. Introductory statement by Miss Monica H. Kurch, Flossmoor School, Flossmoor, Illinois
2. Demonstration: "The Use of Maps and Slides in Teaching Seventh- and Eighth-Grade Geography"
3. General discussion

Secondary School Clinic

Florentine Room—2nd Floor—North End

Rodger E. Stutz, Instructor in Science, East High School, Aurora, Illinois—Chairman

9:30 A. M.—12:00 M.

1. Introductory statement by E. M. Wells, Joliet Township High School, Joliet, Illinois
2. Demonstration: "How to Make Effective Use of Slides and Motion Pictures in Teaching Auto Mechanics"
3. General discussion

1:30 P. M.—4:00 P. M.

1. Introductory statement by Alvin C. Roberts, Principal, Haw Creek Township High School, Gilson, Illinois
2. Demonstration: A Panel of Students from the Haw Creek School Will Discuss Their Local and National Field Tours. Pictures Will Be Shown Describing Their Well Established Journeys and Tour Methods
3. General discussion

Exhibitors' Evening

Gold Room—2nd Floor
Friday Evening, March 27, 8:00

Visitation of exhibits by everyone. Teachers and Administrators who register will be assigned a number, and at 10 o'clock a drawing will be held at which time all those holding numbers will have an opportunity to win a Defense Bond or several prizes in Defense Stamps. Winners must be present to receive prize.

SATURDAY, MARCH 28

Elementary School Clinic

Casino—1st Floor

Orville T. Bright, Chairman

9:30 A. M.—11:00 A. M.

1. Introductory statement by Mrs. Kathryn D. Lee, Laboratory Schools, University of Chicago
2. A Film, "Broadstroke Drawing"
3. General discussion

11:00 A. M.—12:00 M.

A Locally Produced Film Showing a Second-Grade Project on Foods. Presented by George McIntire, Director, Audio-Visual Aids, Michigan City, Indiana

Secondary School Clinic

Florentine Room—2nd Floor—North End

Rodger E. Stutz, Chairman

9:30 A. M.—12:00 M.

1. Introductory statement by Kenneth J. Rehage, University High School, University of Chicago
2. "The Use of Student Prepared and Other Visual Aids in Summarizing the Work of a Unit on Problems of the Far East." A series of reports by student committees of the ninth grade, followed by class discussions.
3. General discussion

School Administrators' Clinic

English Room—2nd Floor—North End

William J. Hamilton, Chairman

9:30 A. M.—12:00 M.

Theme—*Solving Administrative Problems through the Use of Visual Aids in a Public Relations Program*

"The Use of Lantern Slides in the Interpretation of Education Needs"
B. I. Griffith, Director of Public Relations, Illinois Education Association, Springfield, Illinois

"The Use of the Film Strip in the Discussion of Administrative Problems"
Selmer H. Berg, Superintendent of Schools, Rockford, Illinois

"Motion Pictures in an Interpretation of Teaching Technics"
Elvin G. Byers, Supervising Principal, Henry W. Longfellow Elementary School, Oak Park, Illinois

"Bringing the Schools to the People through the Use of Kodachrome Lantern Slides"
Charles Bruner, Superintendent of Schools, Kewanee, Illinois

General discussion

Zone VIII

Miss Lelia Trolinger, zone president, has been doing a grand job of organization in spite of the fact that her library at the University of Colorado has just absorbed about three hundred electrical transcriptions which must be sorted and catalogued.

One organization wrinkle worked out by Zone VIII may be useful elsewhere. Commercial distributors of equipment and materials in the territory covered by Zone VIII have agreed to inform Zone officers when they place new equipment. In this way potential members may be contacted at the moment when membership would be most useful to them.

Proceedings of the Zone meeting are going to be distributed to members as the first issue of a Zone News Bulletin. This bulletin is to contain information on Zone affairs and will probably be published quarterly.

Zone X

The largest single event in the field for sometime probably was the Southern Conference on Audio-Visual Education held November 13, 14 and 15 in Atlanta, Georgia. This year marked the fifth anniversary of the Conference. Extended notice of this program appeared in the October issue of EDUCATIONAL SCREEN. Proceedings of the Conference, available this year for the first time, will be given detailed review next month by Etta Schneider in her department "The Literature in Visual Instruction."

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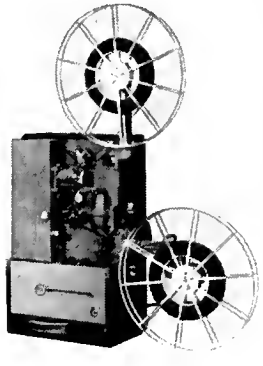

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Nevertheless, we at RCA, in partnership with our sub-contractors and vendors, have been making equipment for you—equipment just as much *yours* as if it had been shipped directly to you instead of to outposts and overseas destinations thousands of miles away. For this equipment is designed to preserve everything you value—everything that makes your way of living *worth* preserving. We have changed your shipping instructions a bit—that's all. For "your" equipment went to Uncle Sam.

On your "other" order—to be sent direct to you—RCA will make every effort, subject only to the prior needs of the war program. For, obviously, victory comes first, victory counts most. In comparison we hold nothing else important! That's the only policy for you, for 130 million other Americans in 48 states, and for us at RCA!

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Because of our War Efforts, shortages exist in certain raw materials and in man power needed to build projectors, and there will be a universal decrease in their production. Hence our RCA Sound Film Projectors will be *fewer* but *finer* than ever. For, as a result of U. S. Government orders, RCA quality standards—always the highest—are now more exacting than ever!

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Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

Title of Thesis: AN EVALUATION OF THE USE OF VISUAL AIDS IN THE TEACHING OF BIOLOGY.

Thesis completed in May 1941 for the degree of Master of Education, University of Texas, Austin, Texas.

Investigator: CHARLES A. CATE

Need For Study

During recent years much stress has been placed upon the use of mechanical devices as a means of solving a variety of educational problems in the ordinary classroom. There is a belief, and some proof, that projected pictures, particularly the motion picture, has very definite teaching values. Because of this belief the use of visual aids has increased remarkably during the past few years. This increase in the use of mechanical aids in the classroom has created many problems and has raised many questions which need answering.

Since most of the literature concerning the use of visual aids in biology deals with opinions rather than scientific facts, an effort was made in this investigation to demonstrate the values of visual aids experimentally in actual classroom situations. Most of the experiments that have been performed in this field have been conducted by specialists interested in testing the values of visual aids as a problem within itself. As a result, none of the experiments in biology has been conducted for the specific purpose of discovering the learning values of these aids when they are used in the classroom situation in which various devices have been fitted into the general program of instruction.

Purpose of Study

To determine scientifically the values of visual aids in teaching biology in a typical classroom.

The original purpose of the experiment was that of securing reliable information concerning the use of visual aids in one particular school, known as the London High School, New London, Texas.

Specific Problems

1. Do students profit more from visual instruction than from the traditional type of instruction?
2. What are the results of the use of visual aids upon students of varying amounts of intelligence? Will a student with a high I.Q. gain more from the use of visual instruction than will a student with a low I.Q.?
3. Does visual instruction result in better and longer retentions than does the non-use of visual materials?
4. What effect will the use of visual aids have upon motivating student's preparation of daily assignments?
5. What is the comparative cost of visual instruction program in a typical classroom?

Procedure

Three units of subject matter were chosen for the experiment. These were: Plant and Animal Groups, How Plants and Animals Behave, and the Laws of Heredity. Since each of these units was relatively new to the students, each student and each group appears to have had an equal opportunity for initial achievement.

Three groups or classes, or subjects were utilized. One group had the use of no mechanical visual aids. It had only such aids as museum pieces, field trips and flat pictures, just as these had always been used in regular classroom instruction. The second group utilized the museum, field trips, flat pictures, and in addition, lantern slides and a projector, and microscopic slides and micro-projector. The third group had the use of all these devices plus all the sound

and silent motion pictures available on the topics in the three units. These pictures were selected to fit into the teaching schedule of the units of work chosen to be taught during the experiment.

No attempt was made to select the students for the different groups. Three classes that had been in existence up to the time the experiment started were used as subjects. A testing program conducted by the school and previous records of the students were assumed to provide sufficient data for determining general abilities and capacities of the groups.

One form of an achievement test was given at the beginning of the experiment and another form of the same test at the end. Teacher-made tests were of two kinds; weekly and final. The weekly tests covered the work taught during a given week. The final teacher-made test was given approximately one week after the end of the experiment. This test covered all the subject matter studied during the nine weeks of the experiment.

A teaching procedure consisting of a combination of class discussion, supervised study, and laboratory work was followed. This method had been used for some time. Workbooks designed and written to accompany the test were used during a portion of the supervised study periods.

Films were used, in all instances, to supplement the regular classroom work. They were allowed to displace only a small amount of time used in the other classes for class discussion. They were used, in some instances, as an introduction to a subject, but in such instances they were shown again at the conclusion of that phase of work. In most instances they were shown at the conclusion of the unit they covered. Re-showing of difficult parts of the films was adhered to in every instance where it was deemed necessary.

Results

1. The non-visual aids group has a slightly higher percentage of ninth-grade students than has the full visual aids group; but this disadvantage, if it is one, should be offset by the fact that it also has a slightly high percentage of eleventh-grade students. The partial visual aids group shows the highest percentage of ninth-grade students, but it also shows the highest percentage of eleventh grade students which should offset any disadvantage in that respect. On the whole, it appears that the three groups were not seriously unbalanced from the standpoint of the grade level of the subjects composing them.

2. The full visual aids group was at a disadvantage in intelligence and aptitude, in comparison with the non-visual aids group and the partial visual aids group.

3. The students of the full visual aids group made a gain of 18.4% more than did the students of the non-visual aids group. The students of the full visual aids group made a gain of 15.8% more than did the students of the partial visual aids group. The difference between the means made by the three groups represents the effects of the instruction they received.

4. The retention of the full visual aids group was 10% higher than that of the non-visual aids group, and 10% higher than that of the partial visual aids group.

5. The students of the non-visual aids group were absent twice as much as the students of the full visual aids group. Also, the non-visual aids group made no preparation of the assigned lesson slightly more than 66 per cent more days than did the full visual aids group.

6. For the period of experimentation, the total cost per student was thirteen cents.

Conclusions

There is no doubt that the use of the visual materials is one of the most potent educational factors of recent years. What is true of the use of visual aids in the teaching of biology is also true in any other field in which adequate materials are available. Any device which will increase mastery of subject matter as much as eighteen per cent, will increase retention as much as ten per cent, and will so adequately motivate students, can no longer be questioned as to its value in the classroom.

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by
GODFREY ELLIOTT, Oakvale, W. Va.
Readers are invited to submit questions.

Connecticut School Produces

Community Patterns in Geometry is one of the new school-made films that indicates the possibilities of future productions in the field of mathematics. Produced by Arthur S. Bibbins, mathematics instructor and audio-visual director at the Darien High School, the 250-foot film shows in color how geometry is not an abstract subject but one that is closely associated with everyday life.

A straight railroad track, electric wires between poles, and a four-lane highway illustrate the principle of parallel lines. A cardboard circle, a dinner plate, a rack of bicycles in the rear of the high school, and a circular window in a nearby church show some of life's circles. Honeycomb presents the natural hexagons.

To show the relation of rectangular figures to everyday life, student cameramen shot scenes of a brick terrace, of piano keys, and of a cross. Octagons found by the film-makers included an octagonal window and a highway stop sign. Oil tanks, canned goods, and clock weights were discovered as examples of cylinders. More complicated geometric figures were illustrated by lathe gears and kettle drums.

The final title of the film, "The Glorious Union of Rectangles and Parallels," is followed by the American Flag—an example of geometric figures.

Ohio

Richard W. Horn, director of audio-visual aids, Galion Public Schools, produced a very useful film on *How Teachers Are Hired* a few years ago. His latest production, *A Good Start,* shows the public what goes on at nursery school and gives the reasons for each part of the daily program. (400 feet)

A fifth grade puppet show and an art-music project are recorded on a 400-foot film developed at Wooster, Ohio. Not only does the film show the puppet play, but also it pictures the making of the puppets by the fifth graders. C. M. Layton, superintendent of schools, was the cameraman.

Wisconsin

H. M. Kuckuk, Rufus King High School, Milwaukee, has produced an all-color film for the Milwaukee Physical Education Department. Documenting the *Third Biennial Athletic and Play Holiday,* it records the action of the field day.

Course in Film Making

The Hartley School of Film Making, 20 West 47th Street, New York City, announce a new film workship course in 1942.

"The chief objective of the workshop is to learn as much about film technique as possible, but a secondary objective is to produce a film which is good enough to obtain distribution. If this second objective is accomplished, the students will share equally in the profits.

"A film topic will be selected which lends itself to treament by many individual units; such a theme as the contributions of the foreign-born to the culture of the New World might be used.

"Students will meet once a week as a group and will come in during the week for private conference and criticism of material shot. The good footage will be selected and a dupe reversal made. There will be no limitation on the amount of film shot—each student may submit as much as he wishes, but is required to submit at least 50 feet. Those who wish to work in other branches of film production, such as research, script writing, music or criticism, may do so.

"There will be ten weekly sessions of two hours each and individual conferences fortnightly. The recording of the film will be done in post-sessions and will not involve any extra expenditure on the part of the student."

Question Box on School Film Production

1. What precautions should we observe in purchasing a used camera?

With the present restriction of metal production and with the bulk of optical glass going into military orders, good used cameras and lenses will become scarcer and more shoddy equipment will appear on the dealers' shelves. Considerable care must be exercised in the purchase of used equipment. The wisest method is to select a reputable dealer whom you know and in whose integrity you have faith. Buy your equipment from or through him, after he has certified to its condition. Never purchase equipment from any source without the clearly stipulated understanding that it can be returned if it does not perform according to the dealer's guarantee. If you would like to know what to look for in examining used equipment, read pages 66-68 in *Producing School Movies* by Child and Finch.

2. We should like to exchange information and films with other school production groups. Is there any established agency through which such exchanges can be made?

None specifically for the school field. The Amateur Cinema League maintains a listing service for its members who wish to exchange films, and several schools may be found in its lists. I suggest that you read over the names of school production groups mentioned in some of Mr. Finch's recent columns in this magazine, then write direct to the schools that interest you.

3. In planning a sound film can we record music and commentary on discs in our local radio studio, then send the discs to the film laboratory for transfer to film?

Such a procedure would be possible (but not necessarily advisable), if great care were used to synchronize and cue your sound to the screen. If you expect the sound to be cued accurately in a number of places to the picture, there must be assurance that the studio projector is mechanically synchronized to the recording turntable. The final recording on film can be no better than your disc recording, there will in fact be some loss in tonal quality if you try to use the disc recording as an intermediate step between original sound and the film sound track. Before you attempt this procedure, I suggest that you write to the laboratory you plan to have do the film recording. Explain your project to them fully, and ask for their suggestions and criticism.

4. Our production group, by reason of considerable experience, finds the few books on school production excellent but a little elementary for some of the more advanced members. Can you recommend an advanced book that might help them?

There are no "advanced" handbooks dealing specifically with school production. The field is still too new and too limited to justify a publication of this type. Perhaps your group would be interested in Paul Burnford's *Filming For Amateurs* (Pitman Publishing Corporation; $3.50). It is a small book (103 pages), sensitively written for the advanced amateur who wants to improve his technique.

5. We want to repeat some opening scenes of our film in the closing sequence. Is our simplest procedure to have a reversal duplicate made of the opening scenes?

Don't do it that way! Reversal duplicate footage should not be spliced into your original reversal film. The reversal dupe has its emulsion surface on the opposite side from the original. When the two are run through your projector on the same reel one of them will be slightly out of focus. If your script demands exact duplication of opening scenes in the closing sequence, the simplest procedure is to shoot those opening scenes with two cameras set side by side. Use the same focal length lenses on both cameras, and frame the same area with both cameras. Of course, if you do not have an extra camera available, your next alternative is to photograph the opening scenes twice with the one camera that you do have. The care that you use in rephotographing these scenes will be in direct proportion to the importance of key action, costume, location, lighting, etc., that the repeated scenes must show. G.E.

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS
Assistant in Audio-Visual Aids
Extension Division
Indiana University, Bloomington

THE new authors of the department will endeavor to continue the critical review of new films on the basis originally outlined by Mr. Don White in his foreword to "New Films of the Month As They Look to a Teacher Committee" in the October, 1940 issue of THE EDUCATIONAL SCREEN.

The Teacher Committee will consist of members of two graduate classes in audio-visual education and teachers in the University School. The authors will attempt, in the description of the film, to give an objective report of the content and meaning of the film. The final revision of the description of content and an appraisal of the selection and organization of material in the film, the use of the film medium, and possible educational uses for the film will be prepared by the Teacher Committee immediately following the viewing of each film. The description of content and the committee appraisal will, therefore, represent a composite contribution of the committee rather than the opinion of a single critic.

Three to five films will be reviewed each month. The editor may, from time to time, include notes on production activities and forthcoming releases of interest to the readers.

The Flag Speaks (Teaching Film Custodians) 19 minutes, technicolor, 16 mm. sound. Apply to distributor for rental sources and prices. Produced in 1940 by Warner Brothers Pictures.

This subject presents the flag of the United States of America and the struggles to establish and maintain the national unity and the freedoms for which it stands.

During shots of New York City and contemporary scenes the commentator stresses the diversity of race, language, and religious beliefs in our population. The unity of these diverse groups is illustrated by a great crowd in a stadium standing while the flag is unfurled.

Brief shots show several of the predecessors of our flag. The stars and stripes are unfurled at Fort Schuyler on the Mohawk, under siege by British. Man reads to crowd from a newspaper, brought by relieving cavalry troop, an article describing the new national flag designated by the Continental Congress. The new flag is hastily made of a girl's red petticoat, a white shirt, and an officer's blue cloak. Two officers discuss what all colonists are fighting for and this is summed up by one officer's quotation from Voltaire: "I detest what you say, but I will defend to the death your right to say it."

Soon the victorious Americans are quarreling among themselves. A tavern scene of men arguing about state versus national sovereignty. Unity does triumph, but in 1798 the Alien and Sedition Act threatens the fundamental freedoms for which the flag stands. John Chase is arrested in his newspaper office and his place wrecked because he defied this act. Jefferson pardons all prisoners under the Act, and Chase comes from jail triumphant. The next threat to liberty occurs in 1833 when freedom of worship is at stake. Attacks on the Mormons and the pillaging of their churches. A shot of the confederate flag being unfurled introduces a short sequence showing the Civil War with its threat to unity. The next sequence concerns equal suffrage and the right of assembly. A women's meeting is broken up by group of ruffians showing how a minority often abuses privileges enjoyed under the flag.

Finally the film shows how to display and honor the flag properly, and summarizes the appeal of the flag to the many diverse groups in the United States.

COMMITTEE APPRAISAL: Rather than a series of authentic events presented in a scholarly textbook fashion, the film attempts to create the social atmosphere under which national unity and the Freedoms of our Democracy were developed. This film can be used to motivate discussion of civil liberties and the processes whereby democratic freedoms are extended and maintained. The film is also suitable for use in auditorium programs and assemblies to give a dramatic interpretation of the foundations of patriotism. The Civil War sequence was so scantily developed as to contribute little to the significance of the film.

Power For Defense (National Defense Advisory Commission—superseded by the Office for Emergency Management) 10 minutes, 16 mm. sound. Apply to producer for free and rental sources and sale prices. Issued in 1941. Teacher's guide furnished.

The use of power resources for defense production in the Tennessee Valley is the theme. A brief introduction shows seven completed dams and three new dams under construction which compose the gigantic power plant in the Tennessee Valley. The commentator tells what power is obtained from them and points out that this source of power is in an area which can supply one-third of the raw materials needed for defense and that it is protected by its geographic position from attack by any enemy.

The film shows workers in factories turning out tents, army clothing, uniforms, and shoes; the processing of phosphate rock from the valley to recover phosphorus for tracer bullets and other munitions; the reconversion of Muscle Shoals for nitrate manufacture; a new method for the recovery of vital manganese through the use of abundant electric power; and aluminum recovered from the ore in the TVA area being rolled and stacked for shipment to leading aircraft manufacturers. The next sequence shows manufacture of training planes in the valley. Then a quick review of many specialized industries supplying machines and war materials. The last scene shows the products shipped by train and truck.

COMMITTEE APPRAISAL: This is a "news report of film",

(*Continued on page 76*)

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer, and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

(*Continued from page* 74)

suitable for use in current events periods to vitalize discussions of the conversion of our industrial resources to war-time production. The content is admirably selected to give great unity and dramatic intensity. Such discriminating selection prohibits the inclusion of information necessary for the establishment of relationships which would qualify the film for classroom use in subject matter areas.

TVA (Tennessee Valley Authority in cooperation with the National Defense Advisory Commission) 22 minutes, 16 mm. sound. Apply to producer for free and rental sources and sale prices. Issued in 1940.

Describes development of power and rehabilitation of the land and people of the Tennessee Valley under the Tennessee Valley Authority. Opens with scenes of the land and rivers in the TVA area while the commentator briefly tells of the early settlers, who in a century stripped natural resources and loaded rivers with silt, and turns to present efforts through skill and brains to harness the water and reclaim the land. Next shown are the multipurpose dams to control floods, make navigation possible, and produce power; and the four new dams under construction. Skilled and unskilled workers on these projects are represented by 15 unions of the building and metal trades.

New waterways are shown with boats carrying freight and going through locks. Shots of generators, plants, power lines, other equipment, and the control boards where crews direct power to users, introduce the use of power in industry. Workers swing along to work in plants where sheet metal is being rolled and stamped, textiles woven, shoes stamped and sewn, precision machines worked, and electric furnaces used.

Next the use of power by the farmer is shown by scenes of the farmer irrigating, taking stored food from community electrical lockers, and fertilizing land with phosphorus fertilizer from Muscle Shoals. Transplanting of seedlings by C.C.C. workers illustrates the re-forestation activities carried on under the TVA. Researchers are shown at work finding

new methods for utilizing natural resources of the area while commentator tells progress made to date.

The use of this huge reservoir of waterpower created by TVA is shown in the manufacture for defense of manganese, sheet aluminum, airplanes, shells, and ammonium nitrate for explosives. Film closes with shots of workers against background of machinery while commentator summarizes purposes of TVA in "weaving in this fertile valley a sturdy fabric of democracy."

COMMITTEE APPRAISAL: This film can be used to introduce study of long-range national planning in development of physical and human resources. It shows how resources, developed to improve the standard of living in a large area of our country, can quickly be converted to produce efficiently defense material. It can also be used in the study of the geography of the Tennessee Valley. The film lacks a map defining area drained by Tennessee River and locating the various dams. In some instances commentary and picture are not correlated. For instance, while commentator tells of heavy annual rainfall in the valley, the picture shows a dry field with clouds of dust stirred up by the wheels of a farm implement. In general the technical quality of the film is excellent. The difficult editing of so comprehensive a film has been handled skilfully.

Addresses of Producers and Distributors

Office for Emergency Management, Division of Information, Washington, D. C.

Teaching Film Custodians, 25 West 43rd Street, New York, New York.

Tennessee Valley Authority, Division of Information, Knoxville Tennessee.

PRODUCTION NOTES

Mr. Arch Mercey, producer of the two films, *Power For Defense* and *TVA,* reviewed in this column, offers with these films a solution to the problems of production, distribution, and use of theatrical and educational films designed for the dissemination of information and for the building of civilian morale by government departments during the national war effort. The practice has been not to release these films for 16 mm. use until they have had a theatrical run. Thus during the period when the subject is timely and of utmost importance the film is unavailable to the teachers on the elementary, secondary, and college levels and leaders of adult study groups and forums. If immediately issued in 16 mm., it is quite possible that the films could be systematically shown, under optimum learning conditions, to approximately 20 to 40 per cent of the population of many communities.

Mr. Mercey has suggested a solution to this problem in his treatment of the same subject in the two films, *Power For Defense* and *TVA.* The same camera crew shot footage on power, material, and human resources used in the production of defense materials under the TVA. The footage was used in both films. *Power For Defense* was made into a highly unified, fast-moving, and dramatic ten-minute theatrical short, while the *TVA* footage was organized into a twenty minute film for 16mm. use by school and community groups. *Power For Defense,* designed for use in theatres, deals specifically with the use of electrical power generated at the great dams of the Tennessee Valley in the production of defense materials, and the gearing of American industry to effective war production. It compares favorably in unity and in dramatic intensity to entertainment films in theaters. On the other hand, the *TVA* film develops the need for a planned use of resources, gives a brief history of the Tennessee Valley Authority, and then shows the regional and national implications of the project in the development of waterways, the use of power in industry, agriculture, defense, reforestation, and the opportunities the

TVA has provided for the people of the valley. TVA not only gives information, but orients the facts in the social scheme, enabling us to see the present project as an effect of causes and as the cause of effects to come. Mr. Mercey's simultaneous production of two films on the same subject, designed for their respective channels of distribution, probably cost little more than a single theatrical short and gained the advantage of making possible the release of both the educational and theatrical film at the same time. It is to be hoped that other producers will follow Mr. Mercey in arranging for the production of both educational and theatrical film on the same subject and in releasing early the 16 mm. educational version.

The Cloth of Kings—1 reel, 16 mm sound. Released and distributed by Universal Pictures Company, Rockefeller Center, New York City.

We ran notice of this film in September 1937, when it was running as a short subject in the theatres. Now the 16 mm version puts it within reach of all schools and we gladly print a further word.

The Cloth of Kings is a notably well made film giving the clear and absorbing story of Ireland's flax industry from the soil of Erin to the salons of the world, from primitive and unchanging agricultural methods of planting, reaping, soaking, threshing, to the most modern factory machines and processes for the expert creation of beautiful linens of all kinds. But the film is more than a mere factual document on linen-making. It brims with bits of cultural element as well. It is a veritable little pictorial saga of Irish life and toil in flax-field and factory, with appealing close-ups of the Irish workers, farm hands, vivid young colleens, and beautifully wrinkled old folk. Charming shots of the uniquely lovely Irish landscape give authentic background of the island's great commercial industry, which is also a labor of love and art that the workers manifestly enjoy. This picture will delight and benefit any classroom or auditorium where the subject is appropriate to the study in hand.

(Reviewed by N. L. G.)

Films and Slides Together

(*Concluded from page* 53)

following are suggestive of the follow-up that might be used in the development of a unit of this kind:

Social Studies

1. Finding out about other groups of pioneers who settled in our West.
2. Making a large map of the United States on which early pioneer routes and settlement are shown.
3. Making a covered wagon.
4. Dipping candles.
5. Showing the sound film, *The Westward Movement* (Erpi), as a summary to the entire unit.

Excursions

1. Visiting the St. Louis Public School Education Museum to study specimens of pioneer life.
2. Visiting Salem, Illinois, a replica village of pioneer days.

Art: Making a mural showing phases of pioneer life.

Literature and English: Reading and dramatizing stories of pioneers from a suggested bibliography.

Current Events: Finding out about such twentieth century pioneers as Admiral Byrd, Beebe and the recent settlers in Alaska.

Music: Learning songs sung by the early pioneers.

Physical Education: Learning square dances enjoyed by these pioneers.

Not all the above suggested activities were used by this class; some were repetitions of work which had been done; but enough of them were used to provide the extension and completion of learning necessary to the unit.

News and

Government Film Coordinator Appointed

Mr. Lowell Mellett, Director of the Office of Government Reports, Washington, D. C., has been appointed Coordinator of Government Films by President Roosevelt, thus bringing under one head the numerous film activities of various government agencies. Assistants to Mr. Mellett are Leo Rosten, recently liaison man between the Office of Emergency Management and Hollywood, and Arch Mercey, formerly with the U. S. Film Service. It will be Mr. Mellett's job also to coordinate wartime film production, both government and professional, working with the motion picture industry's War Activities Committee, headed by Francis Harmon of the Hays office, through which organization government films will be released to theatres.

The educational film field has also offered to cooperate with the government in film distribution. Representatives of the 16 mm. industry met in Washington on January 26 to discuss the roll of the non-theatrical 16 mm. film as a medium of informing, inspiring, and training our citizens to meet the demands of war. The Committee's report, which was submitted to Mr. Mellett, dealt with the four principal needs: a plan of organization that will mobilize the widest possible support for the showing of government films; adequate films; physical distribution facilities for booking, shipping, inspecting, repairing, and keeping reports on films shown; and projection equipment and personnel. The following organizations sent representatives to the conference: National University Extension Association; National Association of Visual Education Dealers; Visual Equipment Manufacturers Association; Films, Inc.; Allied Non-Theatrical Film Association; Erpi Classroom Films, Inc.; Walter O. Gutlohn, Inc.; Bell and Howell Company; Modern Talking Picture Service, Inc.; Castle Films; and Y.M.C.A. Motion Picture Bureau.

Defense Film Production

The first official training film to be approved by the Office of Civilian Defense, Washington, is *Fighting the Fire Bomb,* produced by Transfilm, Incorporated, under the technical supervision of the Chemical Warfare Service of the U. S. Army and the National Fire Protection Association. The film runs fifteen minutes and gives vital information on methods and equipment to be employed in fighting fire bombs and preventing the spread of fire. A special teacher's manual has been prepared by the Safety Research Institute, 420 Lexington Avenue, New York City, to accompany the film. It contains instructions for using the film in class work, lectures to be given before and after the showing, "quiz" questions, and other instructional material. Copies of the film in 16mm can be obtained from Transfilm, Inc., 9 Rockefeller Plaza, New York City.

The Research Council of the Academy of Motion Picture Arts and Sciences, Hollywood, is collaborating with the U. S. Army Signal Corps and the Civilian Defense Committee in the production of a series of civilian defense films. Lieut. Col. Darryl F. Zanuck,

Notes

chairman of the Council, announced that the first of these films, all of which will deal with military information of vital importance and interest to the civilian population, will be on such subjects as safeguarding military information, proper cooperation of the civilian population with the military authorities, and the proper preparation for blackouts.

Film Study Courses

City College of New York inaugurated a series of film courses this month under the supervision of Irving Jacoby, producer and director. The series, known as the Institute of Film Techniques, will consist of twelve workshop and lecture courses on the production and utilization of documentary films. According to Mr. Jacoby, "they have been designed to train experts to supervise the use of fact films in schools and colleges, civilian defense, Government agencies, social service, labor organizations, church and cultural groups, as well as for commercial, industrial, and advertising purposes." Lecturers will include John Grierson, Canadian Film Commissioner, Joris Ivens, Willard Van Dyke, John Ferno, Alice V. Keliher, Kurt London, and Stuart Legg.

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Jean Benoit-Levy, noted French director who produced the well known films *LaMaternelle* and *Ballerina*, conducts a course on the "Motion Picture—Its Present And Its Future" at the New School for Social Research, 66 West 12th Street, New York City, every Tuesday from 6:00 to 7:40. The course will meet for fifteen weeks and will take up the study of the film in its nearly infinite varieties, many of which are being used increasingly by science, art, industry, government, and social agencies. The course is in two sections: the "Motion Picture As Education, Publicity, Documentation, Theatre", which began on February 3rd; and "Potentialities of the Motion Picture in Education", which starts on March 31st. While stress is laid on non-theatrical uses of the motion picture, theatrical films, both here and abroad, constitute half of Section A of the course. Documentaries are considered as the transition stage between dramatic and educational movies. In Mr. Benoit-Levy's view the motion picture is capable of being not merely a great art medium but as an educational instrument it is destined to prove as important in its uses as the printed page itself. Before the war he was the General Secretary of the French Committee of the International Institute for Educational Films of the League of Nations.

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New York University School of Education again offers its well-known course on "The Motion Picture: Its Artistic, Educational, and Social Aspects" on Thursday evenings from 6:15 to 8:00 at the Washington Square campus, under the direction of Frederic M. Thrasher. Special attention will be given to the use of films in national defense.

Dr. Daniel C. Knowlton will continue his course on "The Study and Appreciation of American History

through the Motion Picture" at New York University Thursday evenings, carrying 4 points credit. Phases of history to be covered by authentic motion pictures this term are the American Revolution, the establishment of the Federal Government, the westward movement, and the slavery struggle. The object is to determine how far a satisfactory knowledge of history may be obtained through the pictorial medium.

Growing Activity in Tennessee

The Audio-Visual Department of the Tennessee Education Association, newly organized under the chairmanship of Mr. W. K. McCharen, Middle Tennessee State College, Murfreesboro, is making plans for its second annual sectional meeting to be held during the T.E.A. convention in Nashville April 2-4. Last year the audio-visual section was held jointly with the librarian's section. This year's meeting will be a joint session with either the Elementary Principals or the Intermediate section.

The film library of the University of Tennessee Division of University Extension has been growing steadily. The January issue of its "Audio-Visual News" lists thirty new acquisitions, and titles of films available for building patriotism, morale, and national unity—"films which should definitely be considered to help in the task during months to come."

South Carolina Service Expands

The use of audio-visual aids in the classrooms of South Carolina is becoming more popular from year to year, as evidenced by the growing activities of the Audio-Visual Aids Bureau of the University Extension Division. Last year the Division circulated a total of 3,662 reels among its 180 users, which more than doubled the number of reels distributed the preceding year. Ninety-five new films were added to the Division's film library during the past year. According to reports, the number of motion picture projectors in use in South Carolina schools has doubled in the past two years. There is also reported evidence of increasing interest in the educational use of slides, recordings, and radio.

Along with the growing interest in visual aids has gone the preparation and training of teachers in visual techniques, courses being offered on the University campus and at several extension centers.

Another USHA Film Slide

Government Departments are making more and more use of the potent little film slide for informational and instructional purposes. As an example, one of the many recent productions of the United States Housing Authority of the Federal Works Agency (which we have viewed with keen interest) is entitled "Yes, We CAN Have Housing." The roll presents 80 pictures excellently chosen, concisely titled, single frame pictures (75 cents a roll, with Speech Notes), with detailed suggestions for modifying and adapting the roll for varying local purposes. It is a telling series of "before and after" contrasts, the familiar slum conditions and the increasingly familiar "modern housing projects."

The USHA also offers to schools and colleges most ample bibliographic service through numerous multigraphed reference lists. These cover Housing Courses being given in Colleges and Universities in 1941-42, motion pictures and film slides locally or professionally produced throughout the country, literature on the subject in the form of documents available from Washington, pamphlets from many other sources, housing study guides, books, magazines, news bulletins—the aggregate representing a mass of reference material for enriching the study of housing problems by communities, schools or colleges. Merely write the USHA in Washington.

Data on Summer Courses Wanted

The Educational Screen is again gathering information on all summer courses in visual instruction, for publication in the April and May issues.

Any reader knowing of such courses to be given next summer is earnestly asked to send us names of the institutions—with or without further data, such as: title of corse, name of instructor, dates of duration, credits, contents of course.

A Visual Aid for Defense Training

(*Concluded from page* 55)

7. Attachments may be obtained with the machine that allow 35mm strip film and glass slides to be used.
8. In common with all still projection, all students see exactly the same point, illustrated by the instructor, at the same time.
9. Because of the darkened room, distracting influences are reduced to a minimum.
10. Material can be organized in any sequence desired by the instructor.
11. Drawings, diagrams and graphs may be thrown on the blackboard as a screen and then traced. With the lights turned on, the traced lines may be used for copy work and further analysis.
12. Easy to review material previously covered.

Administrative Organization

1. Have operators available to set machine up, show instructor how to use it and take care of all minor machine details. (High school students are satisfactory).
2. Schedule the machine in advance on a calendar type record with date, hour and room.
3. Provide a general instruction sheet for instructors on the use of the reflectoscope. This sheet is mimeographed, letterhead size, and gives teachers detailed information on the Opaque Projector and its operation, kinds and sources of visual materials for use therewith and an outline procedure for securing and teaching with these materials.
4. Have a special lesson plan form that instructors may use in organizing material to be used in the machine.
5. Provide a filing cabinet for available material and index it according to subject and trade.
6. Include demonstrations of its use in all teacher training classes conducted.

Finally, there should be a full size Report Sheet, which may also be mimeographed, to be filled out and turned in by each teacher after using the materials. Besides the usual necessary data on subject, date, class, instructor, whether slides, filmstrips or pictures were used, etc., the sheet apportions about two-thirds of its space for the recording of all the materials used, a brief description, source, (if a book or magazine the title, page numbers, publisher), with the last four or five lines left free for the teacher's comment, suggestions and questions. The data from these Report Sheets, when properly catalogued and filed in the visual headquarters of the school, constitute a growing reference library on visual materials of constant value to all teachers in all grades and subjects.

Current Film News

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, include some timely subjects among their recent films, such as:

South African Mirror—the first newsreel of the war in Africa—an exclusive offering of the Filmosound Library.

Demosthenes' Fight for Freedom—2 reels, 16mm sound—featuring the English actor, John Nathaniel, with interpolations by Prof. Hartmann of Cambridge University. The speeches of the accused patriot, and of his "appeaser" prosecutor, Aeschines, are given with classic form and fervor.

Panama Interior—1 reel, sound, produced by Carveth Wells—portraying Indian and animal life in the backcountry, far from the Canal.

Recent additions to the series of Indian life films, available in color, are two 1-reel silent films:

Indian Dances of the Southwest—photographed by Dr. A. C. Twomey—showing the more important tribal ceremonials at the annual Gallup Intertribals.

Indian Life Today—produced by Josef Boehmer—portraying the practice of old crafts, pottery, agriculture, baking, weaving, under the impress of the white world.

Analytical Balance Technique—a 2-reel silent film produced at Wright Junior College in Chicago by Dr. Sebastian A. Durban—is being made available for general use by science classes on the senior high school and college levels through the Filmosound Library, which has exclusive distribution. The picture shows in great detail the operation in mathematical techniques involved in the proper use of this basic instrument. Five lantern slides and a teacher's outline accompany the film.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, has released two 16 mm. sound shorts of current interest, in which Ralph Ingersoll, editor of PM, tells of his recent tour of the battlefronts.

I Saw Russia reports on his six-weeks' visit in the Soviet Union, showing why Russia cannot be beaten and how U. S. production can help.

Hitler's Threat to America presents his impressions and analysis of the battlefronts in the Atlantic, in Russia, and China and on the Pacific, and the direct threat to the Americas through Africa.

Among entertainment features announced this month by Gutlohn, are:

The Black Doll; Danger on the Air—two Crime Club productions starring Nan Grey and Donald Woods.

Flash Gordon; Scouts to the Rescue; Flaming Frontiers—Universal serials featuring, respectively, Buster Crabbe, Jackie Cooper, and Johnny Mack Brown.

■ Y.M.C.A. Motion Picture Bureau, 347 Madison Ave., New York City, is cooperating with the U. S. Government, Office of Emergency Management, in distributing 16mm sound editions of their defense films to schools, churches, clubs, industries and community organizations. Late releases are:

Building a Bomber—2 reels—describing the step-by-step manufacture and assembly of the B-26 medium bomber in the Glenn Martin plant at Baltimore.

Aluminum—1 reel—tracing the importation of bauxite from Dutch Guiana, and the chemical processes which convert the ore into aluminum.

Homes for Defense—1 reel—showing types of housing provided for workers in defense areas by governmental agencies.

These films are available free from the Bureau's four distributing offices located in New York, Dallas, Chicago, and San Francisco. For purchase of prints, communicate with the Division of Information, Office for Emergency Management, Washington, D. C.

■ Vocational Guidance Films Inc., Old Colony Building, Des Moines, Iowa, has completed production on four new 16 mm. sound films in the series *Your Life Work*. All are one reel.

Nursing takes a young lady through a nursing school, showing what qualifications are required, training involved, and opportunities for positions on graduation.

The Draftsman presents the part he plays in constructing bridges, buildings, highways and machinery.

The Electrician shows the multitude of jobs in this vocation, particularly the installation and service of electrical equipment used in daily life. It explains the wiring of buildings and homes, servicing motors and household appliances, the place of the electrician in communication and radio.

Engineering covers the basic branches of the field—Civil, Mechanical, Electrical, Chemical, Mining and Metallurgical Engineering—and explains many subdivisions such as Highway, Railway, Aircraft, Hydraulic, Sanitary, Heating, Refrigeration and Air Conditioning.

■ General Electric Company, Schenectady, New York, lists its free film offerings in a new colorfully illustrated 1942 catalog, copies of which may be obtained by writing to the Visual Instruction Section, Publicity Department, at Schenectady or to the nearest G-E office. Defense, X-ray, railroads, lighting, home economics, "Excursions in Science" are among the subjects offered. A variety of industrial films show behind-the-scene workings of some of the country's most vital industries.

■ Castle Films, Inc., 30 Rockefeller Center, New York City, this month offers to 8mm and 16mm users some additional motion picture footage that has come out of one of the war arenas, namely:

Britain's Commandos in Action—the most complete filming of any single episode of all the wars. This release is devoted to actual sequences of the daring, adventurous raids on Nazi-held Norwegian islands, filmed in the thick of the fight.

Tight-lipped fighting men are seen making ready for the surprise attack as their ships near the coast under cover of darkness. With split-second precision, British destroyers' guns bark, bombarding and silencing German batteries ashore. As dawn appears, Commandos land from the famous assault boats, and pave the way for their companions who follow in waves. Sappers lay their wires while others fight from street to street, house to house. Mortars take toll of all remaining in garrisons or hide-outs. Huge explosions wreck building after building. Nazi planes, summoned to relieve their mates, are hit and downed in flames. Oil, gas, all supplies are set afire, and tons of German shipping destroyed. Captives and wounded are herded to assault boats for the larger naval craft and concentration camps for the duration. Jubilant Commandos celebrate their seven-hour victory as their ships steam homeward, leaving the two islands a mass of flames.

This release is available at usual Castle prices at photo dealers in five sizes and lengths.

■ Films Incorporated, 1 East 42nd St., New York City, announces the availability of two notable Paramount 16mm sound features to all schools located in non-competitive locations:

Beau Geste—starring Gary Cooper, Ray Milland, Robert Preston—the classic story from the famous pen of Percival Christopher Wren, of the love between three brothers in the French Foreign Legion and the sacrifices they make for each other.

The Great Victor Herbert—a musical romance centering around the great composer and featuring his operetta classics, ably sung by Allan Jones and Mary Martin.

These two pictures are offered under the new sliding scale system recently set up by Films Incorporated.

■ New York University Film Library, 71 Washington Square South, New York City, is handling the 16mm distribution of a two-reel sound picture made by Joseph Losey and John Ferno for the National Association of Nursery Educators, entitled:

A Child Went Forth—an intimate picture of children from two to seven engaged in a wide scope of activities at Nell Goldsmith's nursery camp, Woodlea. There they learn how to live with one another, how to build things and to develop their creative instinct. A wide

(*Concluded on page* 84)

A teaching film in a new field

Making cuttings of fleshy green stems (Geranium) — *Reel I*

"VEGETATIVE PLANT PROPAGATION"

Fibrous root cuttings are planted in a propagating bed — *Reel I*

A step in making a top graft on an apple tree — *Reel II*

Demonstration of side grafting of an evergreen — *Reel II*

IN this new Eastman film the motion picture successfully invades another field. Time-tested techniques are used to orient the problem and methods of plant propagation, and to reveal them in minute detail. To see this film is to realize again the power and effectiveness of the motion picture as a medium of instruction.

Vegetative Plant Propagation
Reels I and II

A film designed for use in high-school courses in biology and ornamental horticulture, and in agricultural schools as well. The techniques used in various types of vegetative plant propagation, based on scientific findings, are thoroughly covered, and revealing full-screen close-ups bring out the various steps in the action for detailed study. The subject is treated in two 16-millimeter reels (silent), priced at $24 each.

Reel I: Demonstrates correct procedures in making soft green and woody stem cuttings; leaf cuttings; fleshy and fibrous root cuttings.

Reel II: Tip, mound, and aerial layering; separation and division of garden plants such as phlox, dahlia tubers, narcissus and tulip bulbs, gladiolus corms; top grafting of apple trees; side grafting of evergreens; grafting of apple roots; bud grafting of roses.

Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Eastman Classroom Films

(*Concluded from page* 82)

range of behavior is pictured. Commentary by Munro Leaf relates the activities of the camp to general progressive education techniques.

■ Heidenkamp Nature Pictures, 538 Glen Arden Drive, Pittsburgh, Pa., offers a series of original bird pictures in 16mm silent and color motion picture film.

The Thrush Family—Series No. 1—depicts the life and habits of the Robin, Bluebird and Wood Thrush in their natural habitat, with many colorful close-ups.

The Titmouse Family—Series No. 2—presents the Titmouse searching into crevices of bark for insects, the Chickadee which steals the Titmouse's hoard, and the posing of the Nuthatch.

Each series is 200 feet in length and is available on a sale basis.

Land Birds of the Eastern United States is the most recent series of films on wild bird life produced by Heidenkamp. It consists of twelve 100 foot reels of authentic color views, all of which are close-up. Among the birds pictured are the Woodpecker, Northern Flicker, Purple Martin, Barn Swallow, Eastern House Wren, Catbird, Brown Thrasher, Warblers, Baltimore Oriole, Sparrows, Eastern Goldfinch, and many others. The reels are sold separately or combined to make one, two, or three 400 feet reels of film.

■ National Film Board of Canada, Ottawa, Canada, has issued a descriptive list of films—sound and silent—now available in the United States and Canada on a purchase basis. Educational film libraries may secure copies of this list for mailing to organizations they serve.

The films in the catalog describe Canada as a nation. Some give the picture of the war; others show the background of the country's life and industry. Also included are the silent pictures formerly circulated by the Canadian Government Motion Picture Bureau, now absorbed by the National Film Board. The war reels include the series *Canada Carries On* and a group called *Canadian War Films*. Listed among the latter is:

Fight For Liberty—a four-reel sound film outlining the course of events from August, 1940, through the succeeding year: the courage and energy of Britain; the strategy of hemisphere defense; the close co-ordination of policies and action effected between Britain, Canada and the United States, with its promise of a working basis for the future. The picture has reference to the air war over Western Europe, the Balkan and African campaigns, and the Battle of the Atlantic, as well as a survey of Canada's war program in relation to Britain and the United States.

■ Commonwealth Pictures, 729 Seventh Ave., New York City, announce the establishment of a 16 mm. sound rental library, in response to popular demand. Up to this time, their films might only be purchased, now they also may be rented.

The rental library includes many outstanding Hollywood features, such as *Algiers, Blockade, History Is Made at Night, Flying Deuces*. Many educational films will also be offered with teachers' guides, including *Edge of the World, With Williamson Beneath the Sea. The Living Story of the Bible* is one of the religious film offerings. The library also makes available original technicolor and black-and-white cartoons, short-subject musicals and Shirley Temple comedies.

Commonwealth has just issued its first Rental Library catalog and will be glad to send copies upon request.

■ Better Vision Institute, Inc., Rockefeller Center, New York City, is offering a new educational film production which they have just completed under the title:

Vision for Defense—16mm sound, running time 15½ minutes—featuring Lowell Thomas as commentator. The film presents the story of the importance of vision, not only in defense activities but in all lines of human activity. The structure and function of the eye are studied, followed by scenes showing the making of optical glass, and the grinding and polishing of lenses to accommodate individual eye defects.

■ The Cooperative League, 167 W. 12th St., New York Sity, announces the release of their first sound production, entitled:

Here Is Tomorrow—3 reels, 16mm or 35mm sound—a documentary film on American consumer cooperatives, directed by Willard Van Dyke and Herbert Kerkow. It depicts the progress of cooperation which developed out of small groups of men and women working together—co-operatively-owned oil wells and refineries; co-op hatcheries and fertilizer plants; an extensive insurance business and other numerous cooperative activities.

This subject is available for rental or purchase on life-time lease.

■ The United States Public Health Service, Washington, D. C., operates a lending library of health films which have been produced by that Service, or under its supervision. Recent subjects, offered free to schools, are:

About Faces—a sound film on dental hygiene, narrated by Lowell Thomas. Available in 16 mm. Kodachrome, (running time 20 minutes), and black-and-white, 16 mm. or 35 mm. (10 minutes).

Proof of the Pudding—a 16 mm. sound film in technicolor, running time 10 minutes, which emphasizes the importance of good nutrition.

These films should be ordered from the Surgeon General in Washington, D. C.

■ Donald Manashaw, 7352 Hollywood Blvd., Hollywood, California, has produced two industrial films for Gregg Publishing Co., and the Delehanty Institute.

The Champions Write—1½ reels, 16mm color and sound—presents eight of the fastest shorthand writers in the United States today and the secrets of their speed. Their actual writing is shown in closeup, synchronized with the actual oral dictation. Available from The Gregg Publishing Company, 270 Madison Ave., New York City.

Men O' Defense—1½ reels, 16mm sound in black and white—portrays the facilities and methods of instruction at The Delehanty Institute in training men for national defense jobs.

Machine shop sequence shows the operation of engine lathe, millers and grinders, drill press, and bench work. Arc and acetylene welding are demonstrated. Aviation sequence shows how men are taught every phase of airplane construction. Available from The Delehanty Institute, 115 E. 15th St., New York City.

■ Photo & Sound, Inc., 153 Kearny St. San Francisco, California, have produced a 16 mm. civilian defense training film in cooperation with the Office of Information of the San Francisco Civilian Defense Council, and others. The film, which is now ready for use, is titled:

Air Raid Warden—1 reel, 16 mm. sound. Its purpose is to show the duties of the air raid warden in preparing his neighbors for action under possible air attack, as well as his duties during a blackout.

Blackout — another defense training film now in production—is scheduled for release March 1.

In addition to producing films, Photo & Sound is handling distribution of all civilian defense films available.

■ Bureau of Mines, United States Department of the Interior, presents a new 16mm. sound film for free distribution:

The Story of Sulphur, "prepared in cooperation with a large number sulphur-producing company. The opening scenes show a typical sulphur-mining town near the Gulf of Mexico, where most of the sulphur is mined. Line drawings show the geologic formation of sulphur deposits; animated drawings and photography depict the ingenious method of mining the sulphur. Functions of huge boilers for generating the steam used for water heating and power, are explained. Additional scenes show drilling of wells, pumping of sulphur, filling of vat, loading and transportation of sulphur, and, finally, its industrial uses.

Applications for this film should be addressed to the Bureau of Mines Experiment Station, 4800 Forbes St., Pittsburgh, Pa.

Among the Producers

S.V.E. Filmstrip Correlation

In an endeavor to increase its contribution to the elementary educational program, the Society for Visual Education Inc., Chicago, arranged for the extensive correlation of a number of geography and social studies Picturols (filmstrips) with twenty-two widely used elementary text books. The filmstrip or Picturol as produced by S.V.E. is a strip of 35 mm. film having twenty-five or more pictures or frames about a particular subject. Appropriate explanatory matter appears either on the film alternately with pictures or in an accompanying printed manuel.

The books are standard geography and social studies texts universally used throughout the country. After selecting the texts and carefully checking them for subject matter, it was necessary to review in detail all filmstrips in the S.V.E. Social Studies group for corresponding supplementary or related topics which educators would find advantageous to use in enriching the regular elementary curricula. The texts so correlated are:

Atwood-Thomas *Home Life in Far Away Lands* (Ginn) A —Stull-Hatch *Journeys Through Many Lands* (Allyn-Bacon) B —Bodley-Thurston *People of Other Lands* (Iroquois) C —Smith *Home Folks* (Winston) D —Smith *World Folks* (Winston) E —Barrows-Parker *Journeys in Distant Lands* (Silver-Burdett) F —Atwood-Thomas *Nations Beyond the Seas* (Ginn) G —Stull-Hatch *Journeys Through North America* (Allyn-Bacon) H —Bodley-Thurston *North America and South America* (Iroquis) I —Smith *American Lands and Peoples* (Winston) J —Barrows-Parker *United States and Canada* (Silver-Burdett) K —Atwood-Thomas *The Americas* (Ginn) L —Stull-Hatch *Europe and Overseas* (Allyn-Bacon) M —Bodley-Thurston *Old World Continents* (Iroquis) N —Smith *Foreign Lands and Peoples* (Winston) O —Barrows-Parker *Europe and Asia* (Silver-Burdett) P —Atwood-Thomas *Growth of Nations* (Ginn) Q —Atwood-Thomas *World at Work* (Ginn) R —Stull-Hatch *Our World Today*: Asia, Latin America, United States (Allyn-Bacon) S —Brigham-McFarlane *How the World Lives and Works* (American) T —Smith *Our Industrial World* (Winston) U —Barrows-Parker *Southern Lands* (Silver-Burdett) V.

The method of correlation is as follows. In the Educational Picturol Catalog, the texts are listed as above with corresponding code letters. In the body of the catalog, after correlated strips, code letters indicating the title with numbers indicating the chapter or division in that book are given. Thus we find on Page 6 of the catalog under the Geography—Foreign Series is listed the Picturol "Ecuador", after which appears the following "(J, 13; L, 14)". Translated, we find that the filmstrip on Ecuador may be advantageously used with the book Smith, *American Lands and Peoples* (Winston), Section 13 as well as with Atwood-Thomas: *The Americas* (Ginn), Section 14

With this new idea in presenting filmstrips, educational value has been added to both texts and Picturols. The Society is going ahead with plans for further such correlation of social studies texts. Later other subjects such as science and literature will be classified. In the not-too-distant future it is planned to embark upon a similar project with the Kodachrome Library.

Keystone Elementary Science Units

A new Elementary Science Unit on "Wild Animals" is offered by the Keystone View Company, Meadville, Pa. Selection of the subjects and the editorial work on this group were done by Miss Adela Losch of Cleveland This unit, like others in the Elementary Science Series, will consist of twenty-five slides and twenty-five stereographs. It will be furnished with eight slides in color, or all in color if so desired. Another set on "Domestic Animals" will be ready shortly.

Other units available in this series are Birds, Wild Flowers, Trees, Butterflies, Moths, Insects.

New Lens Focuses Automatically

Although the living eye, with its elastic lens, automatically focuses objects at varying distances, optical engineers have looked askance at many ingenious proposals to accomplish this purpose in a photographic lens. But a four-element motion picture lens has now been designed by Bausch & Lomb of Rochester, New York, in which one double-concave element is electronically oscillated on its axis by means of a special cell mounting developed by P. Stanley Smith, a radio engineer. The new lens is confined to a distance of three-tenths of a millimeter in its axis movement but the oscillations are at the rate of 23,200 times per minute, thus continuously altering the focus so that all objects are uniformly in register from four feet to infinity.

The incorporation of this lens in a motion picture camera is believed to offer greater flexibility in motion picture photography and direction. At present action must be kept mobile within a chalk line necessitated by the focal range of the camera. Lighting must be rearranged for each new focus, cameras reset, and distance taped. The new electroplane camera, with a lens which keeps all moving objects in perpetual focus, holds the promise of a solution to one of the chief limitations in motion picture photography.

Bausch & Lomb engineers stated emphatically that the new oscillating lens could not be incorporated in hand cameras.

The Literature In Visual Instruction

(*Concluded from page* 65)

afforded and, moreover, they were sharing their learnings with their pupils.

The article "National Defense" by Etta Schneider is a copy of an address given at a dinner-meeting of the Association last year. It tells of the part which the motion picture can play in education for the present emergency. For example, it lists as values: a) the motion picture is a short-cut to experiences that promote desirable attitudes and understandings about democracy. At a time when we must work rapidly and with utmost efficiency, the motion picture can surpass words or statistics as a means of presenting social situations. b) the motion picture is an authentic document of actual life occurrences, as represented by travel films, documentaries and newsreels. c) the motion picture is a universal language, comprehensible in some measure, to learners of varying mentalities. d) the camera has its own language through which it can sift life situations in order to create a special kind of response. e) The motion picture has dramatic appeal. It can bring into sharp focus man's relations with his fellow-man in all parts of the world. Films can be a great boon to the young people in school, and perhaps to their parents. But, like the airplane and other great inventions, they might be improperly used to destroy or to thwart personality and subsequently to destroy our way of life. Needs to be recognized are: films to help promote a pride in the people and resources of our nation; we need teachers who can use good films intelligently; we need further clarification of the ways films can serve; and we need much more cooperation between educators and producers on films to be made.

SOURCES OF INFORMATION

Field Manual for Museums.—Ned J. Burns—Supt. of Documents, Washington, D. C. 70c.

A help to teachers working on school or classroom museums.

Music in the Junior and Senior High School: A Tentative List of Visual and Teaching Aids—compiled under the direction of Dr. Edna McEachern, Director of the Department of Music, from material collected by Dr. Lili Heimers, Director, Visual Aids Service, State Teachers College, Upper Montclair N. J. 1941 10 pp mimeo. 25 cents in coin (no stamps accepted).

A survey of free or inexpensive aids dealing with music in junior and senior high school. Includes sources of charts, pictures, films, slides, filmslides, publications, recordings.

Some Valuable Literature —

"1000 AND ONE"—The Blue Book of Films

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The current (17th) edition lists and describes over 5,000 films, classified into 162 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film title in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

128 pp. Paper. Price 75c. (25c to E. S. subscribers)

FILM EVALUATION SUPPLEMENTS to "1000 and ONE" under The National Film Evaluation Project

A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 500 teachers after actual use of the films with classes.

Each Supplement consists of 50 standard-size library cards carrying detailed evaluations of 50 films, based on combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid if cash with order).

VISUALIZING THE CURRICULUM
By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price **$2.75.** (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK (4th Edition)
By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."

212 pp. Illus. Cloth. Price **$1.50.**

SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production date, producer, sale and rental price and grade level suitability, are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation. 275 pp. Cloth. Price **$2.25.**

PICTURE VALUES IN EDUCATION
By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph. 156 pp. Cloth. Illus. Price **$1.00**

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AN ALTERNATIVE FOR REVOLUTION AND WAR
By Albert E. Osborne.

A stimulating, wide-range view of the higher potentialities of visual instruction in promoting world harmony by a "more humanity-centered education." A pertinent reply to H. G. Wells' dictum that the "future is a race between education and catastrophe." 124 pp. Cloth. Price **$1.25.**

EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. **The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution.** 48 pp. Paper. Illus. Price **50c.**

PRODUCING SCHOOL MOVIES
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Based on first-hand experiences of the authors and those of many other teachers and movie enthusiasts. Chapters are "Organization (of a Club); Choosing the Idea; The Scenario; Buying Equipment; Using the Equipment; Filming the Picture; Advanced Techniques; Final Preparation and Showing. A welcome book to those who want movie-making explained in simple terms.

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Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based upon extended experience in studying teachers' use of sound films and in helping to organize programs of audio visual instruction in school systems. Two valuable Appendices and a full index.

175 pp. Cloth. Illus. Price **$2.00.** (20% discount to schools)

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47 pp. Paper. Price **15c.**

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"1000 and One" Film Directory	$ .75 ☐	$ .25 ☐
Film Evaluation Supplements No. 1, No. 2, and No. 3	1.50 ☐	1.50 ☐
Visualizing the Curriculum	2.75 ☐	2.75 ☐
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64 E. Lake St., Chicago

I have indicated items desired and enclose check for $.....

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School or Street.....

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HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bailey Film Service (3, 4)
1651 Cosmo St., Hollywood, Cal.
(See advertisement on page 70)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 49)

Brandon Films (3)
1600 Broadway, New York City
(See advertisement on page 80)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on page 45)

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago
(See advertisement on inside front cover)

Dudley Visual Education Service (1)
2169 W. Wilson Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Co.
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 83)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erpi Classroom Films, Inc. (2, 5)
1841 Broadway, New York City
(See advertisement on page 77)

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

Foster Films (1)
40 E. 17th St., Brooklyn, N. Y.
(See advertisment on page 80)

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
25 W. 45th St. New York City
(See advertisement on page 78, 81)

Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
(See advertisement on page 70)

Health Film Service (3)
First Nat'l Bank Bldg., Salem, Ore.
(See advertisement on page 70)

Heidenkamp Nature Pictures (1)
538 Glen Arden Dr., Pittsburgh, Pa.
(See advertisement on page 81)

Hoffberg Productions, Inc. (2,5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 85)

Knowledge Builders Classroom Films
130 W. 46th St., New York City (2, 5)

Manse Film Library (3)
1521 Dana Ave., Cincinnati, O.
(See advertisement on page 76)

Post Pictures Corp. (3)
723 Seventh Ave., New York City

Douglas D. Rathacker
729 Seventh Ave., New York City

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 71)

Visual Art Films (2)
1303 Porterfield St., Pittsburgh, Pa.
(See advertisement on pages 70, 81)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
Old Colony Bldg., Des Moines, Ia.
(See advertisement on page 78)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.
(See advertisement on page 76)

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 47)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 49)

DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago
(See advertisement on inside front cover)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 72)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 85)

RCA Manufacturing Co., Inc. (2)
Camden, N. J.
(See advertisement on page 69)

S. O. S. Cinema Supply Corp. (3, 6)
636 Eleventh Ave., New York City

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on page 51)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 73)

Radiant Mfg. Corporation
1140-46 Superior St., Chicago
(See advertisement on page 79)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Stanley Bowmar Co.
2929 Broadway, New York City

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILMSTRIPS

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 85)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 75)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 70)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Stanley Bowmar Co.
2929 Broadway, New York City

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 70)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

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1111 Armitage Ave., Chicago
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Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Keystone View Co.
Meadville, Pa
(See advertisement on page 75)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 48)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16 mm silent.
(2) indicates 16 mm sound.
(3) indicates 16 mm sound and silent.
(4) indicates 35 mm silent.
(5) indicates 35 mm sound.
(6) indicates 35 mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.

EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION

25¢ A COPY $2.00 PER YEAR

MARCH, 1942

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1. The Milling Machine
2. Cutting Keyways
3. Straddle and Surface Milling to Close Tolerances
4. Straddle Milling
5. Plain Indexing and Cutting a Spur Gear

3 ON THE VERTICAL BORING MILL
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2. Rough Facing and Boring and Turning a Shoulder on a Vertical Turret Lathe
3. Facing, Turning, Boring, Grooving, Chamfering on a Vertical Turret Lathe Using 2 Heads

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2 ON THE RADIAL DRILL
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The EDUCATIONAL SCREEN

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Ready for Immediate Delivery!

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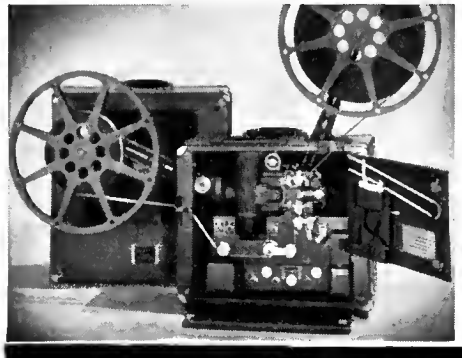

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Visualization for Victory*

Sturdy argument for a nation-wide expansion of visual teaching in the present national emergency.

C. R. REAGAN, President
National Association of Visual Education Dealers

RADIO and Visual Education got together everywhere in the world last night when millions *listened* to our President interpret the world struggle and *looked* at maps to visualize the facts.

Visual education as we use the term received its first great impetus during World War I from the use of motion picture films and other visual aids for training our armed forces and informing our civilians. Allied Democracy won World War I militarily, but lost the peace intellectually and spiritually. Realizing that motion pictures and other modern communication devices grip attention, inform, inspire, develop attitudes, habits and character, we now know that had we stayed on the job and taught the masses of conquered peoples through motion pictures the path to Democracy and Peace, World War II might not have been necessary.

There is enough knowledge embalmed in books to make the world healthy, happy, prosperous and peaceful. Our American educational system since 1918 has failed to give our people a clear idea of world history, and leaves our country today intellectually and spiritually unprepared for the present world conflict. Charles P. Taft says, "Have you stopped to think what a reflection it is on the work we have done for our pupils that the Army should find it necessary to set up a fairly complete history school to tell these fine young men between 21 and 28 what the war is all about?"

Too often instead of building foundations for peace, schools all over the world have sowed seeds of misunderstanding and distrust. Dr. John K. Norton of Columbia University says, "Education generally in the past has been prostituted to lay the foundations for misunderstanding between nations. For instance, French school books invariably represented France as right in all international disputes, and German school children have been taught that everything German is right." U. S. Commissioner of Education John W. Studebaker stresses four major points in our school emergency program:

1. Promoting health and physical efficiency.
2. Training workers for war industries and services.
3. Teaching the issue, aims, and progress of the war and the peace.
4. Sustaining the morale of children and adults.

Educational films utilizing sight, sound, motion, enriched with color and dramatic effects, gripping the human emotions and stimulating discussions resulting in changed attitude and character, are the tools we must use to build a better world.

Commissioner Studebaker says, "Unless we do make radio and motion pictures and other modern means of communication and visualization serve the major need of understanding our common life and our complex problems, I doubt very much if education, depending largely upon such traditional tools as pictures and blackboards, can compete with these newer instruments. And if education cannot successfully compete for the time and attention of adults and young people alike, the very basis of democracy will be demolished."

The motion picture offers a means of communication international in language and scope. It educates not merely individuals, but nations and races, and eradicates hatred and ill will on a world-wide scale. Science has made the world a neighborhood. Motion pictures must be used to make the world a brotherhood, lest we all perish. Never in all history has there been such an opportunity and challenge. Our people must be aroused, informed and set on fire. Every man, woman and child in the United States must learn why we fight, how to win victory, and establish and extend the blessings of democracy all over the world.

Unless this is done, we could lose this war and become German slaves and Japanese coolies. Morale *and* might will win this war. "Fly high and strike hard" must be our slogan educationally as well as militarily. We must get out of the rut, throw away our brass hats, and become alert, aggressive, militant in education. Especially must friends of visual education arouse themselves.

What's wrong with us? Here at this San Francisco meeting of 10,000 educators attending the American Association of School Administrators, in our Department of Visual Instruction program, only about 100 educators are present! We few sanctified visualites continue meeting and preaching the same gospel to our small flock of converts, while the great majority of educational sinners, visually speaking, are on the outside! We must become aware of the necessity for the recognition and utilization of audio-visual aids in every aspect of education. They are short-cuts to goals in education, resulting in proper habits, leading to the right action.

Instead of becoming more specialized, which has resulted in pigeonholing our visual education activities off by themselves, we must become more curriculum minded and work more closely with other departments and subject matter specialists. Since teachers in other fields have not joined us, we must join them. We must enter into the discussions and activities of teachers in all subject matter groups.

To achieve these goals the Visual Instruction Section, Texas State Teachers Association at its annual meeting, Houston, Texas, November 21, 1941, passed the following resolutions:

"Recognizing that audio-visual aids are aids to instructions for all grades and all subjects and therefore enrich and vitalize instruction if properly used in all grades, from kindergarten through university, and,

"Whereas, in the present emergency in which our very existence and way of life are seriously threatened it is imperative that we step up the effectiveness of education to the fullest possible extent, and

*Address delivered at San Francisco, February 24, before the annual meeting of the Department of Visual Instruction of the National Education Association.

"Whereas, to achieve this end it is essential that a discussion of audio-visual aids to instruction be included as a part of the regular program of most sections of the Texas State Teachers Association,

"BE IT RESOLVED: That this Section request the officers of the Texas State Teachers Association to arrange for an outstanding national speaker for our next annual meeting one year hence to discuss on the regular general program audio-visual education, and that each section of the Association be interviewed by the officers of the Visual Instruction Section regarding the inclusion of a discussion of audio-visual education as a regular part of each sectional program one year hence."

You educators who have carried high the torch of visual education have had too little help from manufacturers and distributors of visual education machines and materials. We who produce and distribute and service these dynamic devices have shown too little vision and have thought too much in terms of sales and profits. We have been all too often persistent peddlers of projectors and pictures for profit instead of conscientious consultants concerned with improving human living and bringing permanent peace to the world. Manufacturers (producers), dealers (distributors) and educators (consumers) all have one common goal—to see that visual education is utilized to help transform children and adults into useful citizens.

We who are visual education dealers three years ago banded together to form the National Association of Visual Education Dealers to professionalize our business, and develop it into a responsible and efficient sales and service group rendering an intelligent national service. The preamble to our Constitution states clearly our objectives:

To promote practical, ethical and progressive methods of doing business among its members;

To assist schools, colleges, churches and other organizations in obtaining maximum results in the use of audio-visual aids;

To furnish visual education data and reports to enable its members to render a more effective service;

To develop and promote better cooperative relations among producers, distributors and consumers, and all others serving the visual education field, and

To approve, encourage, and promote sound fair trade practices, and to eliminate unfair trade practices.

Committees are being organized from among the three groups—educators, producers, and dealers—to study our common problems and develop plans for solving them. These committees will deal with such questions as cooperation with architects, cooperation with libraries, development of visual education courses and conferences, cooperation with educators, and legislation and governmental cooperation.

Following through in our pledge to join hands with visual educators and visual manufacturers, our Association has offered its fullest cooperation to our nation in the war emergency. When President Roosevelt by Executive Order on December 18, 1941, designated the Director of the Office of Government Reports to act as Coordinator of Government Films for the duration of the war, and authorized production and distribution of motion pictures "deemed necessary to inform and instruct the public during the wartime crisis", we sent a committee to Washington to cooperate. A Committee of Seventeen, representing educators, manufacturers and distributors of educational films, and visual education dealers, working together unselfishly as a unit with the knowledge, consent and cooperation of the Federal Government, developed a plan to mobilize the nation's more than 25,000 16mm motion picture projectors in the war effort.

Arch Mercey, Deputy Coordinator of Government Films, in speaking to this committee said, "The job of the American people at this time is to get the maximum use from this particular field. I think the 16mm field should be mobilized as a resource in the national effort, just the same as any other resource is mobilized. It would seem desirable that the 16mm people, regardless of what element they represent should individually and collectively exert every possible effort to see that no 16mm machine is idle. I think an idle 16mm machine might be likened to an idle machine tool, because it is a machine tool of information and morale and instruction."

The committee recommended the registration of all existing 16mm projectors in the United States and their mobilization for use, day and night, with school and community groups. An abstract of the full report and recommendations of the Committee of Seventeen is appended below. Already the Federal government is planning production and distribution of films by the hundreds for the home front and the battle front, for America and for all the world, so that we "shall know the truth and the truth shall make us free". Billions are being spent for guns, tanks and planes. Surely our Government will invest the few thousands needed to dramatize for us all in films the facts and figures and feelings to make sure the final victory and universal establishment of the four essential human freedoms.

Abstract of Recommendations of the Committee of Seventeen (as submitted on January 27, 1942, to Mr. Lowell Mellett, Coordinator of Government Films, Office of Government Reports, Washington, D. C.)

THE proposals submitted are made solely with the view of assisting you as the Coordinator of Government Films in a task that carries with it enormous responsibility, both in America's war effort and for the entire future of visual education.

In hundreds of thousands of gathering places, the social and cultural life of the American people is now focused—in schools (public, parochial and private, from kindergarten through college)—and in churches, clubs, lodges, cooperatives, trade unions, service and trade associations, as well as in the latest forms of defense agencies as now organized. All such groups, called together for a common serious purpose, can most effectively be informed, inspired and trained by the widest possible use of the non-theatrical motion picture. By this medium the same essential message or lesson can be given in the same uniformly effective way, regardless of the size of the audience or the prominence of the auspices.

In this great task the principal needs are: (1) A plan of organization that will motilize the widest possible support for the showing of Government films; (2) adequate films and prints of each; (3) Physical distribution facilities for booking, shipping, inspecting, repairing, and keeping reports on films shown; (4) Projection equipment and personnel.

I PLAN OF ORGANIZATION

A. Appoint Regional or State Coordinators of 16mm Gov-

ernment films who can command ready access to all necessary resources, and the cooperation of leaders in educational motion picture and defense activities in said Region or State.

B. Appoint Advisory Committees to cooperate with the Regional or State Coordinator in mobilizing necessary resource and support throughout the Region or State.

C. It should be the responsibility of Coordinaors and Advisory Committees to see that local urban and rural organizations be formed to obtain maximum showings of Government films in every school and to adult audiences.

In urban communities Local Committees should be set up to promote this program within its community. They may be composed of City officials, School officials, prominent civic leaders, local visual education specialists and a publicity representative of the local press and radio.

In rural districts County Committees should be set up to promote and organize the showing of Government films, both in schools and other meeting places for adults throughout the county. The personnel of County Committees would be similar in character to that for the urban communities.

It is recommended that both urban and rural committees designate as Administrative Secretary a member of the Committee experienced in the distribution and use of educational motion pictures, who would have charge of distribution and maintenance service.

II ADEQUATE FILMS

As to production, those of us who are producers pledge you our facilities to supplement those already available to the Government. We are confident that between government and commercial production facilities, ample films can be speedily produced that will meet our urgent needs and be worthy of their function. Such films include various types of general and specific instructional pictures but also informative films to increase the understanding of the population as to our domestic and foreign policies. Some would be aimed at universal circulation, others at specific objectives and special groups.

III PHYSICAL DISTRIBUTION FACILITIES

As to physical distribution facilities, a resolution has been unanimously adopted "that Government films be deposited directly with existing 16mm film libraries and which will distribute films for a stated handling charge per reel booking." These films should be consigned free of cost to the libraries and be available to the borrower without charge of any kind. In the selection of these depositories high standards of service should be insisted upon. The qualifications of certain libraries for broad service make any solely territorial limitation of film circulation undesirable. Thus, a university or college film center might be located near to a commercial rental library and possibly also to another organization serving religious, labor, foreign language and other similar groups. The same films should be available to users on equal terms from each of these types of non-theatrical distributors.

IV. PROJECTION EQUIPMENT AND PERSONNEL

As to projection equipment (both sound and silent), and operating personnel, it is felt that machines and men now readily available would be sufficient to serve every important group in the nation by extending the use of these films far beyond the organizations which now have projectors of their own. Facilitate the purchase of projectors by assuring priority on materials needed by manufacturers for the filling of such orders. For groups not owning projectors and not in a position to purchase, it is recommended that all available machines be "spread" with the consent of their owners, so that they be given maximum use. *The registration and enlistment of every existing projector is essential to the Nation's war effort.*

Our resolutions further recommend that "where needed for the showing of Government films in localities where projectors are not readily available, the services of qualified projectionists, mobile units, and similar facilities be employed." Especially in sparsely settled communities or in large scale intensive and concentrated campaigns under time pressure in urban or other target areas, these commercial projection services can assure the largest number of excellent showings in the shortest possible time.

Where necessary to operate in areas where electricity is not available, mobile units including portable generating outfits, mounted in automobiles, can be operated by skilled itinerant projectionists. Such units have worked very successfully in Great Britain, in the Union of South Africa, and elsewhere.

We suggest the issuance of a *periodic information bulletin* on matters of common interest for the benefit of all concerned, and a Standing Advisory Committee from the 16mm industry be ready for consultation with your office at any time we can serve.

Respectfully submitted,
C. R. Reagan, Chairman
Standing Advisory Committee
From the 16mm Industry

Recommended and adopted unanimously by this Committee: V. C. Arnspiger, Epri Classroom Films, Inc.; Paul Brand, National Association of Visual Education Dealers; O. H. Coelln, Chairman, Visual Equipment Manufacturers Association; James W. Dodd, Films, Inc.; Russell M. Grumman, President, National University Extension Association; Eric H. Haight, President, Films, Inc.; W. K. Hedwig, President, Allied Non-Theatrical Film Association, Inc.; Orton Hicks, Walter O. Gutlohn, Inc.; H. O. Jones, Eastern Manager, Victor Animatograph Corporation; Wm. F. Kruse, Bell & Howell Company; W. H. Larkin, Modern Talking Pictures Service Inc.; L. C. Larson, Representing Educational Rental Libraries, Indiana University; C. R. Reagan, President, National Association of Visual Education Dealers; J. M. Stackhouse, Chairman, Washington, D. C., Committee National Association of Visual Education Dealers; Harry J. Spiess, Castle Films; Earl A. Trager, Vice President, Bell & Howell Company; George Zehrung, Y. M. C. A. Motion Picture Bureau.

Film Library Directors Meeting in Zone IV

There will be a meeting of directors of educational film libraries on Friday evening, March 27, in conjunction with the sessions of the Midwest Forum at the Congress Hotel, Chicago. The meeting will be at 8 p. m., or immediately following the dinner for Department of Visual Instruction members to be held at 6:30 p. m. Friday, at the Congress Hotel.

Mr. Larson of Indiana University will present a report of the progress made in offering the facilities of educational libraries for the distribution of government films designed for civilian protection, building morale, and defense training. Of particular concern to the group is the free distribution of films recently released by the office of the Coordinator of Inter-American Affairs and the Office for Emergency Management.

Spring Meeting of Zone III of D.V.I.

Zone III of the Department of Visual Instruction of the National Education Association will hold its spring meeting in Gary on April 23, 24, and 25 in cooperation with the Gary Public Schools and the Indiana University Calumet Extension Center. The program will be organized around five demonstration centers in the Gary Public Schools, which have been set up to give Gary teachers, administrators and the Board of Education, guidance in planning a more effective, city-wide, audio-visual program.

Teachers and administrators attending the Zonal meeting will be given an opportunity to observe the actual classroom use of school trips, museum materials, still pictures, and radio transcriptions. Specialists in the use of each of these aids will be present to interpret and appraise the program and to make recommendations for the development of similar programs in both large and small school systems.

Picture of New England farm home, used in Regional Study.

(Courtesy of U. S. Farm Security Administration)

Radio's Offspring—The School Recording

An experimental study shows how records, supplemented by visual aids, can be utilized to meet the especial needs of the rural school.

EFFIE BATHURST
New York State Education Department, Albany

AS a new means of communication, radio immediately challenged speakers, writers, musicians, entertainers, and educators to develop new skills; to improve traditional techniques of expression; to clarify and vivify their ideas. Today the high-class radio program has powerful appeal to all that is best in the minds of vast audiences.

Early in the history of radio, leaders in rural education regarded the new art as a hopeful way of enriching the often meager program of the isolated rural school, particularly of the one-teacher school. Excellent children's programs, such as those of the American School of the Air, were received with joy, but difficulties were soon perceived in their use. They could be heard only at stated times. Instead of adapting the radio program to the needs of the school, as learning aids must of necessity be adapted if optimum results are to be secured, teachers found that they had to make their school programs fit the radio program, often regardless of the needs or interests of the children. This difficulty in adaptation was especially hard on the one-room school, which has greatest need for a flexible program. The various requirements of a mixed group of children from six to sixteen years cannot be completely served with a pre-planned program. Furthermore teachers could use each radio program only once, although many pupils might need to hear it more than once in order to grasp the full meaning. Pupils who were absent when a particular program was given had no way of making up what they lost. The teacher could not hear the programs before the children did and so make the varied preparation so necessary for teaching a mixed group. Not all of these problems can be solved by radio, even by local programs.

Then came improvement of phonograph records; and following that the efforts of the Committee on Scientific Aids to Learning of the National Research Council to develop phonograph records as a curriculum aid. Here was help for the rural school. There was no reason why the highly developed radio arts could not be made available through phonograph records. Of course, compared with the phonograph record, radio would continue to have the advantage of being recent. Current events, for example, could not be given on phonograph records. Radio programs also have the advantage of being used by more schools and more pupils at one time.

Nevertheless, here and there, teachers were beginning to say that phonograph records might be better in some respects than radio. They could be on hand for repeated use; for individual playings; for the teacher's preparation. The phonograph record appeared to be just as personal as the radio in that a speaker seemed just as near and just as real on the phonograph record as over the radio. The well-made phonograph record sounds as well as radio. No appreciable loss of interest in a well-constructed program occurred when the record was interrupted for turning to the other side. In fact, it was suspected that effective use might sometimes be made of the break, especially if the record were suitably planned for this. Furthermore, the phonograph record can be used flexibly in connection with pictures and other visual

Above, The White Trillium; right, A Beaver Dam — supplementary aids to study of Environment.

(Courtesy of N. Y. State Education Dept.)

aids collected by teacher or pupils to supplement the record. When they are available for repeated playings and study, phonograph records are useful in helping children develop skills of listening, which in later years will enable them to make discriminating use of radio.

However, rather than compare the advantages of the phonograph record over radio, or vice versa, it is better to give schools the use of both of them. There is no reason why a school should not have last year's radio program which was made with a great amount of effort and expense with the best of talent, on a phonograph record for use today, especially if the values claimed for the contents are real. At the same time today's radio program can bring current information and entertainment to the school that provides time for them.

Early opinions of teachers regarding phonograph records were later substantiated by experiments. One which was developed in rural schools is pertinent for consideration in this article. It was one of the research studies of the New York State Education Department, 1939-41, and included the development and use of a set of phonograph records which were constructed with the same techniques as are applied to radio programs.

The records were made to fit the rural schools of New York State. The writer, who was in immediate charge of the experiment, visited New York State rural schools, learned the common experiences of the children, observed the work of classrooms, and asked teachers and pupils what types of records they would like to have. A questionnaire was sent to district superintendents inviting them to tell what kind of records they thought the rural schools needed. New York State rural teachers studying in summer school were asked what they thought were the needs of rural school pupils that might be met by phonograph records. Study of the literature of rural education suggested the characteristic personality lacks of rural children and the most desirable curriculum organization for the rural school to which the records would need to be adapted.

With the information gained from these studies, thirty-eight records were made and classified in three groups: *Environment*, *English*, and *Regional Studies*. The programs included drama, recorded bird songs, master-teacher talks, and story telling. The records were all made for the use of children, not for the education of teachers. The following brief description of each group of records shows what separate contribution each made to the school program.

The *Environment* group consists of three series: (1) "We Build a Nature Trail" (2) "Making Better Use of Nature" (3) "Do You Know the Birds?" The first series is a serial, dramatized. It is based on a real school nature trail. The woods in the story were borrowed from a neighbor, an old woodsman who first had unjustly accused the children of damaging his trees and flowers. The second series is about conservation of natural resources. It is not a serial, since each program has no connection with any of the others. Each is a dramatic incident connected with a specific problem in the conservation of one of the natural resources. The third series in the *Environment* group consists of the real songs of birds which were actually recorded in wood and field. The *Environment* records were the "activity" group, and, as one teacher said, were so stimulating that the children could not begin to find time to do all the things they wanted to do in connection with each record.

The *English* group has two series: (1) "Stories and Poems We Like" and (2) "Everyday Conservation." This group is the most varied. The first series includes choral speaking by fifth-grade pupils showing listeners that children, like themselves, can interpret poetry, learn to say it together, and enjoy it. It includes talks by authors of children's literature, a talk on creating poetry, excellent reading of poems which have interesting sounds, dramatic skits used to introduce books,

children's oral reading. The second series has dramatized incidents connected with manners and courtesy, and a record addressed to children showing them how to improve their own story telling. This was the "appreciation" group of records, a group which particularly needed to be on hand for repeated playings and study.

The *Regional Studies* records are the favorites with teachers of geography and are aimed to stimulate search for information. The group consists of one series only, entitled "How Country Children Live," and is designed to show how ways of living in different regions such as New England, New York, Colorado, the Middle West, are affected by geographical influences. Some teachers used the records by way of contrast following study of the home community. Others used them in connection with regional studies of the United States. One teacher reported using some of them in connection with imaginary journeys. The children liked them and followed them, probably more than any other group, with questions, reading, and study.

Flat pictures and lantern slides were made to supplement the themes of the records.* These consisted of pictures of wild flowers, birds, mammals, trees and forests, and farmstead scenes in different geographical regions of the United States. They were presented in the form of prints in those schools where there was no projector; and as lantern slides in the schools which had projectors. To find out whether or not the records were more interesting when presented with pictures than when used alone, the schools which tried the slides and pictures were visited, the teachers' use of the pictures was observed, and the teacher was asked to give her opinion of the value of these visual aids. To aid the teacher and children in finding points for discussion and further study along the theme of the phonograph record, facts and suggested questions were placed on the backs of the printed pictures.* The teachers unanimously approved of the use of the pictures and slides in connection with the records; the only recommendation made on the pictures was that *it would be desirable to have more of each than were prepared.*

One hundred copies of each of the records in the experiment were made, and these were tried by approximately 180 teachers in one-room, two-room, and centralized schools, who evaluated them on forms prepared for the purpose for educative qualities, effectiveness, listener appeal, and described the uses made of individual records and of series. An excerpt from one teacher's* report on use reads as follows:

"To meet the individual needs of the children, an early lesson on the care of the phonograph and proper use of the records was taught. The records were then made accessible to each child in order that he might play them at his own leisure. There were times when committees doing research on certain topics asked for records on those topics. If there were any, the children took the records, played them, made up suggestions for activities and then played the records and reported on their suggestions to the class as a whole. Some of these activities were useful and interesting. Children with hobbies often asked for the records and replayed them at the noon hour. One boy who was collecting animal pictures and stories wrote up the story of beavers for his notebook on animals after hearing the record, 'Where Are the Beavers?'"

Among the findings of the experiment were interesting items to substantiate some of the earlier opinions of teachers regarding the probable values of school recordings. For example:

1. Many of the teachers reported repeated playings of records for class use and more playings for individual pupils. Some teachers said that the records were used by individuals so frequently that there was no way of really knowing how many times different ones were played. One teacher secured a set of ear phones so that individuals could use the records in the classroom at any time without disturbing pupils who were doing other work.

2. Several teachers said they always listened to the records before they played them for a class. They said this was one of the best advantages of the phonograph record as a teaching aid.

3. A majority of the teachers reported that the characters on the records seemed to become members of the school and to have a socializing value to the children. This is an outstanding value of dramatized recordings, suitably constructed, for the unusually small school.

4. In only two cases was it suggested that there was loss in effectiveness by turning the record to play the second side.

5. No effort was made to use the records in this set to improve children's ability to listen to recorded or broadcast programs, but a number of teachers reported improvement in ability to listen as one result of the use of the records.

6. Out of 55 one-room schools that used the series, "We Build a Nature Trail," 22 schools built nature trails.

Additional findings and conclusions were summarized and are incorporated in reports available to researchists and specialists through the New York State Education Department. Ways in which cooperating teachers used the records are being published in a handbook to aid in the use of the records.

(*Concluded on page* 118)

*Credit for the production of the records of the experiment discussed in this article is as follows: Dr. J. Cayce Morrison, Assistant Commissioner for Research, New York State Education Department, was in charge of the experiment. Funds were provided by a grant from the Committee on Scientific Aids to Learning, of which Dr. Irvin Stewart is director. Specialists from the U. S. Departments of Agriculture and the Interior and from various New York State Departments checked the programs for factual accuracy. Mr. George Stone, a specialist in science in the State Education Department, provided factual information for certain of the programs. Committees of the State Education Department with Miss Helen Heyl as chairman served as advisers for the experiment. Mr. Paul T. Williams, Supervisor of Visual Education, selected and prepared the lantern slides and prints which were used with the recordings, and Mr. Walter J. Schoonmaker, Assistant Zoologist, New York State Museum, wrote factual texts and discussion questions for use with recordings and pictures. Quotations in the article are from the following teachers, in order: Mr. James Smith, Miss Mabel Hyzer, Mrs. Bertha Brown, Miss Alice Shoecraft, Miss Ruth Potter, Mrs. Helen Buckley, Miss Ruth Smith. The experiment was under the immediate direction of the author of this article. Discussions of other phases of the experiment are published by the author in "An Experiment with Phonograph Records," New York State Education, April, 1940.

Above, Paul appears before Felix at Caesarea.
—from *Faith Triumphant*

Right, Christians worshipping in the Catacombs.
—from *The Kindled Flame*

Education for Church Leadership in Visual Method

An account of the splendid training program of this institution, to stimulate wider use of projected pictures in the church field.

PAUL H. VIETH
The Divinity School, Yale University

DRAMATIC and visual presentation of its message is a time-honored practice in the church. Its architecture, religious art, stained glass, sacraments, the mass, symbols, and the early use of drama in the miracle plays all witness to the truth of this statement.

With the invention of projection equipment and materials, it was a foregone conclusion that this new avenue of expression would be seized upon by the church. Stereopticon slides were widely used for the presentation of religious art, the country and people of Palestine, missionary activities. Soon after the invention of the motion picture, many churches were equipped with projectors.

Following this good beginning, there came a lull in progress, a plateau so to speak, during which visual education so far as projected pictures are concerned, failed to hold its place in the church. Today comparatively few churches use projector and screen except when an itinerant lecturer comes to town carrying his own equipment.

Why has this change taken place? Undoubtedly there are several reasons. One is the prejudice which developed against the use of motion pictures in the church because of the way in which they were often mis-used in public entertainment. Another was the expense of maintaining a program of projected pictures in churches whose budgets are often unbalanced. A third reason is that churches made the mistake of seeking to provide entertainment in competition with public theaters. A fourth reason is the scarcity of available projection material for church use. Finally, and perhaps most important, is the reason that church leaders did not properly understand the effective use of visual method.

If the use of visual education is important to the success of the work of the church, as it undoubtedly is, then some effort should be made to overcome the causes which have produced the present situation. The most important remedy is that of training a leadership for the proper use of visual education.

With the purpose of attacking the problem at this point, the Department of Religious Education at the Divinity School of Yale University, an institution engaged primarily in the work of training ministers, made plans about ten years ago to introduce its students more fully to the use of projected pictures in the program of the church. It was decided to make the approach from two directions. First, to make available projection equipment and material for the use of the comparatively large number of students who are engaged in church work while they are studying. The University maintains a Department of Religious Field Work which seeks to utilize the experience of students engaged in church work as a means for their better training for professional service. It was a simple matter to encourage students working under the guidance of this Department to make use of visual material. The second direction from which the approach was made was that of conducting a course in Visual Education for a small group of students who were interested in electing this as a part of their preparation for the Christian ministry. From the beginning this course has been very informal with a great deal of emphasis placed on the student's own experimental work. If a visitor were to look in on

this class in session, it would remind him more of a club than of a class session, and at times he might have difficulty in deciding who holds the rank of professor in this group in which everyone seems to share.

In launching this venture, we were fortunate in securing the co-operation of the Harmon Foundation and the Yale University Press. The Press made available to the Divinity School a complete set of the "Chronicles of America" motion picture series as well as a projector and screen. The Harmon Foundation, in addition to wise counsel, made available for the experimental use of the class in visual education any of the films in its library upon payment of transportation charges only. Without this help, the undertaking would not have been possible, for in this day of diminishing budgets it is not possible to bring a new venture of this sort under the sheltering arm of the University treasurer. In fact, the whole enterprise has been self-sustained, with the exception of the student assistance which has been provided through bursary grants and N. Y. A.

The course in visual education, which was offered as a part of this plan, was oriented to a view which regards the visual material used as an aid to teaching or preaching as contrasted with seeking to substitute projected pictures for verbal effort in these directions. This interpretation of the meaning of visual education was closely related to the interpretation of Christian education and the task of Christian education in the local church. With this orientation, the major work of the course is given over to practical laboratory and field work with a minimum of reading to support field practice. Throughout the course the attitude is maintained that the purpose of the student in such a course is that of the consumer of visual education material rather than producer. Any ventures in production are made primarily because they help to understand the medium with which the student is working.

One of the first ventures of each year's class is practice in program building. Since most of the students enlisting in such a course are engaged in church work, they have a practical field background in which to try out their ideas. Through cooperation of the Harmon Foundation, as well as through use of the increasing library of slides and motion pictures maintained at the School, students are made acquainted with existing materials. Following presentation of such materials discussion is given to their possible use in church programs. Care is taken to avoid an approach which offers only criticism of that which in some cases is far from perfect, without seeking to see how even imperfect material may be used in effective ways. The primary question is not "how do you like this?" but, "how can we use this?" Students are then required to work out sample programs around certain visual education materials and to present these programs for discussion and criticism. Following the use of the program in the church, the student brings back a report on its success and suggestions for improvement if he were to do the same thing over again.

During the past few years, due to the development of Kodachrome film, a great deal of interest has been given to the making of miniature slides. Fortunately for our purpose a dark room was included in the building plans for the Divinity School, and this has been fairly adequately equipped for work of this kind. Many students have made their own hymn slides and some of them have ventured into the copying of colored pictures. Others have used pictures which were taken during summer vacations or otherwise acquired and developed them into lectures. While many who acquire proficiency in the making of slides will not be equipped when they get out into their own churches to continue this practice, it is felt that they will have a much better insight into the problems of visual education through this experience. Some, however, before they leave the University, succeed in acquiring cameras and other equipment so that they may carry on this work in their own parishes.

Three different classes have made an excursion into movie making. These interests were encouraged partly because the making of a motion picture is valuable in helping to understand the use of motion pictures, and also because many will be taking home movies and movies of camp and church activities after they leave the Divinity School. A long-suffering public will be greatly benefited by some improvement in the technique of making amateur movies. The first two pictures undertaken were those which go under the titles *As We Forgive* and *Our Childrens' Money*. These were made in cooperation with the Harmon Foundation. The first attempt at these pictures was rejected as being unsatisfactory for public use. The class the following year revised and re-made the pictures in the form in which they now appear. A third class undertook a film which has been released under the name *If a Boy Needs a Friend*. The story for this picture was prepared from original data in the files of the New Haven Y.M.C.A., and was written by one of the students in the class. The scenario was prepared by another student, while a third student undertook the work of assembling properties and general direction of the enterprise. Throughout this process all the other members of the class shared through suggestion and criticism as well as cooperation in the making of the film. The Harmon Foundation provided the photographer and director for the actual field work in the making of this picture, bore the expense, and is distributing this and the other two pictures.

One class expressed its interest in passing on to others what they had learned about visual education. The results of their cooperative activity have been published under the title of "Visual Aids in the Service of the Church," a 50c bulletin which is now out of print and has been replaced by the revised bulletin "Visual Method in the Church Curriculum," published by the International Council of Religious Education.

In addition to classroom work and individual and group laboratory work a number of field trips have been arranged for the students in visual education. These include an annual trip to the Visual Education Center of New Haven, a WPA project of considerable significance, and another trip to New York under the guidance of the Harmon Foundation to become acquainted with some of the centers of visual education.

The total number of students enrolled in the course in visual education in any one year is but a small per cent of the total enrollment of the Divinity School. In true evangelistic spirit, the members of this class have sought

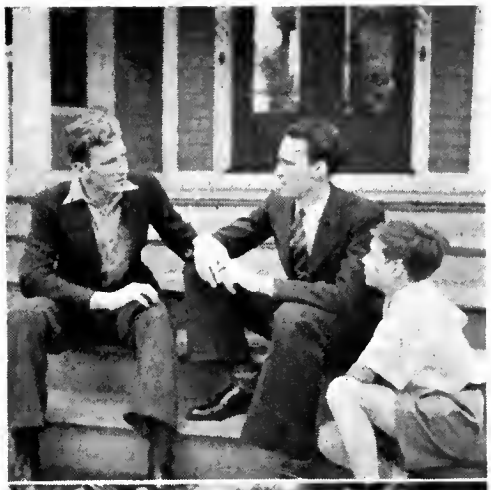
to spread the gospel of visual education to their fellow students. This has been done by frequent public showing of new motion pictures arranged for the school common room on the noon hour. On three occasions also, one of the Human Relations films has been brought for a period of six or more weeks and cooperatively financed by bookings to members of the student body who are in charge of young people societies, boys' clubs, or other activities in which such material would prove to be of use. Each such effort included teaching those interested how best to use these films.

For a number of years,the visual aids service of the Divinity School (as this modest effort is now called) has made a practice of bringing some outstanding religious motion picture for a period of time and to secure as many bookings as possible among the churches in the New Haven area. For three years the picture used was *King of Kings*. Last year this emphasis was placed on *Barabbas*. During the current year, *Starlight Night* was featured at Christmas time. For the Lenten season we are using *Faith Triumphant*, dealing with an episode in the life of Saint Paul, and for Easter *The Kindled Flame*, which is based on the persecution of the early Christians and their firmness under suffering. The two last named are sound films, produced by the British Film Society, and are distributed in this country by the Harmon Foundation. These ventures have been important factors in educating churches to the use of visual aids and, incidentally, have been one of the sources of income for financing the project.

The results of this effort in visual education are difficult to measure objectively. Each year a new group of students must be started from scratch and while they may learn something from the experience of previous groups, they do not rise very high above the achievements of previous years. This prevents the instructor from carrying on advanced projects such as would be possible if the same group could remain in the course for a period of years.

As a result of work in the class in visual education and other contacts with the program of visual education at the Divinity School, students engaged in religious field work have undoubtedly improved their work considerably. Some of the best available pictures have been taken to their churches, and, what is more important, these students have strengthened their own work through the application of visual methods. Almost without exception ,those who have enrolled for the course have come out of it with a great enthusiasm for this approach to church work.

Time enough has now elapsed to send a considerable number of students who have taken the course in visual education out into churches of their own. No effort has been made at a systematic follow-up to determine just what uses they have made of the techniques which they learn. There are undoubtedly some who have made no use of it. On the other hand, correspondence and a few personal contacts indicate that most of them are carrying on in one way or another, and some have developed quite considerable proficiency in the use of visual materials in their churches. One who is now serving as General Secretary of a State Council of Churches is carrying on a department of visual educa-



Scenes from *If a Boy Needs A Friend.*

(1) A leader is found for the Boy's Club.

(2) A helping hand wins a friend on a hike.

Scenes from *As We Forgive.*

(3) "You lost my best stamps!"

(4) "And did you forgive your friend?"

tion in connection with his work. Another who is a denominational Director of Religious Education is doing the same for the state which he is serving.

The instructor has perhaps been benefited most of all. Supervising this work among divinity students at the same time that he was also serving as Chairman of the Committee on Visual Education of the International Council of Religious Education has enabled him to pursue practically as a hobby an interest in visual education which has always been a live one. It has been his privilege to see this interest in visual education in churches grow from year to year during the past decade until at present a Department of Visual Education is provided under the International Council of Religious Education, and scarcely an important conference on religious education is being held in which there is not some emphasis on visual education and some effort to present themes by means of visual method.

A Visual Education Program Grows Up

A concise summary of the functioning of visual aids, particularly films, on a limited budget.

DR. E. R. HARRINGTON

Head of Science Department
High School, Albuquerque, New Mexico

IT might be very nice to start a complete program of visual education all at once but it is doubtful if such a "complete" program could prove as successful as one which has grown up slowly, proving itself as it goes. The program which has evolved, and is still evolving, at the Albuquerque (New Mexico) High School started humbly and has fought its way upward upon its merits alone.

A start was made some years ago when a science teacher used a borrowed balopticon to project borrowed slides upon the back of an old map used as a screen. The results were thought of sufficient value to continue the procedure and a projecting machine was purchased. Some few years later a 16mm silent movie machine was purchased and various films shown to the science classes. The machine was operated by the several science teachers and two classrooms provided with curtains so that they might be used as show rooms. The program was successful from a teaching standpoint even with a lack of complete planning, and several other departments obtained films and borrowed the science classrooms for projecting them. Eventually the demand for films as teaching devices grew to the proportion that made the individual system difficult to operate. We had obtained a glimpse of the "promised land" and needed a Moses to lead us out of the wilderness.

The leadership came to the able hands of William P. Davies, one of the chemistry teachers. He made an exhaustive study of the available films from every possible source. His findings were presented to the teachers in the various departments and they asked for certain films for certain times in the year. The director then scheduled the requested films as near to the desired date as possible. After the film was shown he checked up on it to see whether it was thought to be of sufficient value to merit a showing the next year. From the beginning the program had to build itself up on its merits. At all times the cost was kept in mind and everyone had to be very sure of a film's value before it was given a second booking.

The visual program grew in popularity and a sound projector was purchased. A 6 x 8 beaded screen was added and the library basement was turned into a theatre seating 175 students comfortably. Mr. Davies is a skillful and tireless worker who has devoted many extra hours to perfecting the acoustic properties of the improvised theatre. By the use of ingenious curtain arrangements smaller groups may use the theatre as a small show room and at the same time objectional reverberations can be largely eliminated. The director's files increased in volume and a strictly up to date card index system was evolved to take care of all information on films. Individual teachers or departmental groups may look over the card index and select films which are listed under fifteen different subdivisions such as; chemistry, physics, English, foreign language, archaeology, extra-curricular activities, etc.

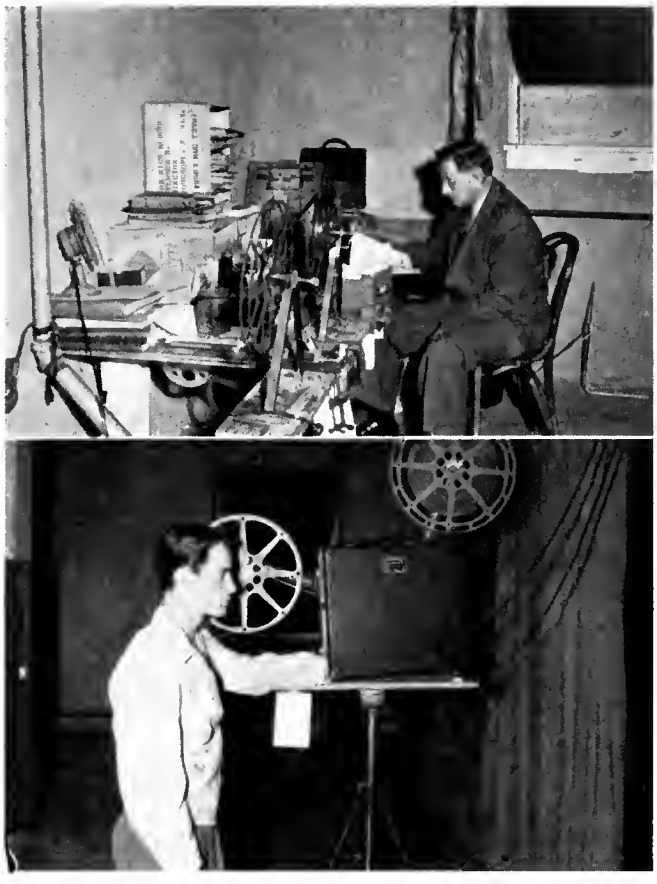
The Projector's Club, all licensed operators.

The index card for a special film gives information concerning the film source, how old it is, sound or silent, rental fee, what it is about, and so forth. The operators also keep a record of how many students saw each film. After a film has been shown Mr. Davies checks up with the requesting teacher or department to see whether the film is desired for the next year. He does not have a long and complicated list of criteria upon which a film is to be judged, as he feels that such criteria are too vague to be of value. He wants to know just two things: (1) Did the film fill the purpose for which it was intended and, (2) Do you want it again? More than a thousand films appear in the visual education card index. The file includes almost every known subject carefully culled from many film sources.

For 1941-1942 the Albuquerque High School has a schedule of 404 reels to be shown in 119 programs. Approximately 90% of the films are sound. Reports of the complete booking are available for the teachers and a special notice is given the requesting teacher the day before his special film is to be shown.

The Albuquerque High School has an enrollment of 2500 students and most of the films are shown for every period on the day when they are booked. At times night showings have been made for visiting groups from some of the private high schools in the city. Grade school groups are sometimes brought in to see certain pictures and many showings have been seen by more than a thousand students in a two day period. In cases where the children cannot come to the theatre, the projecting equipment has been taken to other schools and the program presented there.

Mr. Davies is a full-time chemistry teacher with a full load of students in that work alone. To him the visual education work is just an additional load which he assumed through his own choice. Such an individual would naturally have to possess more than ordinary ingenuity to keep the program moving smoothly. His machine operators are all students. He has available three operators for every period in the day. Two years back the operators were trained by the director and a projector salesman. They received regular operator's cards and formed themselves into a school club. These trained operators started to train others, being careful to select younger students who would carry over into the next year. By having several operators each period it is possible to stagger the work so that no one operator is inconvenienced by too much work. In emergencies, also, an extra operator is always available. The operators are recruited from study halls, only, and the recruiting is done by the student operator who must train the students he selects. Some little friendly rivalry exists between the master operators and each one is very careful to do his best on the students he has selected. The program has been very successful. During three years of student operation the Albuquerque High School has been charged less than five dollars for film damage.



Top, Mr. William P. Davies in his workshop adjacent to the High School Library basement. Bottom, Student operator all ready to start a picture in the High School Theatre. The memorandum pad is used to keep his record of all information concerning this showing.

The operators have the duties of: (1) Projecting the films without damage. (2) Attending to darkening the room. (3) Seeing that the room is properly ventilated. (4) Keeping films in good condition and making necessary splices and minor repairs. (5) Observing the time for long films. (6) Passing on to the next film crew any necessary information. (7) Listing any special reactions that the students have to the films being shown. Minor repairs are made by the student operators. Major repairs are made by the director who also attends to the clerical work attendant to receiving and sending the films.

The student operators also have charge of the school's public address system which is much in use in many places. Their watch word in all cases is: "Be Careful." They are perfectly aware that they are handling valuable equipment and they take their responsibilities seriously. This responsibility has a fine psychological effect upon the individuals, the group, and the school. The operator's association has even gone out and raised money to purchase additional equipment. They realize that their program is operating on a limited budget and they try to give the most possible for the money. They are learning subject matter, an idea of service, how to operate their machinery, how to cooperate with others, and how to put on a good showing. They are getting an education and helping others to obtain one also.

MOTION PICTURES—NOT FOR THEATRES

Part Thirty-five — A chronicle of Chronicles. More previously untold pages concerning Big Business efforts to show "visual educators" how.

By **ARTHUR EDWIN KROWS**

IN the spring of 1920 the survey was deemed sufficient for a preliminary estimate of costs. It tentatively called for five sequences, of eight units each, covering the history of America from Columbus to Woodrow Wilson, inclusive. For purposes of figuring, players and settings required were indicated in round numbers, and there were other useful clues provided for a statistical department. Of course, we hoped ultimately for production on a revolving fund basis, gaining money from release of early productions which might then be invested in later ones, and there was offered a plan for the repeated turnover of only $20,000; but, for the present, it was obviously necessary to regard the entire series as an accumulating out-of-pocket expense. Famous Players-Lasky kindly and apologetically gave a verbal estimate of around a million dollars, but asked for specific scenarios upon which to base a more reasonable charge, sure that such a quotation would frighten off any customer, especially a newcomer to the field.

Profits Begin at Home

WHAT it actually did was to persuade Glasgow that the undertaking would be too large and too profitable to be sublet, and he decided that if anybody was going to do the job, he would do it himself. While he was ruminating over this, I proceeded by instruction to write the first scenarios. Of course, it was not intended that I should write them all, merely that I should establish the precedents. As far as possible we wanted the plan to unfold chronologically, so "Columbus" became the opening subject. This was followed by "Jamestown," the story of the first permanent English settlement in the New World. During this work, Glasgow revised his first intention of making the pictures dramatizations of the books. He decided that there was so much original work in preparing the film versions, picturizing not his own published texts but the very source documents of history, that they should be regarded as distinct accomplishments, with the scenario writer to be accredited with full authorship.

The scripts certainly were unique in form, made so to accommodate the peculiar demands of the situation. They were typed on long, foolscap sheets to care for elaborate footnotes on each page, which gave historical justification and amplification of every major point. In the first two scripts alone, the supporting notes totalled more than 50,000 words. Information as to physical appearances, including costumes; how houses and fortifications were constructed; ages, heights, weights and mannerisms of the respective characters; full descriptions of properties—all were to be found there, convenient to the hand of any and every person who might have to do with editorial supervision or production. There was even talk of printing these scenarios for the guidance of teachers who might use the completed pictures in class.

I was very glad indeed that the scripts were just that way when, June 6, 1921, I was summoned to read the first two to an assembled body of educators at Yale University, who wanted to pass on their fitness to receive the University Press endorsement. It was a lovely summer morning when I went with Glas-

To none is credit more richly due than to Robert E. MacAlarney for realized merits of the school films known as the Chronicles of America.

gow to New Haven, and sat with him in the board room of the University for this ordeal, although, naturally, I wasn't especially interested in the weather just then. Among those present were Allen Johnson, chairman of the Department of History at Yale, general editor of the published *Chronicles of America* and later to become editor-in-chief of the *National Cyclopaedia of American Biography;* George Parmly Day, treasurer of Yale University Corporation and president of the Press; Charles M. Andrews, authority on the history of New England; Max Farrand, professor of American history and brother of Livingston Farrand; Nathaniel Wright Stephenson, of the University of South Carolina; Charles Seymour, who today is no less than the president of Yale itself; C. H. Haring, professor of European history; Anson Phelps Stokes, and Ralph M. Gabriel, assistant to Allen Johnson.

When the reading was at an end, these specialists, most of them authors of books in the *Chronicles* series, bombarded me with questions concerning this statement of fact and that; and how thankful I was that I had all the historical citations in the footnotes, ready to read off in answer to objections. But finally all the listeners commented favorably and the manuscripts were delivered for further action by the Council's Committee on Publications of Yale University. There, September 26, 1921, after the pages had been read critically by experts, a resolution was adopted generally endorsing the picture project. To act for the Committee Dr. Max Farrand was appointed general editor, and he chose as his associate, Dr. Frank Ellsworth Spaulding, Sterling Professor of School Administration and head of the Department of Education in Yale. As their executive on the ground, watchdog of production, so to speak, was Nathaniel Stephenson.

Glasgow's plan now was to organize a separate concern to handle the picture making. My own, tentative schedule which was authorized in editorial conference at New Haven April 29, 1922, and copies of which were sent for comment to about thirty selected principals and teachers of elementary schools, called for some thirty-six units of two reels each. Considering the heavy staff requirements of a large concern, together with the fact that these gentlemen around me were depending on my guidance for every phase of film practice, including writing, production, distribution and even to some degree of sales, I doubted my physical ability to manage it alone. Glasgow finally agreed on the expediency of having another man to direct the business organization while I gave my preferred attention to writing and supervising the preparation of scripts, and, to my great pleasure, persuaded Robert MacAlarney to join us in this capacity.

Until then a desk in the general open office, with occasional secretarial help from Glasgow's personal staff, had sufficed, as most of my work was done at home or in the public library. MacAlarney required an office, of course. Moreover, obviously, still more room would soon be needed, so he requested also a proper office accommodation for all reasonable early expansion of the project. A modest space was therefore taken across the hall from the suite of the U. S. Publishers Association, at 522 Fifth Avenue, corner of 44th Street, the Guaranty Trust Building. I was

President of the picture Chronicles corporation was George Parmly Day, treasurer of Yale University and founder and head of the Yale Press.

urged to expand my department, and I took on two research workers to provide me with material from which to build continuities, an efficient secretary and a girl to do routine copying. I knew that it was a question only of time before I would have to organize a writing staff, but I was reluctant to do that, and Glasgow understood clearly why.

Out of my earlier experience in the regular studios I knew that the usual scenario writer, trained in applications of the tried-and-true Garden of Eden formula, would inevitably present his history in terms of romance, would go to extremes to provide "entertainment," and would give scant shift to the needs of pedagogy. For our purposes he would not only have to learn a new set of standards, but he would be obliged to *un*learn most of the others in which he had come to believe. On that account I felt that we would be better off to continue as we were, though, as a matter of fact, I already had made a concession. A friend who had exceptional talents as a theatrical film editor, Don W. Bartlett, lately of Vitagraph, had said he would like to try. He was given piles of research material and a thorough synopsis— a "treatment" they call such full preliminary outlines now —of "Young George Washington," the unit dealing with the start of the Seven Years War in America, and invited to develop it. The result of about eight weeks of his earnest labor was admirable, but upon its delivery Bartlett very humanly and understandably decided that there were easier ways of making money. While he had been doing that, I had been toiling through the detailed work of following Wolfe and Montcalm in the last few days of the fall of Quebec.

Allen Johnson and Glasgow kept in close touch with these "precedent" continuities as the work progressed, declaring that the scripts would lead to a previously unreached height of achievement. Nevertheless, I had my misgivings. "When these scripts fall into the hands of a professional director," I told Glasgow, "you'll find them all turned into Hollywood love stories." Upon which he smote his desk and vowed that he'd "like to see any director try it." It was MacAlarney's idea that I should direct the first productions, and it was rather a temptation to attempt it. But it seemed that my services were needed more in specifying what should be produced. Glasgow was elated that we had won the professorial approval and wanted me to continue the writing. His opinion was confirmed when a professional scenarist, who had been employed briefly and experimentally on a salary basis, returned his first manuscript to me, refusing to revise it on the ground that the job wasn't worth it. So I became scenario editor and MacAlarney became production manager.

Carlyle Ellis, and his little production staff, consisting principally of Thomas H. Swinton, assistant director, and Walter T. Pritchard, cameraman, were tentatively engaged to make Production Number One, "Columbus." As production time had not yet arrived, however, MacAlarney used Ellis and Swinton to survey and report on the studio facilities available in the New York area. There were plenty of those, too, because this was just about the time that the last major production companies in the East were moving to California.

While MacAlarney, Ellis, Swinton and I were thus occupied, Glasgow was busily maturing his plans for the formation of the Chronicles of America Picture Corporation, and for the anticipated sale of stock to carry the venture through. George Parmly Day, head of Yale University Press and treasurer of Yale University, was made president; Glasgow became vice-president, the office of secretary fell to my lot, and that of treasurer to Arthur Brook, assisted by John J. Reilly, the very efficient and friendly manager of the book organization. On the board of directors, in addition to those named as officers, were MacAlarney, William Todd Devan, one of the book sales managers, and Elton Parks, lawyer-trustee of Yale University Press. The advisory committee, assuming responsibility for the pictures to be produced, included Max Farrand, Nathaniel Stephenson and Frank Ellsworth Spaulding. Allen Johnson was genuinely interested, but too much occupied with other duties to serve. The first formal, public announcement of the incorporation was made about January, 1922.

All seemed propitious for realization of one of the finest educational film series to date. The corporation charter, under the laws of the State of New York, was already issued; the first four scenarios were approved for production; wealthy patrons of education, and notably those belonging to the Yale alumni, were described as eager to take stock; representative newspapers and magazines reported the plan in generous spreads and editorialized in warm approval; the usual signs of success in the shape of singular characters with odd ideas to promote—including one who threatened us with suit if we prepared a picture stating that Columbus discovered America—put in their appearance. Glasgow, delighted with progress and prospects, recently honored by Yale with an M.A. degree, was triumphant, too, because Yale University Press had just bought from the U. S. Publishers Association all of the plates from which the published *Chronicles* were being issued.

It was the 5th of April, 1922. Glasgow was on his way to a Kiwanis Club luncheon to speak on his favorite topic, the cementing of cordial relationships

The Council's Committee on Publications of Yale University made Max Farrand general editor of the motion picture Chronicles of America.

between Canada and the United States. I went out to a quicker luncheon and then returned to the office. A few minutes later Reilly entered hurriedly and asked me to try to find some sort of heart stimulant somewhere in the building. I tried vainly to comply—those were Prohibition days—and came back to find Reilly in the office of the chief. Glasgow has been to luncheon and had returned for the last time. He was sitting at his desk dead.

But Columbus Sailed On

THE shock was very great. For a few days thereafter, naturally, all of our activities were rather aimless. On the other hand, production of "Columbus" was virtually ready to begin. Tom Swinton had gone to Chicago, where permission had been obtained from the city officials to use the reproductions of the ships of Columbus, kept in the Jackson Park lagoon—the same vessels which had been employed so many

years before by Selig. By this time the *Nina* and the *Pinta* were in hopeless disrepair, but Swinton's judicious expenditure of a few hundred dollars, largely for sails, rigging and so forth, made the *Santa Maria* sufficiently seaworthy to be towed out into Lake Michigan for some effective shots.

MacAlarney had finally concluded arrangements to make the studio scenes in the Vitagraph studio at Flatbush, where there were extensive property and laboratory resources, and a technical director named Bingham began the construction of sets. As to costumes and certain important props, we had secured for guidance here the fine services of the late Harry A. Ogden, one of the foremost authorities on American period dress. His admirable drawings, made for the Chronicles pictures, are now preserved in the Yale library at New Haven.

In motion picture production it is customary to make the exteriors first, if possible, partly to guard against uncertainties of weather, and partly to allow time for set construction in the studio. Consequently, Ellis began shooting the scenes of the messenger being sent by Queen Isabella to overtake Columbus, and of a sailor's wife waving good-bye to the *Santa Maria*. This was done out near Montauk, Long Island, where the country was believed to resemble Spanish topography. There were also a garden at the palace of King John of Portugal, situated for these purposes at Mount Kisco, and a La Rabida monastery scene at Huntington, Long Island.

Ellis readied himself, at this juncture, for interior shooting, with the chamber of King John of Portugal as the first studio item. He began casting his more expensive principal characters, and selected the well-known Broadway actor, the late Fred Eric, to portray Columbus. Eric was officially approved and remained throughout the production period—unlike Ellis. In the drastic circumstances of Glasgow's demise and the formulation of a lot of production routines for the expected mass output, friction of various sorts naturally developed. Encountering some of it, Ellis, who had, I knew, precious qualities to bring to this venture, was an unreasonably peaceful man. He preferred not to fight back. He therefore accepted, with relief and surely without rancor, the fact of his succession by a rougher diamond, Edwin L. Hollywood, a theatrical director who had lately made a few Vitagraph productions starring Harry T. Morey.

Hollywood, and his assistant Frank Heath (who subsequently headed the casting office of Paramount in the East) at once entered heavily upon production. Their start at casting was to place the personable operatic star Dolores Cassinelli opposite Fred Eric, as Queen Isabella; and they engaged many other able players for the lesser roles to come. They made their local scenes and, in acceptable time, also the major sequences planned aboard the reconstructed *Santa Maria* in Chicago. To complete "Columbus," as they saw it, they shot 52,000 feet of film. Out of this nearly five miles of material they presented for first official view a "first cut" of eight and one-half reels.

By this time it had become imperative also to enlarge the writing staff. Glasgow's own method of reaching for authors of the published *Chronicles* suggested a way. He had gone, for his writers, not to the list of reputed historians so much as to persons who could write in general, who had a respect for statements of fact, who understood human interest, who had an enthusiasm for history, and who would value a connection with so distinguished

Painting by Harry Morse Meyers

William Basil Courtney's 1923 job was to chart a professional course for educators lacking film experience but nevertheless seeking to prove their command of the medium.

an undertaking—persons such as Emerson Hough, Mary Johnston and Constance Lindsay Skinner. If professional historians were represented, such as Charles M. Andrews, Allen Johnson and Irving Berdine Richman, it was because they also could write.

So I looked particularly to newspapermen who were skilled in reporting and in appreciating human interest, and who surely were visual in their approach. After all, with the facts of a proposed unit picked out and provided with all manner of substantiating documents, why shouldn't a good newspaperman be able to report the actual event without dishing it up with fiction? The group we interested on this basis, included: Dwight S. Perrin, city editor of the New York *Tribune* and later managing editor of the St. Louis *Post-Dispatch;* Frederick F. Van De Water, scion of a distinguished literary line, and then doing a widely read newspaper column; the late James O. Spearing, motion picture editor of the New York *Times;* Cleveland Rodgers, then associate editor and now editor-in-chief of the Brooklyn *Daily Eagle,* and Sanford E. Stanton, long editor of the celebrated Metropolitan Section of the New York *Sunday World* and now a leading editorial writer for Hearst. Others of more general training were Lebbeus H. Mitchell, theatrical publicity man, author of juvenile books, and now of the *Film Daily* staff; the late Lynde Denig, magazine writer, poet and motion picture press agent—and for awhile Howard Lindsay, today one of the most successful dramatists on Broadway, toyed with the idea of taking an assignment.

Of course, it was inevitable that the scripts prepared by those unfamiliar with studio practices would require some professional editing, but this was fully understood by those who undertook writing for us, and I felt especially fortunate in securing as assistant editor, William Basil Courtney, who for eight years had been on the scenario staff at the Vitagraph Company of America. In that place he had written many of the celebrated short comedies for Mr. and Mrs. Sidney Drew—all in all, more than two hundred produced pictures. Courtney's brilliant talents have asserted themselves in later years in his capacity as associate editor and feature writer of *Collier's.*

Although, in one sense, my duties were thus simplified, the increased volume of work incidental to preparing material for a number of writers under contract and conferring frequently with them, made little difference in my hours of application. To complicate the situation, I acquired additional duties as a corporate officer, made necessary by the passing of Glasgow. Organization adjustments had to be made; numerous papers had to be signed, in especially large quantity because George Parmly Day, the president of the corporation, was up at New Haven most of the time, and Arthur Brook was too busy with book sales. I was the corporation officer easily available. It would only cumber the record to detail the day-to-day growing pains that made the organization what it was in those green "salad days" when it first functioned. However, "Columbus" was still pretty much in its eight-reel form when I began to break under the strain. I was persuaded to take the accumulated time of an unused month's vacation; but I returned in a state of even greater distress and realized that I must withdraw for my own good. Accordingly, though with a heavy heart, I bought my way out of my contract.

There was an interval before my leaving to permit readjustments. William Courtney was my logical successor, and he was confirmed in that place. Professor Nathaniel Stephenson, who had been appointed to act on the ground for the educational committee, was given wider duties to relieve Brook, who had plenty to do selling the published books.

(To be continued)

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

ADMINISTRATION

Visual Aids Are Now Available to Schools on the Same Basis as Library Materials—G. L. Hutcheson, Chairman, Audio-Visual Committee—*Georgia Education Journal,* 35: No. 6, p. 25 Feb. 1942.

The professional committee on audio-visual aids was appointed by the State Board of Education. The committee is composed of five members who are actively engaged in classroom work and doing special work in visual education. It is hoped that P.T.A. and individual schools will be encouraged to provide equipment. The State Department of Education has compiled a list of approved materials. A group of 100 free films is available, and the other films and materials can be purchased on the two for one matching basis.

A Unified Visual-Aid Approach—S. S. Bernhard, Midwood High School, Brooklyn, N. Y.—*High Points,* 24:69 Jan. 1942.

The program here described was organized in a new high school, under the direction of Dr. Charles A. Gramet, administrative assistant of the school, and the author. First an in-service course was set up for the teachers at the school as a means of learning the use of the equipment and how to find suitable films and other materials. The science department routes the projectors and films to the classrooms. Then there is a Film Makers Club, which records important events at the school. Scenario-writing is carefully studied before actual filming will be done. A Film Festival of good film revivals is also part of the Film Makers Club activities. Many of the subjects come from the Museum of Modern Art Film Library.

Each department has its own film activities. The French and English Departments have film programs. Assembly programs use the excerpts from the Human Relations Series. Microphones scattered over the auditorium enable stimulating discussions to follow each film showing, with a discussion leader on the stage, usually a student.

UTILIZATION

Visual Aids in Education—New Jersey State Visual Education Syllabus—Rev. ed. 1941. 75 pp. Available through The Bookstore, Trenton State Teachers' College, 60c plus postage.

This syllabus, used in State Teachers' Colleges of New Jersey, was written in 1939 by Dr. Grant W. Leman, and has been revised under the direction of Dr. Robert H. Morrison of the State Department of Public Instruction. Gives instruction in the proper use of visual aids.

Advancing the Use of Visual Aids—Wilma I. Nelson—*Volta Review,* 44:11 Jan. 1942.

A critical evaluation of the ways in which many types of visual aids could be used for enriching the education of the deaf. The author describes the effectiveness of using pupil-made slides, excursions and the Yale Chronicles with elementary school children. The deaf child's ability to grasp new learning wholly by lip reading is definitely limited, and varies with different children. Lip reading becomes fatiguing after a time, but with the assistance of a visual aid a child's interest is stimulated and his attention span lengthened. Psychologists have found the visual memory of deaf children to be greater than that of hearing children.

Stimulated by a trip to the post-office, a third grade class wrote a story about a postman. Each child illustrated, by drawing on a glass slide, his interpretation of one or two sentences from the story. The whole class was eager to illustrate the story accurately down to the smallest detail. Some of the first sketches revealed misconceptions of new language. Criticisms were gratefully accepted and corrections were made. The showing and re-showing of the slides to other classes, along with the reading slides made by the teacher, further aided the retention of the new language.

Teachers of the deaf make little use of the available visual aids in their daily work. Too often they rely on graphic materials, the least concrete of the visual aids, as teaching aids. School trips, museum material, films, lantern slides and stereographs should also be used.

Motion pictures, even sound films, are intriguing to deaf children. A slow class of fourth grade children based their history study on the topics in the Yale Chronicles. They studied the subject matter in advance, and discussed each film after the showing. The questions asked and the responses received indicated more desirable attitudes and greater understanding of relationships than had ever been experienced by this teacher before.

An appeal is made for a Visual Education Exchange, somewhat as indicated by the Visual Aids Project in Wisconsin whereby a small school for the deaf could receive visual aids inexpensively.

Materials Please!—G. F. Stover, Professor of Education, State Teachers College, Troy—*Alabama School Journal,* 59:14 Feb. 1942.

A discussion of ways of using materials that have been made available for studying modern problems not usually found in textbooks.

PRODUCTION

"Come to See Our Show"—Dorothy Bowen, P. S. 33, Indianapolis, Ind.—*Nation's Schools,* 29: 60 Jan. 1942.

In this first grade room the children began a study of pets, using a turtle, squirrel, hen, goldfish, canary, puppies and kittens that had been brought to school. The teacher believed in the value of this study, but to convince the parents she took pictures of classroom activities showing children reading about pets at the library table, printing their own stories on the blackboard, studying the spelling of words needed, drawing with crayons and paint the animals around them. They even sang their songs before the (silent) camera.

The parents were invited to see the movie. Parents and children together saw it, but the children were later dismissed and the parents asked to remain for a discussion with the teacher. The teacher found the results well worth the effort and cost of the films.

Visual Aids in Chemistry—Harold W. Woodson—*Chicago Schools Journal* 23:71 Nov.-Dec. 1941.

The description of a W.P.A. Project that serves the teachers of Chicago. Technicians are available to prepare exhibits and other types of visual aids at the request of teachers. This enables teachers who have good ideas but lack technical ability to secure teaching aids at a very small cost.

CONFERENCE PROCEEDINGS

Addresses and Forum Discussions of the Fifth Annual Southern Conference on Audio-Visual Education, November, 13-15, 1941. J. C. Wardlaw, general chairman. 223 Walton Street, N. W., Atlanta, Ga. 102 pp. mimeo. $1.00.

The six sessions of this conference were crowded with interesting addresses and forums, in addition to the presentation of new materials and the commercial exhibits. The Proceedings include most of the addresses and a stenographic report of the forum discussions. The volume is testimony that this must have been a very successful conference.

The addresses are herewith summarized briefly, but no summary is adequate for the forum discussions. The reader is, therefore, referred to the original volume.

Producing Films for the Educational Field—J. E. Hansen, Executive Director, Coronet Productions, Glenview, Ill.

First step in film production is a study of curriculum needs. Then there should be a careful study of the ways in which

motion pictures and what kinds of motion pictures could help. Production in the past has been too opportunistic.

Any motion picture production program based on the content of our present textbook curriculum, even though it does serve to improve the teaching of the present curriculum, does not provide for a fundamental recasting of the curriculum. My conviction is that one of the outstanding contributions of the motion picture has not yet been explored. Curriculum makers and producers should get together and consider this problem.

Scripts for educational films should be written by educational authors, specialists in each field who have creative writing ability. The producer is then faced with problems involving sound recording, the proper lengths of films, the type of study guide, the use of still pictures and many others.

Revealing America's Scenic Beauty Through Color Photography—William S. Yale, Great Northern Railway, St. Paul, Minn.

The circumstances behind the production of color films on the scenic beauty of the United States.

Making 8mm. Documentary Films for Special Needs—Hugh N. Fuller, Prof. of Sociology, Emory University, Ga.

The author makes films about the city of Atlanta that answer questions such as were presented by the Lynds in "Middletown". Where do the people come from? Where do they live? How do they make a living? There are eleven reels completed for use in the sociology courses at Emory. There are to be 18 such reels, for six classroom periods.

Suggestions based on the experience of this project include: Pictures should be carefully planned in advance, arrangements made for taking them and a complete, detailed shooting script constructed; pictures are not really objective, depending on the point of view of the author; try to get the picture scenes to tell the truth, even if you have to kill the picture where objections to the truth are too strenuous; don't try to tell everything through the picture; use humor but be careful of it; use people at their customary tasks; audience reaction is the best test of your picture.

Visual Education in International Affairs—Kenneth MacGowan, Director of Production, Motion Picture Section, Office of the Coordinator of Inter-American Affairs, Washington, D. C.

A resume of the cultural film program plan whereby films about the United States are to be sent to South America, and pictures of South American countries are to be shown here. Among the films about the United States are defense films; agricultural films; health and medical films; process films; a few travels, sports; some military training, and some on Americanism as contrasted with totalitarianism. For the films on South America, the Office has the cooperation of travelers, commercial producers and March of Time.

Audio-Visual Aids in the Army Training Program—Col. Alfred E. Kenney, U. S. Army Training Film Editor, Fort Benning, Ga.

This address was supplemented by the showing of charts, slides and a motion picture. No single projected aid is used to the exclusion of others and, if the aid does not fit the program exactly it is not used. Preview by the teacher is important. The aid should be simple, large enough for all to see. Army films are written by army personnel.

Audio-Visual Aids in Vocational Guidance—Carl F. Mahnke, President, Vocational Guidance Films, Inc., Des Moines, Ia.

Motion pictures and filmstrips can help to give elementary and high school students a fair command of the primary facts which are emphasized in the vocational departments of the school. The series of films "Your Life Work" was made after much research on each vocation, by Mr. A. P. Twogood of Iowa State College. Business men in each field are also approached for criticisms and advice before production is started.

But, each film is not complete in itself as a source of information. Reading, interviewing and repeated showings are necessary.

BOOK REVIEW

Educational Motion Pictures and Libraries—Gerald D. McDonald—American Library Association, Chicago, Ill. 183 pp. 1942 $2.75.

This fine volume is the summary of a study made by a Joint Committee on Educational Films and Libraries, under a grant from the Rockefeller Foundation, The Audio-Visual Committee of the American Library Association, with the collaboration of Charles Hoban, Jr., Donald Slesinger, J. C. Wardlaw, each representing a film group. Miss Mary U. Rothrock was chairman of the Committee.

It is needless to present in this review a detailed report on the content of the book, because *Educational Motion Pictures and Libraries* is a must for your reading list. The ideas are carefully-thought-through, and are based on experience. With the thoroughness and specificity of a librarian, Mr. McDonald has expressed the reasons why libraries should concern themselves with (a) showing films (as part of their adult education program), and (b) with distributing educational films to schools (as part of their public service). The library, it is pointed out, is a community agency which is a recognized center of education. It should become an information center for film sources in the various curriculum areas. Where needed, it could organize a service for borrowing and loaning films and projectors for its users. Above all, it should seek to supplement the services provided by other agencies along the lines that would best promote effective use.

The book describes the role of the library as follows: the educational responsibility of the library; the status of the educational film; films and the public library; films in adult education; films in the school library; films in the college and university library; films as historical records; training for library film service. Appended are excellent materials on the organization of a library and sources of information. The style and format of the book are outstanding. You cannot afford to miss reading it.

SOURCES OF INFORMATION

Victor Directory of 16mm Film Sources—Revised Eighth Edition—148 pp. 1942. Published by Victor Animatograph Corp., Davenport, Iowa. 50 cents.

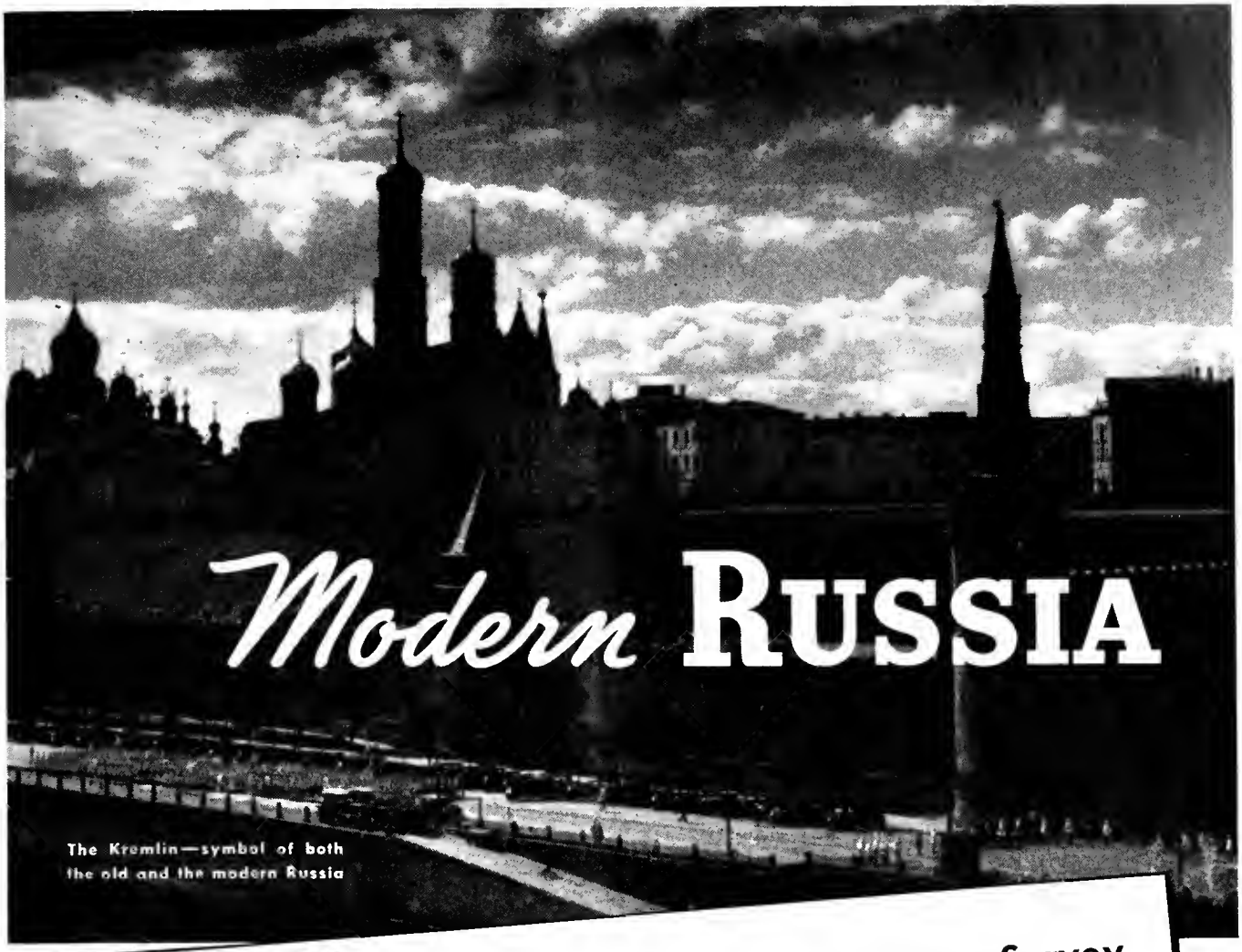
This is a valuable directory of sources for 16mm sound and silent subjects—classified into three groups: Group A—Institutional, Organization and Governmental Sources: Educational and Religious Institutions, National and Local Associations; Group B—Industrial and Commercial sources; Group C—National and Regional Distributors regularly engaged in the business of renting or selling films. These sources are arranged alphabetically and numerically identified under each group.

Of great convenience to the user is an index of subject-groups, which indicates by numbers the sources handling films on particular topics. A tabular style of make-up quickly shows the type of films distributed by any given source, territorial extent of distribution, and whether films are for sale, rent, or loaned free.

An informative feature is the collection of statements by directors of Visual Instruction Bureaus summarizing briefly the film services offered by their university, college, or educational institution. Helpful and interesting, too, are the articles in the editorial section dealing with such timely subjects as: "The Microphone and Phonograph Record Player," "A Recommended Classroom Procedure for Using Films Produced Specifically for Instruction," "Reasons Why This Is the Time to Begin a Well Defined Audio-Visual Program," "The Sound Motion Picture—An International Educational Instrument," "Non-Theatrical Motion Picture Industry," "Making Your Own Movies," and others covering the sound motion picture in the home, in business, and in religious work.

Education and National Defense Series—Pamphlets prepared by a U. S. Office of Education committee, headed by Assistant U. S. Commisisoner of Education Bess Goodykoontz. 15 cents each. Available from Superintendent of Documents, Washington, D. C.

This series, which will ultimately include twenty pamphlets, is designed to help education meet defense problems. Titles of the first six are: "What the Schools Can Do" (Pamphlet No. 4); "Home Nursing Courses in High Schools" (No. 9); "Hemisphere Solidarity" (No. 13) "Education under Dictatorships and in Democracy (No. 15); "How Librarians May Serve "(No. 17); "Democracy in the Summer Camp" (No. 23.).



An authoritative Motion Picture Survey in 3 reels—Filmed by JULIEN BRYAN, Noted American Explorer and Lecturer

REEL I—*MOSCOW*—Life in the capital of the U.S.S.R.—street scenes and public buildings; traffic and the famous subway; housing projects; trade in Moscow's retail shops, department stores, and public markets; the clothing industry. 1 reel—$24.

REEL II—*LENINGRAD AND INDUSTRY*—The principal streets, and public buildings; churches; a mosque. Activities in a newspaper office; a modern bakery; Dnieprostroi Dam; modern industry—road building—Baku oil fields. 1 reel—$24.

REEL III—*DEVELOPMENT OF AGRICULTURE*—Life of the independent farmer; collective effort on farms conducted without modern equipment; state farms, agricultural schools; operating features of the modern mechanized collective farm. 1 reel—$24.

Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Eastman Classroom Films

Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

Title of Thesis: THE PRESENT STATUS OF VISUAL EDUCATION IN TEXAS.

Thesis completed 1940 for the degree of Master of Arts, The University of Texas, Austin, Texas.
Investigator: JACK WADDINGTON MEARS

Purpose of Study

1. To present a treatment designed to reveal the main characteristics of the national movement in visual education, since visual education in Texas is little more than an extension of a broader movement underway throughout the nation.

2. To reveal the general trend of visual education in Texas.

Procedure

1. Through a treatment of the available literature an attempt was made to show how the work accomplished by agencies throughout the nation is being extended to Texas.

2. Questionnaires, patterned largely after the questionnaires used in the national survey conducted by the United States Office of Education, were sent to superintendents and directors of visual education in various sections of the state. Questionnaires were returned from ninety-six school executives which included a cross-section of the state. The general purpose of the questionnaire was to take stock of the types of equipment of visual aids found in Texas schools, the subjects in which these aids are being employed, the extent to which they are being employed, and some of the problems which arise in using them.

Conclusions

1. Only 3.2 per cent of the schools investigated have official directors of visual instruction. The superintendent or principal usually serves in this capacity.

2. In general, only the larger schools or school systems have visual instruction programs in operation.

3. The larger schools have all of their buildings wired with electricity. The smaller schools often have only a part of their buildings wired with electricity.

4. Studied as a whole, the data reveals that few, if any, of the schools in Texas have a sufficient amount of visual aids equipment to maintain an effective visual instruction program.

5. Very few of the schools have their equipment centrally located so as to give all of the schools in the system adequate service.

6. The survey shows that few of the schools in Texas have adequate access to motion picture films.

7. The amount of equipment on hand in the schools suggests that most of them are inadequately equipped with projectors for lantern slides and film strips. This fact implies that the newer types of equipment are not being used extensively.

8. The survey shows that the motion pictures are being used by some of the schools in reading, social studies, and science, but they are being used very little in arithmetic, writing, mathematics, and the vocational subjects.

9. Answers to the questions show that teachers, as a rule, do not make proper use of the motion picture. In general, they fail to provide follow-up procedures designed to make the film a real educational experience.

10. The most serious problem confronting administrators of visual instruction is that of securing funds for its support. Other serious problems are involved in securing teachers who are trained in visual instruction and in arranging for an adequate supply of teaching materials suited to their purposes.

11. Most of the administrators have indicated that they are not receiving adequate service from bureaus and libraries proposing to distribute visual instruction materials to the schools. The administrators, in general, have indicated their programs of instruction could be more effective, if a more adequate amount of teaching materials were made easily available.

12. School executives have indicated that in-service train-

ing can best be effective by means of conferences with small groups of teachers in their schools.

Recommendations For Improving Visual Education In Texas

1. Extending the Influence of Activities of Organizations in Texas.
   a. *Department of Visual Instruction of the N.E.A.* Since this department has been giving impetus to the national movement, it appears that its influence should be felt more forcefully in this state.
   b. *Visual Instruction Section of the Texas State Teachers Association.* If a greater number of educators in Texas would take an interest in this organization, support it, and encourage its work, it could be made to render a real service to the teachers of this state.
   c. *Visual Education Conferences.* Certainly, these conferences (some have already been held) can do much toward promoting visual education, making school executives and teachers aware of its values, and throwing light on a large variety of administrative and teaching problems.
   d. *State Department of Education.* The State Department has contributed much to the visual education movement since 1938. It appears, however, that educators in Texas would do well to encourage the members of the State Department of Education in their efforts to sponsor visual instruction throughout the state.

2. The Work of Two Divisions of State Government. The State Health Department and the Public Safety Department are producing a number of motion pictures and other types of visual aids for the purpose of informing the public of the services they are rendering the state and for the purpose of instructing the school children in regard to health and safety measures. It appears that education should either invite these state agencies to assist them in carrying on their own health and safety programs or try to make arrangements for use of materials.

3. Service Bureaus for Visual Instruction. Although there are several of these bureaus now in operation, the trend in Texas toward establishing regional and local film libraries should continue.

4. Financing Visual Instruction Programs.
   a. *Cooperative Buying.* It appears that groups of schools might profitably support a regional bureau. The East Texas Bureau is an excellent example of collective buying.
   b. *Special Taxation.* Special taxation (such as in the state of Ohio) might be used to finance such a program.
   c. *Other Sources of Revenue.* Some schools are attempting to operate and maintain a visual instruction program by assistance of local agencies.

5. The Production of Visual Aids in Texas.
   a. *School-made Visual Aids.* It is possible for individuals and groups in every school in the state to produce materials needed for instruction. Many of the less expensive aids can be made in the schools, and individuals in the schools should be encouraged to do so.
   b. *Commercial Concerns.* Commercial concerns should be encouraged to produce materials especially adaptable to the schools of Texas.
   c. *Production in Colleges and Universities.* The possibilities of production of visual materials in the colleges and universities are being demonstrated on rather an extensive scale at several state universities throughout the nation. The University of Texas might well have the same facilities where educators from all parts of the state could go to have special types of work done.

6. Administrative and Teaching Practices.
   a. *Administration.* It is the opinion of most educators who have studied the problem that the most effective administration of a visual aids program is through a director of visual instruction. More directors of visual instruction should be employed in the schools of Texas.
   b. *Teaching.* Teachers in the schools of Texas should be encouraged to take courses in visual instruction.

SCHOOL MADE MOTION PICTURES

A University Thesis in 16 mm.

(*Reported by* GODFREY ELLIOTT)

Bruce Fleshman, principal of the high school at McComas, West Virginia, holds the rather unique distinction of having won his Master of Arts degree on the basis of a thesis submitted in the form of a 16 mm. motion picture. The film is titled *How To Cross A Street,* and is a 400-foot silent subject in 16 mm. reversal monochrome. A brief but complete document accompanying the film describes the production of the film.

With the help of his faculty adviser, Dr. H. B. Allen, director of the audio-visual aids service of the West Virginia University, Fleshman completed his film and presented it to the graduate school of that university during August 1941 at which time it was approved for degree purposes. His thesis is the first ever to be presented in such form at West Virginia University; it is one of a very few ever to presented in any other university for graduate credit.

How To Cross A Street is not an experimental study in any sense of the word; it is a study in technique. Fleshman's purpose in submitting a thesis in this unusual fashion was to illustrate and document the production of a desirable type of public relations film. For a producing group Mr. Fleshman turned to the Concord Training School at Athens, West Virginia, where he obtained the cooperation of Acting-Principal Dorsey Martin and the students enrolled in the third and fourth grades of the summer school session.

To produce a film that would effectively portray some phase of the school's program, as a public relations film must do, Fleshman first studied the work being carried on in the school. After careful observation and conference, he and the local faculty decided to develop the film in a unit of safety education being carried on by third and fourth grade classes.

Bruce Fleshman shoots an interior scene for his film on safety education, "How to Cross a Street."

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by
GODFREY ELLIOTT, Oakvale, W. Va.
Readers are invited to submit questions.

Two principles guided its development: (1) the film had to be defined in terms of some phase or area of the local school's work that would permit the community audiences to understand better what the school was trying to accomplish in its classrooms, and (2) in order to justify the use of school time in producing the film it had to be developed as an educational project for the pupils who participated. With these principles in mind, the production project was placed before the pupils who were asked to outline a film story that would show their parents at least some of the things they hoped to accomplish through their study of the safety education unit.

How To Cross A Street is outlined as a film record of how this group of pupils recognized a safety problem and the way in which they tried to solve it. The film opens on the morning news period in one of the classes. One youngster reports having seen a near-accident when two boys ran into the street from between two parked cars. As a part of their safety unit the class decides to look for other examples of bad pedestrian habits, and several days later they report their observations.

The class selects three bad habits for further study: the one previously reported, a girl crossing the street in the middle of the block without looking, and a man walking across the street at a very acute angle. Flashbacks show each of the practices.

Committees are formed to study these bad habits so that they can demonstrate the correct solutions before the class. The demonstrations are performed on the street near the school. Each of the three bad pedestrian practices is now demonstrated as it is done in the most correct manner: (1) a girl walks to the rear of the line of parked cars and crosses where she can see oncoming traffic plainly, (2) another student crosses the street in the middle of the block but watches both traffic lanes carefully for approaching cars, and (3) two boys start across the street simultaneously, one walking straight across and the other at an acute angle. The picture plainly shows that the first boy is safely across the street in the shortest time.

The class returns to the schoolroom where they summarize their discussion on these pedestrian habits. The film closes with the question, "What other pedestrian habits should we study?".

The written document which accompanied Bruce Fleshman's film is a brief but concise 50-page explanation of the techniques and principles involved in the production of his film. It is divided into three main sections:

(1) Planning the Film—in this section the author gives a detailed step-by-step description of how the theme or central idea was selected for the film, how the cooperating pupil group was selected, and how the producer, instructors, and class joined efforts to outline the scenario. It also discusses the technical construction of the scenario, showing how the first synopsis was finally broken down into a shooting script.

(2) Filming—a description of the equipment used, details concerning special problems in technique encountered in shooting the film, and similar details.

(3) Editing and Titling—a description of the technique used in editing the film, and an explanation of how the wording of the titles was arrived at.

In addition to these major sections, the written report includes an explanation of the way in which the film came to be produced, as well as suggestions for ways in which it can be used in the local community to the best advantage. Also included is the shooting script used in producing the film.

Question Box on Production

Important note for all camera users:

Manufacturers of amateur film stock are beginning to feel the pinch of metals restriction, and are calling for the return of all 100-foot spools on which the processing laboratory returns your film. Instead of throwing these away as you used to do, return them to your camera store and help to insure a continued supply of movie film.

1. Are any of the national amateur film contests open to school-made films?

Yes, all of the annual competitions for 8mm and 16mm films welcome school-made films on an equal basis with other amateur entries. One of these, The Annual Amateur *Home Movies* Contest, created a special division in its 1941 competition for school-produced films. It is expected that this special class will continue as a part of the 1942 contest.

2. What word allowance should be used in writing a narrator's script for a sound film?

Most of the studios recommend a word allowance of approximately 144 words per minute of screen time, or 4 words per foot, for 16mm. film projected at sound speed (24 frames). This figure, quite naturally, will vary according to the type of film you are producing and the type of narration that will accompany it. The figure should be regarded only as a starting point from which to make revisions to suit your particular film.

3. Why are all discussions of school production in terms of 16mm? Why can't we use 8mm?

The 8mm. camera has been used successfully by a number of schools in producing films, but only where the school definitely understands the limitations imposed by 8mm. production. Briefly, the more important of those limitations are: (1) There is less variety of film emulsions available in 8mm, and virtually no high-speed emulsions to compare with Super-XX or Triple-S Super Pan in 16mm; (2) The final product is not satisfactory for projection before audiences larger than 50-75 persons; (3) It is not yet possible to add a sound track to 8mm. Only when these limitations are known and appreciated should a school ever attempt production in 8mm.

4. Please give us some suggestions about starting work on our first public relations film.

To the school starting out to produce its first public relations film, I say, in all sincerity: "Look around you and see what others are doing." Too many persons think they have discovered something new in their first film on "A Day In Podunk Schools". It is impossible for the inexperienced school to do too much investigating and planning before spending money on production. Borrow a few films from schools more experienced in production; study them for the applications they provide to your own situation. Plan a film that will limit itself to one area or one phase of the school program, then treat that intelligently. Plan a film that has a definite and worthwhile purpose. Good competent advice on the technical aspects of production can be found in book and magazine references.

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS
Assistant in Audio-Visual Aids
Extension Division
Indiana University, Bloomington

First Aid: Wounds and Fractures (Erpi) 11 minutes, 16mm. sound. Sale price $50. Apply to producer for rental sources. Teacher's guide furnished.

This film focuses attention on the need for first aid knowledge and describes proper procedures in caring for an injured person from time of injury until medical help can be secured.

Film opens as a man is struck by an automobile. A crowd quickly gathers and a trained first-aider is immediately at hand. He keeps crowd back, questions victim concerning injury, keeps him warm, examines victim for further injuries, sends information to hospital, and treats and bandages leg wounds.

Difference between venous and arterial bleeding is illustrated by animated diagrams, and general method to be used in stopping both types of bleeding is given. Diagrams and photographs indicate six pressure points upon which pressure must be applied to stop arterial bleeding of various parts of the body. A tourniquet is made and demonstrated. The patient is given a mild stimulant and is examined for broken bones. Animated diagram illustrates severe break in leg. Temporary leg, arm, wrist and rib splints are applied. The film closes with a rapid review of the first aid methods used at the time of the accident.

COMMITTEE APPRAISAL: An excellent film for teaching the basic principles of first aid in cases involving wounds and fractures and to prepare students and adults to meet accident emergencies. It is a pertinent subject and should be widely used in regular courses and for defense classes in first aid and nursing. The committee questioned the representativeness of the placidity shown by the patient in the film.

The Electrician (Vocational Guidance Films, Inc.) 11 minutes, black and white, 16mm. sound. Sale price $50.

This film shows and describes in comprehensive rather than detailed fashion the work of the electrician in three major fields—power and lighting, communication, and transportation.

While the commentator explains the need for highly trained workers in the various specialties represented, the electrical distribution system is traced back from home wiring to the huge turbo-generators of the powerhouse. Electricians are shown repairing and rebuilding generators and motors, repairing household electrical appliances, and servicing an electric sign mechanism.

How specialized electricians install and maintain telephone, telegraph, and radio lines and equipment is explained while telephone line crews string cross-country wires and repair a cable break across a swollen stream, repairmen service a busy telephone switchboard and a teleprinter machine, and an operator checks the controls of a powerful radio station.

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer, and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

The need for trained electricians in transportation is outlined while electric street cars, trackless electric trolley busses, third-rail and overhead electric trains, and Diesel-electric units and passenger and freight trains are shown. Electricians are shown working in automotive and aviation ignition service.

Many special jobs are shown and described, including the work of the top-ranking graduate electrical engineer. Suggested sources of training are described while the interior of a trade school with students "learning by doing" is shown.

COMMITTEE APPRAISAL: A useful film for giving students an overview of the many types of jobs included under the general term of "electrician". It will motivate students who are interested in a particular type of job to investigate the field in more detail. The film can be used in science and social studies classes to show the importance of electricity and electricians in an industrial society. Training and skills required and working conditions could have been more effectively demonstrated if the electrician's job had been specifically shown in each field, rather than only the machinery which requires his services, as in the case of the high-line, the powerhouse generators, and the radio sequence.

The World We Want To Live In (National Conference of Christians and Jews) 17 minutes, 16mm. sound. Free on loan. Prints may be purchased from producer for $15.06.

This subject shows development of religious intolerance under old world dictatorships and the existence of a startling amount of the same intolerance in the United States in spite of the efforts of influential persons and groups.

Three children, a Catholic, a Protestant and a Jew, playing together in perfect amity on an American shore symbolize the democratic ideal of religious tolerance. On the opposite shore of the same ocean, groups are shown denying equal political, social and religious rights to a minority of the people. Synagogues and churches are destroyed, trade unions suppressed and gainful employment limited to preferred groups.

The film suggests that America, too, is not free from intolerance. Many pressure groups and organizations use economic, religious, social and political discrimination to further their own ends. Even small children are often intolerant of other children with backgrounds different from their own.

Speakers sent out by the National Conference of Christians and Jews to teach the need for religious tolerance are shown in church pulpits and on public platforms. Thomas E. Dewey, former Chief Justice Charles Evans Hughes, Al Smith, Eddie Cantor, and Wendell Willkie appear in the film to emphasize that tolerance in all phases of life is absolutely necessary if American democracy is to continue. All stress the point that "Any weakening of the rights of any is a blow to the rights of all."

COMMITTEE APPRAISAL: An excellent film for a study of social and political conditions that contribute to the development of racial and religious intolerance. It portrays in a dramatic fashion the loss of freedom under dictatorship. The film does not treat discrimination against negroes or persecution of political minorities. The potentialities of the medium were used to a better advantage in portraying effects of intolerance than in emphasizing the advantages of tolerance. This use of the medium reinforces the negative approach in the treatment of the subject.

Time To Spare (Audio-Visual Aids Service, Mercer County Schools) 18 minutes, black and white, 16mm. sound, sale price $75. Apply to producer for rental sources. Study manual furnished.

This film shows some of the activities of the Flat Top

School, Mercer County, West Virginia, a one-teacher school where progressive teaching methods and thoughtful time-block planning provide "time to spare" for enriched individual and group teaching.

The time schedule for the day is divided into five major time-blocks—morning pupil-teacher planning; skills period; afternoon pupil-teacher planning; work-conference period; and free expression period. The pupils are organized into two broad ability groups—above and below fourth grade ability.

The morning skills period is devoted to the teaching of reading and arithmetic in primary and intermediate groups, individual pupil-teacher conferences and remedial procedures.

The development of a unit in geography in the afternoon work-conference period shows the entire school participating, with each group making contributions at its ability level. This unit includes a class excursion; integration of science and arts and crafts in the building of relief maps; the preparation of scrap books and exhibit materials; and shows the culmination of the unit in the delivery of committee and individual reports on the work and how it was done.

COMMITTEE APPRAISAL: This film can be used effectively in teachers' meetings and institutes, university classes in education and with parent-teacher groups. It shows how a skillful teacher through the use of a variety of teaching materials and media can organize a program which will provide for individual differences even though pupils usually work in groups.

The showing of more pupil planning would have added to the effectiveness of the film. The technical quality which is not up to commercial standards should not unduly detract from the effectiveness of the film for teacher training purposes.

Addresses of Producers and Distributors

Audio-Visual Aids Service, Mercer County Schools, Princeton, West Virginia.

Erpi Classroom Films, Inc., 1841 Broadway, New York, New York.

National Conference of Christians and Jews, 381 Fourth Avenue, New York, New York.

Vocational Guidance Films, Inc., Old Colony Building, Des Moines, Iowa.

News and

Southwest Audio-Visual Conference

The first annual Southwest Audio-Visual Conference, co-sponsored by the Louisiana State Department of Education and the General Extension Division of Louisiana State University is to be held April 3-4 at Shreveport. This is to be a practical, helpful, conference rather than a talking one, and should be of vital interest to all teachers of the area. The program has been designed particularly to apply to actual classroom utilization of the teaching materials which will fit into already existing curriculum situations and teaching patterns.

Why hold a conference dedicated to the use of audio-visual aids at a time when education is undergoing the fires of war? The answer is given by the convention committee: "Now, if ever, we need to use every worthwhile technique to insure the economical fulfillment of the curriculum. Perceptual aids to learning are not 'gadgets' and 'devices' in the long freight train of educational panaceas. When intelligently used by wide-awake teachers, audio-visual aids clarify and vitalize the curriculum. Educational objectives can be reached in a shorter span of time when the learning process is stimulated and enriched by audio-visual assistance. The skillful and wise use of these materials requires informed teachers aware of the possibilities inherent in their use."

This conference then will be devoted to the exchange of information between teachers and specialists. Among the out-of-state speakers are Dr. Herbert Walsh, Director of the Emergency Training Program for National Defense; H. B. McCarty, Director of Station WHA, University of Wisconsin; Robert B. Hudson, Director, Rocky Mountain Radio Council; I. Keith Tyler, Director of the Evaluation of School Broadcast Project, Ohio State University; S. Stephenson Smith, Educational Counsellor, American Society of Artists, Composers and Publishers; Alice Evans Field, Association of Motion Picture Producers and Distributors of America; A. L. Chapman, Director of Bureau of Research in Radio Education, University of Texas; Major Harold Kent, Radio Branch, Bureau of Public Relations, War Department; and others. Supervisors and classroom teachers will be asked to participate in discussions.

All sessions will be held in the Washington-Youree Hotel, Shreveport.

Connecticut Visual Meeting

The Connecticut Audio-Visual Education Association convened January 17 in West Hartford with President Edward F. Wheeler presiding over the program. Dr. Alonzo G. Grace, State Commissioner of Education, addressed the group on "War and the Citizens of Tomorrow." Other talks were: "Factors Hindering the Development of Audio-Visual Programs," by William H. Couch, and "Developing Democratic Attitudes," by Ralph Rochefort White.

Notes

Visual Aids for Defense Training Classes

A timely mimeographed "Partial List of References" on Visual Aids for Vocational Training Classes for Defense Workers has been compiled by the U. S. Office of Education. Supplements to this list will be issued as additional information is obtained on visual material that may be applicable in the national defense training program.

The explanatory Foreword page states that "the purchase or rental of visual aids with defense training funds, for use in connection with defense training classes operated by public schools, is permissible only when it can be shown that such materials are necessary as a part of the instruction for specific courses. The purchase of visual aids by a local defense training school must have prior approval of the State Director, Vocational Training for Defense Workers."

The instructional material listed in the 44 pages includes motion pictures (sound and silent), slidefilms, filmstrips and charts, and is classified, for the convenience of the instructor, under the following topics: Aircraft, Automobile, Electrical, Foundry, Instructor and Foreman Training, Machine Shop, Plumbing, Radio, Safety, Sheet Metal, Shipbuilding, Welding, and Visual-Aid Sources. Data as to length and prices, and a brief description of the contents accompany each item.

For further information write to Mr. L. S. Hawkins, Director, Vocational Training for Defense Workers, Federal Security Agency, U. S. Office of Education, Washington, D. C.

Dale in Government Work

Edgar Dale, on leave of absence from Ohio State University, has assumed new duties as advisor on educational film problems to Film Coordinator Lowell Mellett in Washington. He will consult with other government agencies and plan study materials for use in connection with the government war program films.

Material for Pan American Day

In anticipation of Pan American Day, the Pan American Union of Washington, D. C. has prepared and is distributing lists of material which will be made available to schools, clubs, civic associations and other study groups. Pan American Day is observed annually on April 14th in all the American Republics.

Probably never before in the history of this hemisphere have understanding and the desire for knowledge been so deep-rooted amongst all the people of the Americas. Not only has the official life of the American Republics become more closely allied and cooperative, but the general public has also given its whole hearted support to the unification of the continent based upon the ideals of goodwill, freedom and mutual respect.

Pan American Day—the Day of the Americas—is observed on April 14th of each year to commemorate the political, economic and spiritual unity of the

twenty-one Republics. The Day has been set aside for special observance because on that date in 1890 the First International Conference of American States, meeting in Washington, adopted a resolution which resulted in the creation of the organization which is known to-day as the Pan American Union. Another reason for the selection of April 14th as Pan American Day is the fact that practically all the schools of the continent are in session at that time.

As on previous occasions the Pan American Union this year has prepared special material to assist groups which plan to observe Pan American Day. This material is primarily directed toward use in the schools, where Pan American Day programs have become an established feature and an effective means to stimulate the interest of students in the Americas.

Radio's Offspring: The School Recording

(*Concluded from page* 96)

It is almost impossible in the space of a magazine article to give even an inkling of the variety of comments and suggestions which the teachers added freely to questionnaires on which they were asked to report. Following are examples:

"We Build a Nature Trail" is the children's favorite series. They especially like the record, "On the Trail at Night." They have lined a strawberry crate with wire and have it in the brook back of our schoolhouse. In it they have plants, tadpoles, snails, and fish. We have a large glass bowl and are trying to make a balanced aquarium. This morning I took the children to visit the game protector. Words cannot tell you how much the children and I have enjoyed the records. Our eyes have been opened wide. . . . I feel the pleasure these little children in this rural district received is worth the use of the records. I think they present a grand way of teaching. The children really remember more about the records than I do.

I feel that there is much character training in the records on *Environment*. . . . It is difficult to know exactly how much is gained at the time of playing for many times the children make references to records weeks after they have been played.

After hearing "That Hawk's not Guilty" the pupils planned to educate the neighborhood on the subject of hawks. . . . One boy reported recently that he felt that he had not had much success but would keep on trying.

We like the idea of each record's being a unit within itself, but we also like the feeling of tie-up in the 10 records of "We Build a Nature Trail." This feeling has been of assistance to us in our English composition. We work to have the sense of organization and sequence which we got in "We Build a Nature Trail" carry over into the booklets we make. . . . The humor was a stirring feature. Even though all the records were given the same careful consideration I felt many times that records in this series were played over to hear the "funny part" of the dramatization. On the whole we did well to keep our interests as high as we did since so many of us never get amusement above the western picture shows and cowboy music.

All the records in the series, "How Country Children Live," were well liked. The pupils especially liked these because the characters in them lived in the country like themselves. Almost everyone in the school is trying to raise something for himself. Joe has one hill of corn. Some are raising calves or lambs. Even William who is always telling us about the city now plans to be a farmer.

We listened again to the record, "Corn Belt Boy," as you suggested, and the pupils selected and listed the geographical facts they could obtain from the story. Then we noted the implied facts. We still have a feeling that the record misses an opportunity for presenting "local color" and think that a different situation might help.

Certainly the results of the experiment warrant the production of many more records of the type used. Flexible and in keeping with the methods of the creative country school, they afford pleasure, arouse interest, stimulate activities, help children learn to think, and provide socialization.

WANTED

Information on Summer Courses

A list of 1942 summer courses in Visual and Audio-Visual Instruction will appear in the April and May issues of EDUCATIONAL SCREEN.

Readers who know of such courses are earnestly asked to send us the names of institutions offering them, together with such data as: Title of course, name of instructor, dates of summer session, credits, contents of course.

A Method for Darkening Classrooms

Helen Price
Public Schools, Lewiston, Idaho

IN the Lewiston Public Schools much use is made of all types of projection equipment. Lack of funds to buy materials to properly darken the fourteen classrooms was found to greatly handicap teachers in their use of visual aids. The solution worked out at the Webster School has been so economical and still so entirely satisfactory from the teaching point of view, that it seems worthwhile to pass the plan on to others facing the same problem.

Essentially the plan worked out provided for the purchase of eight opaque shades which were kept in the principal's office; the installation of mountings for these shades at the bottom of every window in each of the fourteen classrooms; the installation of a pulley at the top of each window with a cord for pulling up the curtain from the bottom; the training of a group of children to carry the shades to the room to be darkened, and to quickly place the shades in position. It was found that any room of the fourteen could be darkened by this method within ten to fifteen minutes. The total cost was about fifty dollars.

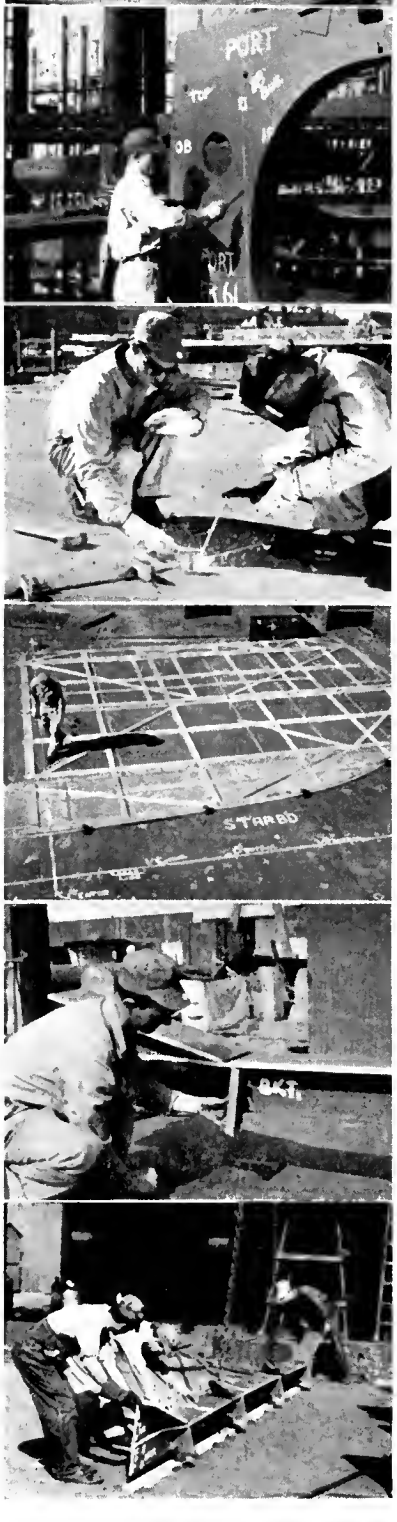
The number of opaque shades needed was determined by the number and sizes of the windows. Even though the windows vary in size, shades of two different widths were made to fit all of the windows by carefully installing the shade mountings. The shades, either black, or black and tan, mounted on a spring roller, were wide enough to extend sufficiently over the casing to prevent too much light from entering.

Each window was permanently equipped with the two necessary mountings. Special mountings for using shades that raise instead of lower may be obtained but were not too satisfactory. They held the shade tightly in the mounting but it was difficult for children to quickly slip the roller in and out of position. Regular shade mountings proved very successful by using a short copper wire in the one mounting, so as to prevent the shade from dropping out of the slot. It was necessary to use a level to install the shade mountings or the shade would not wind straight.

The lock pulley and cord were also permanent equipment on each window. The pulley was placed at the center top of each casing. The cord, long enough to reach double from the bottom of the window to the top, was run through the pulley. The ends of the cord were securely tied together. By hooking the knot over a screwhook that was used instead of a pull, the shade was easily raised and lowered. The location of the screw hook in the shade was made accurate by using a plumb line from the pulley.

Reliable boys from the elementary grades were selected to move all of the necessary projection equipment from room to room and place the shades in position.

Two scenes at left show fitting and fairing of floors and longitudinals into an innerbottom.



Illustrations from top to bottom show: (1 and 2) Setting a web frame and transverse deck beam; (3 and 4) Laying off boundary and stiffener locations on a watertight transverse bulkhead; (5 and 6) Laying off and fitting a center line stiffener for a transverse bulkhead.

Films for Training Shipyard Workers

TO speed the training of the army of novices required in the nation's mushrooming shipyards, the U. S. Office of Education has just released a series of ten sound films on shipbuilding. These films, which are being made available to schools and training centers through Castle Films, 30 Rockefeller Plaza, New York City, are the latest of a series of fifty training films produced under government auspices and with the cooperation of private commercial organizations, to facilitate the training of war workers. Previous releases include 5 films on the *Engine Lathe*, 5 on the *Milling Machine*, 3 on the *Vertical Boring Mill*, 4 on *Precision Measurement*, 3 on the *Shaper* and 2 on the *Radial Drill* for the instruction of shop workers.

Covering in detail shipbuilding skills from the preparing of the keel block to the fitting of deck plates, the new ten subjects have been planned to assist experienced ship artisans in training inexperienced workers in new and constantly changing environments.

According to A. F. Johnson, Coordinator of Shipbuilding, U. S. Maritime Commission, the films should be invaluable in helping this country achieve its goal of 8,000,000 tons of shipping this year and 10,000,000 tons in 1943. Pointing out that five years ago there was very little shipbuilding in this country, Mr. Johnson stated:

"To show learners how the structure and equipment of a vessel are produced and assembled, without interference of related trades and in proper sequence, would be impracticable on the vessel itself. These learners would get in the way of productive workers. The proper kind of motion pictures with essential tasks enacted by skilled men and presented in proper sequence, with supplementary animation and commentary, can be used repeatedly and most quickly to instruct beginners away from the job and with least delay in production.

"They rapidly convey the knowledge of assembly steps, nomenclature, part identification, markings, and supplementary erection procedures, with equal clearness to all learners and with the same opportunities for comprehension.

"They also show skilled manipulation which young apprentices may imitate to their advantage. No other process of visual training can so vividly portray the complete story of producing and erecting typical ship's parts. Nor is it possible to put the student into so many related shop or field environments with little time loss.

"The pictures serve an introductory, a review, and a corrective purpose. They permit, if necessary the breaking down of complete shipbuilding trades into their component skills. This emergency policy may be necessary and justified as the shipbuilding pace accelerates."

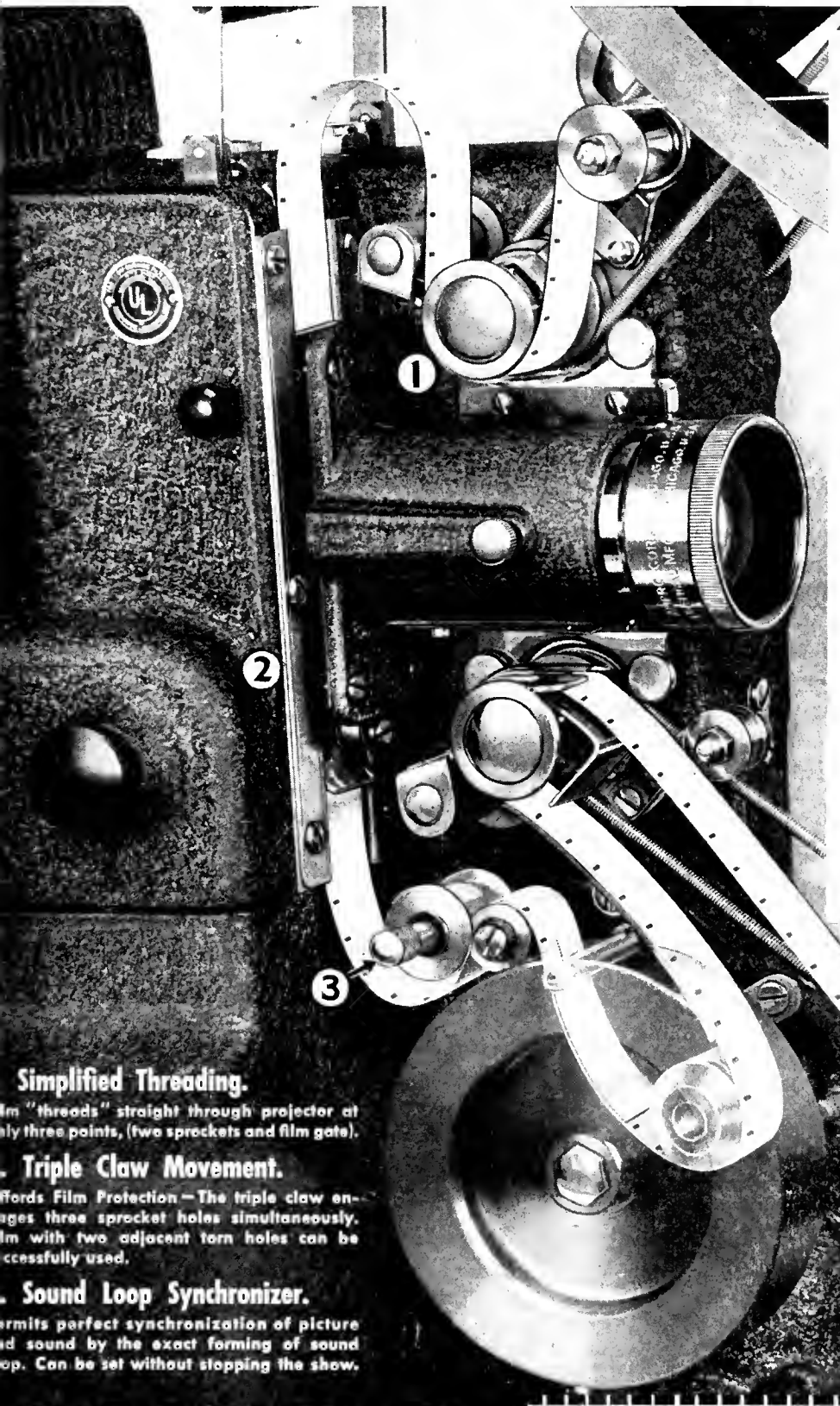
The ten subjects covered in the series of shipbuilding films are:

1. Preparing and setting a keel block and bottom cradle.
2. Innerbottom section: sub-assembly of a closed floor; sub-assembly of a solid floor.
3. Innerbottom section: setting up and fitting floor.
4. Deck girder: sub-assembly.
5. Side frame: sub-assembly of a web frame.
6. Girders: setting a transverse web frame and a horn girder.
7. Bulkhead: Laying off the boundary and stiffeners on a transverse watertight bulkhead.
8. Bulkhead: Laying off and fitting a centerline stiffener.
9. Bulkhead: Setting a transverse watertight bulkhead into hull.
10. Deck plates: Regulating and setting.

The film program of the U. S. Office of Education has been planned to fit the specific needs of the war industries program, and has the endorsement of both industry and labor. It is designed to train for specialized skills, and does not attempt to turn an unskilled worker into a full-fledged machinist in short order.

In order to get the films reproduced and circulated at the lowest possible cost, a contract was awarded to Castle Films, Inc. This company is selling the sound-on-film reels at less than nine dollars a reel.

TRAINING for VICTORY



Simplified Threading.

Film "threads" straight through projector at only three points, (two sprockets and film gate).

Triple Claw Movement.

Affords Film Protection—The triple claw engages three sprocket holes simultaneously. Film with two adjacent torn holes can be successfully used.

Sound Loop Synchronizer.

Permits perfect synchronization of picture and sound by the exact forming of sound loop. Can be set without stopping the show.

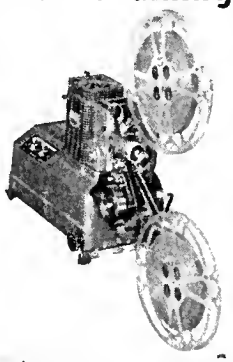
Take Advantage of Industrial Training Films Released by U. S. Office of Education

The U. S. Government has decided that national defense requires wide-spread use of 16mm. sound films for industrial training. The U. S. Office of Education has announced the completion of 50 sound films on all phases of machine shop work and ship building. 18 films are now ready for immediate release thru Castle Films, Inc. official distributors for the U. S. Office of Education. These sound films are available at reasonable cost. By taking advantage of these films, you can increase the effectiveness of your school's participation in the national defense program.

Ampro educational dealers are fully informed regarding this comprehensive sound film program. Contact your nearest Ampro dealer or write us for free catalog describing each film.

Here's Why Ampro Sound Projectors are Widely Used in Industrial and Educational Training

This illustration shows how simple it is to thread Ampro Sound Projectors. Centralized control and other exclusive features make these projectors as easy to operate as a radio. Write for complete Ampro story.



AMPRO

PRECISION CINE EQUIPMENT

THE AMPRO CORPORATION (ES442)
2839 N. Western Ave.,
Chicago, Ill.

Please send me: ☐ Free catalog of Industrial Training films of U. S. Office of Education. ☐ Free catalog of Ampro 16mm silent, sound and convertible to sound projectors.

Name .....

Current Film News

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, have made the following additions to their Filmosound library:

Garden for Victory—2 reels in color and silent, 1 reel in black-and-white and sound. Produced in collaboration with the National Garden Bureau, it

Caring for a "Victory" garden.

shows every practical step in the planting and care of a backyard vegetable garden.

Making the Dead Appear to Live—1 reel, sound, color or black-and-white. Behind the scenes at the Field Museum of Natural History, Chicago, showing how animals and plants brought in by a field expedition are prepared for a habitat group.

Yellowstone Wild Life—1 reel, sound, color or black-and-white. Alfred M. Bailey of the Colorado Museum of Natural History points out the role of the national parks as wild life sanctuaries.

All of these subjects may be either purchased or rented.

The Filmosound Library has acquired a number of films, available free with any rental film. When ordered alone, a $1 handling charge applied. Among such subjects are three films showing production at the Curtis Wright plant, entitled:

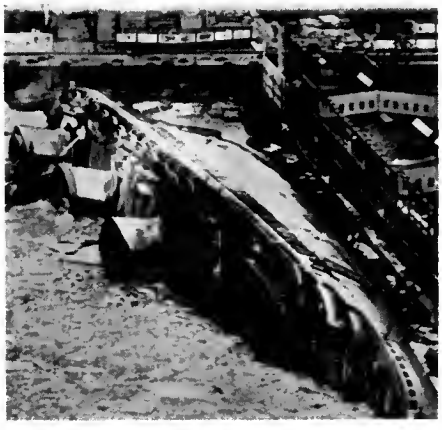
"Curtis-Wright Answers Call for Mass Production"; "America—First in the Air"; "Build for Air Supremacy." Each is 2 reels, sound.

■ National Association of Manufacturers, 14 W. 49th St., New York City, is distributing the following film without charge:

Defense for America—1 reel, 16mm sound—the story of industry's defense output. Through the cooperation of United States military authorities and the Association, Graham McNamee and cameramen have been permitted to go behind the scenes in American factories to show what is being achieved, on the industrial front, in our drive for Victory. Combat cars, heavy guns, fighting aircraft and other machines of war are seen rolling off production lines. McNamee, acting as guide, explains new machines and processes. The film shows the quick change-over of America from peacetime output to an "all-out" wartime effort to assure the preservation of our liberties.

■ Castle Films, Inc., 30 Rockefeller Plaza, New York City, has released motion pictures of the surprise air and sea assault upon Pearl Harbor by Japanese forces December 7th. These graphic scenes, which had been withheld in the public interest, have just been made available by the U. S. Navy Department, and have been included by Castle in the same reel which presents also the dramatic filming of the destruction of the S. S. "Normandie."

Bombing of Pearl Harbor; Burning of S. S. Normandie—title of this latest timely release—offers a single reel of



The S. S. Normandie on its side.

continual action and scenes of tremendous significance.

Russia Stops Hitler—the motion picture record of Russia's magnificent counter assaults driving the Nazi invaders back, is another valuable Castle offering, presenting battle movies never before seen. Soviet fighters are shown in furious bayonet charges against the enemy, and German divisions are shattered by blazing artillery. The mechanized phases of the Russo-Nazi struggle are seen as tanks and planes go into action. The biting winter and its effect upon ill-equipped Germans is portrayed as prisoners shiver in captivity. Stalin gathers Russia's might in Red Square just before sending his armies into battle.

These three films are available in 16mm silent and sound, and 8mm silent, at the usual Castle prices.

■ Film Unit, Division of Information, Office for Emergency Management, Washington, D. C. makes the following announcement:

The New Spirit—Walt Disney's new Donald Duck short on the income tax which was produced for the Treasury Department—is now available in 16mm sound editions. The picture is in technicolor and runs for approximately 8 minutes. It opens with Donald Duck in a military mood, wishing to do his part in his country's war effort. The radio, which is the other main actor, tells him that his service is "Pay Your Income Tax," and how important taxes are in the war effort. The picture then goes into a graphic presentation of the various munitions of war that income tax will buy, ending on a high note of inspired patriotism.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, announce another addition to the series of 16mm. Civilian Defense Training films which they are distributing:

Spotting a Bomber—1 reel, silent or sound. The film contains many detailed diagrams as well as dramatic, realistic scenes that will be of great aid to airplane spotters, air raid wardens and others. The picture is not too technical for the average civilian and therefore can be shown to all audiences.

Making a Hand Puppet—demonstrated by Harry Zarchy, is the latest release in the Gutlohn series of Arts and Crafts films. This subject is based upon material taken from the popular book "Let's Make Something," of which Mr. Zarchy is the author. The film is one reel silent.

Walter O. Gutlohn, Inc., are making available an outstanding group of major features on a graduated fee basis commensurate with school enrollments. Contract rental rates start from $10.00. Complete information will be furnished upon request.

■ American Red Cross, 19 East 47th St., New York City, has a new film on first aid, produced by William J. Ganz, which should be useful for training classes in first aid:

Before the Doctor Comes—4 reels, 16mm sound. Reel 1 demonstrates the control of bleeding and care of shock; reel 2, artificial respiration and care for burns; reel 3, leg fractures and how to apply splints; reel 4, arm fractures. Purchase or rental. Orders should be addressed to Harold Enlows at the American Red Cross.

■ Bray Studios, Inc., 729 Seventh Ave., New York City, have produced a 16mm sound film for Switlik Parachute Co., Trenton, N. J., which can be obtained upon payment of transportation charges only:

Parachutes for Safety—covering the various uses of parachutes, how they are made, and tested for use. The film shows the correct method of packing a Switlik chute, and an Army and Navy chute; and how to properly service and maintain a parachute.

SPENCER — *the leader in still projection*

Optical instruments are so vital to defense that the nation's needs absorb practically all of Spencer's greatly increased production. We are, of course, endeavoring to give our customers the best possible deliveries, but understandable delays and shortages are bound to occur.

TODAY'S high standards of color projection owe much to the many optical and mechanical improvements originated by Spencer Lens Company.

Spencer offers the utmost in brilliance and clarity of screen images and in operating conveniences.

The complete Spencer line includes many types of still projectors in addition to the three pictured above. Among them is one which will fit *your* special requirements. Dept. C12 will send you detailed information upon request.

Spencer Lens Company

BUFFALO, NEW YORK

Scientific Instrument Division of

AMERICAN OPTICAL COMPANY

Sales Offices: New York, Chicago, San Francisco, Washington, Boston, Los Angeles, Dallas, Columbus, St. Louis, Philadelphia, Atlanta

HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 92)

Brandon Films (3)
1600 Broadway, New York City
(See advertisement on page 115)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on page 89)

Commonwealth Pictures Corp. (2)
729 Seventh Ave., New York City
(See advertisement on page 119)

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago
(See advertisement on inside front cover)

Dudley Visual Education Service (1)
2169 W. Wilson Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Co.
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 109)

Eastman Kodak Stores, Inc. (3)
Eastman Classroom Films
356 Madison Ave., New York City

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erpi Classroom Films, Inc. (2, 5)
1841 Broadway, New York City

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
25 W. 45th St. New York City
(See advertisement on page 113)

Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.

Heidenkamp Nature Pictures (1)
538 Glen Arden Dr., Pittsburgh, Pa.
(See advertisement on page 115)

Hoffberg Productions, Inc. (2,5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 116)

Knowledge Builders Classroom Films
130 W. 46th St., New York City (2, 5)

Mause Film Library (3)
1521 Dana Ave., Cincinnati, O.
(See advertisement on page 115)

Post Pictures Corp. (3)
723 Seventh Ave., New York City

Douglas D. Rothacker
729 Seventh Ave., New York City

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 110)

Visual Art Films (2)
1303 Porterfield St., Pittsburgh, Pa.

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
Old Colony Bldg., Des Moines, Ia.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 121)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 92)

DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago
(See advertisement on inside front cover)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 119)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 116)

RCA Manufacturing Co., Inc. (2)
Camden, N. J.

S. O. S. Cinema Supply Corp. (3, 6)
636 Eleventh Ave., New York City

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on page 111)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 115)

Radiant Mfg. Corporation
1140-46 Superior St., Chicago
(See advertisement on page 117)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Stanley Bowmar Co.
2929 Broadway, New York City

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILMSTRIPS

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 116)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 90)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 119)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

The Stanley Bowmar Co.
2929 Broadway, New York City

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 113)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago
(See advertisement on inside front cover)

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Keystone View Co.
Meadville, Pa
(See advertisement on page 90)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 123)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

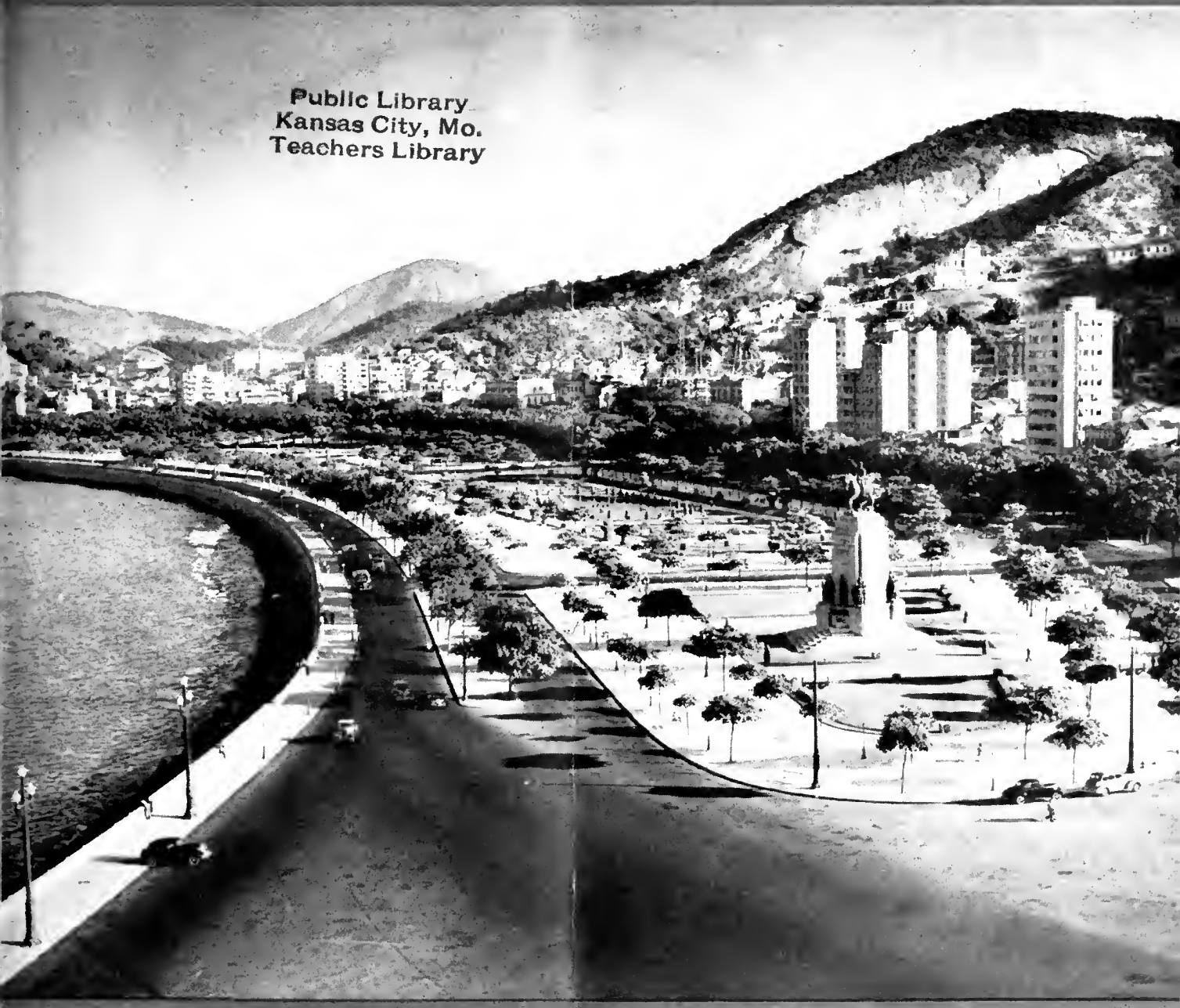
REFERENCE NUMBERS

(1) indicates 16 mm silent.
(2) indicates 16 mm sound.
(3) indicates 16 mm sound and silent.
(4) indicates 35 mm silent.
(5) indicates 35 mm sound.
(6) indicates 35 mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.

EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION



25¢ A COPY $2.00 PER YEAR

APRIL, 1942

With a Spencer VA Delineascope, pupils can see dramatic magnifications of prints, photos, pages from books and periodicals, maps and lantern slides. It is easy to bring the advantages of the *right* pictures at the *right* time to your classes. Work is easier and more efficient.

Better teaching prevents many failures. This means a great saving for the school and community and an even greater benefit to the pupils themselves.

Write Dept. D12 for a free copy of
"Opaque Projection — A New Frontier in Teaching."

Spencer Lens Company

BUFFALO, NEW YORK
Scientific Instrument Division of
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Sales Offices: New York, Chicago, San Francisco, Washington, Boston, Los Angeles, Dallas, Columbus, St. Louis, Philadelphia, Atlanta

NOW! The Picture that took Months to Film!

"BRYCE-ZION-GRAND CANYON"

8mm. 16mm.

Own this awe-inspiring trip thru nature's mightiest creations!

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All Castle 16 MM films are processed by VAP-O-RATE. All Castle 8 MM are also treated.

LOW COST	8mm	16mm	16mm Sound
	50 ft. $1.75 180 ft. $5.50	100 ft. $2.75 360 ft. $8.75	350 ft. $17.50

KODACHROME! This great picture is also available on special order in 16mm Silent or Sound-on-Film original Kodachrome. Ask your dealer or write for special prices.

DON'T WAIT! GET THIS SUPERB FILM AT YOUR PHOTO DEALER'S TODAY!

FREE! New 1942 Castle Films Catalogue describing over a hundred thrilling home movies. Fill out coupon and send for it now!

CASTLE FILMS

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The EDUCATIONAL SCREEN

VOLUME XXI APRIL, 1942 NUMBER FOUR
WHOLE NUMBER 201

Contents

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Address communications to The Educational Screen, 64 East Lake St., Chicago, Ill.

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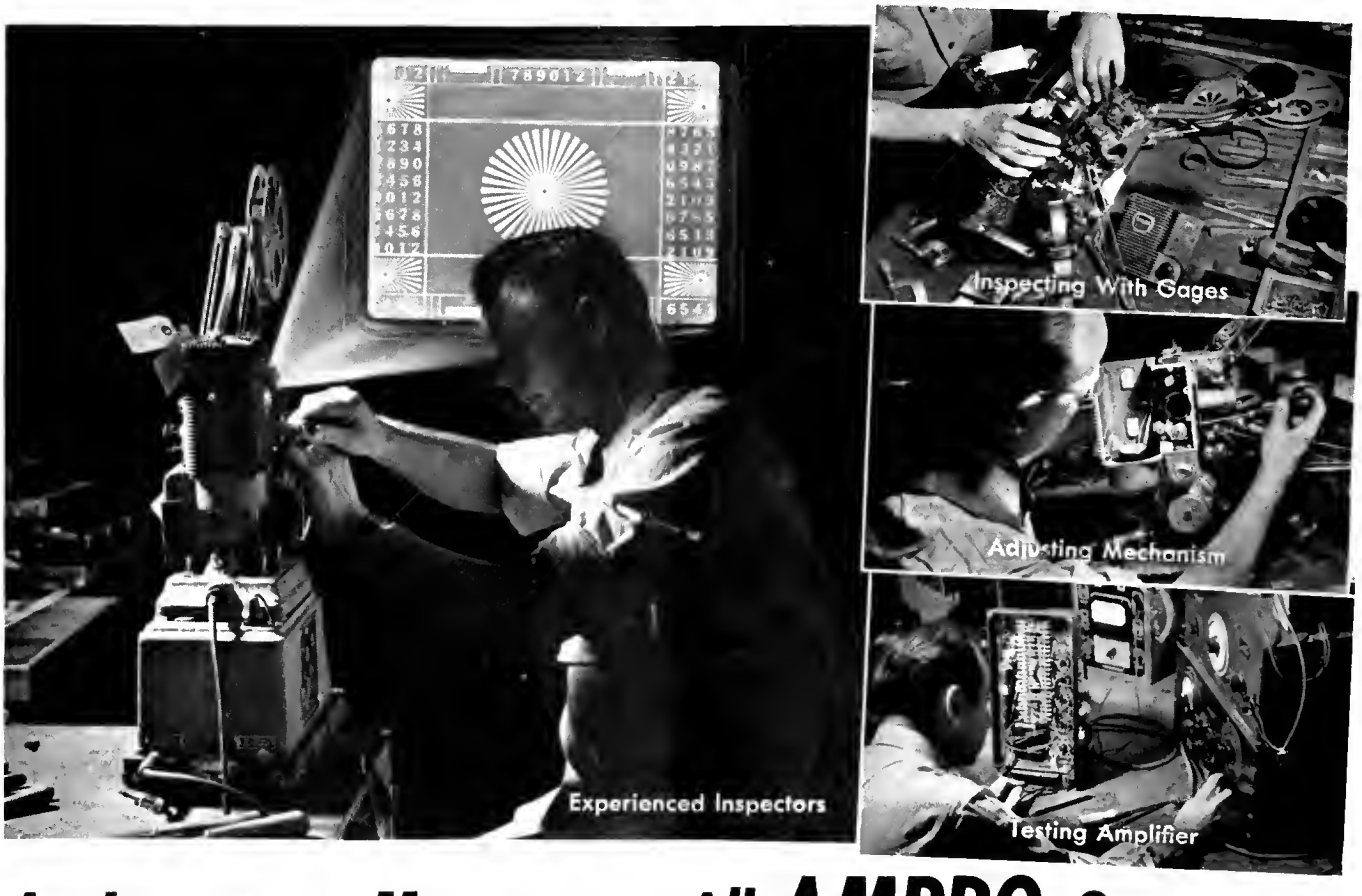
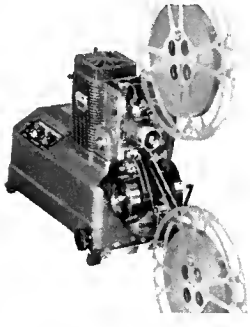


An Important Message to All AMPRO Owners...



Today—every Ampro 16mm. Sound and Silent Projector should play a vital part in the vast U.S. war-time program of training and education.

Today—every Ampro owner has the serious responsibility of making certain that his projector is ready to render efficient service because:

1. Every Ampro projector that is serviced and put back into first class condition relieves just that much of the load of producing new machines for the war effort.
2. There is ample opportunity for using every Ampro for projecting 16mm. films for Civilian Defense, War-time training and the circulation of important information.

For industrial training classes, civilian defense meetings, for vocational schools, church clubs, fraternal organizations and service groups—you can swing your projector into "front line" service for the duration—and help in an important phase of AMERICA'S DEFENSE.

The Ampro corporation maintains complete service departments, manned by men who are experts in reconditioning and rebuilding used projectors. Users report that Ampro maintenance costs are extremely low. You will be surprised at how much can be done at reasonable rates to make your projector as good as new. A routine check-up of your projector will insure long and satisfactory performance, so visit your nearest Ampro dealer today for projector inspection, cleaning, and adjustment.

Write for name of local Ampro dealer.

AMPRO Precision Cine Equipment

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KEYSTONE Follows the Defense Needs of Education

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Keystone offers units—25 stereographs or 25 lantern slides to each unit—as follows:

OUR OUTPOSTS

19A Hawaii **19B Alaska** **19C The Philippines**

OUR NEIGHBORS

(Units published in recent years.)

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No. 21 Our Neighbors in Western and Northern Canada
No. 22 Our Mexican Neighbors
No. 23 Living in the Caribbean Lands
No. 24 The East-Coast Countries of South America
No. 25 The West-Coast Countries of South America

(Units published very recently.)

No. 22A Cuba and the West Indies
No. 23A Central America
No. 25A Venezuela, Colombia, Trinidad, Curacao, and the Guianas
No. 25B Brazil
No. 25C Argentina, Uruguay, and Paraguay
No. 25D Peru and Ecuador
No. 25E Chile and Bolivia

Title Lists and Other Additional Information Will Be Sent Upon Request

Keystone View Company

Meadville, Penna.

What Shall I Do?

A very practical discussion of selection, organization and presentation of materials for a teachers course in visual instruction.

ALVIN B. ROBERTS
Principal, Haw Creek Township High School, Gilson, Illinois

PROBABLY every instructor who has been invited or "drafted" to offer a course in Audio-Visual Instruction has asked himself many times, "What Shall I Do?" The reason for this inquiry is quite obvious because few, it any, of the instructors now offering such courses have had any formal training in this field. One might ask, "Why this lack of formal training?" Again the answer is quite obvious, for while educators have been interested in the movement of visual education for the past twenty years or more, the interest was not sufficient to demand formal training. Then too, there existed then as now two divergent views in regard to giving this training. There were those in one group who favored offering training in the use of audio-visual aids as a part of the regular methods courses; while in the second group there were those who felt that the problems concerning the proper use of audio-visual aids and the administration of an audio-visual program are too numerous and varied to be included in a method course and, therefore, should be given in a separate one. While probably the basic arguments used to support each of the opposing views were more or less sound, each group failed to recognize or at least do anything about the training of teachers in order that they would be qualified to meet the situation whether in a methods course or a seperate class.

Then as a result of the rapidly growing interest in the use of the motion picture as an aid in teaching, and the glaring abuse of the film which in all too many cases was used simply as entertainment, or worse yet just to fill in a period, the teacher training institutions were asked to offer courses in audio-visual instruction. The rapidity with which such courses have been introduced, especially during the summer sessions, shows how great the demand for training of this type.

When invited four years ago to give a course at Western Illinois State Teachers College, Macomb, my only qualification was several years of experience in the use of visual aids; namely, the projected still picture, the field tour, and the motion picture (both silent and sound). In addition, I had read much of the literature in the field. However, I found it very difficult to formulate my reading and experiences into an outline of a course suitable for college students. After spending some time in trying to round out a course I hit upon the novel idea of contacting other instructors of Audio-Visual Courses for suggestions. I mailed fifty-five letters; I received twenty-two replies. Two sent me a bibliography; three suggested books I might find helpful as basic texts; the other seventeen gave me some consolation, but they were unable to send me any helpful material, since they, too, were offering the course for the first time.

After further study of my plans and careful consideration of the few suggestions I received from those in the field I decided to find out what the students in my class wanted and to organize the course on that basis. In my first class of thirty-one students there were teachers of primary, intermediate, and upper grades; teachers of almost every department in high school; administrators of both elementary and high school level; and several all grade or rural teachers. To my question, "Why did you elect this course?" I had many interesting replies, nearly all of which I could group under one of the following:

1. To learn how to use audio-visual materials
2. To learn how to set up and administer an audio-visual program
3. To learn to operate projectors
4. To become acquainted with the content of several films
5. To find from what sources audio-visual materials may be secured.

Students in all of my other classes have also had an opportunity to state what they hoped to get out of the course. Consequently, I have found it necessary to reorganize my procedure every year in order to more adequately meet the needs of the students. To attempt to meet the numerous and varied needs of the members of the class, the work of the course has been divided roughly into five major divisions which cover the five objectives listed above. They are: 1. Reading assignments, 2. Class discussion, 3. Demonstrations, 4. Laboratory work, and 5. Problem assignments.

In planning the work in each division it is necessary to know more about the school in which each member of the class is teaching. This information includes the type of equipment available; method or methods of financing audio-visual program; attitude of the supervisor, principal, superintendent, board members, and people of the community toward the use of these aids; and other information that will be of value in planning the work with the student. Hence, by studying the need of each student one can plan the work of the course so it will more nearly meet the need of each member.

On this basis the *Reading Assignment* is divided into two parts:

A. Text and reference material which will give all members of the class the basic understanding of the place of audio-visual aids in our educational program of today.

B. Special assignments in the field of major interest of each student. From the vast amount of material now available it is possible to find additional reading on almost every problem. This may range from the problem of the administrator in financing an audio-visual program to that of the teacher in making a school movie.

The nature of the *Class Discussion* will also be determined by the interests of the students. However,

in order to round out or fully develop a course in audio-visual instruction, there are certain units that receive the greater portion of the time devoted to this work. They are:

A. Principles underlying the successful use of audio-visual material.

B. The still picture projector and material, including hand-made and photographic slides.

C. The moving picture—both silent and sound.

D. Audio equipment including phonograph, recorder, play-back system, and the radio.

E. The field tour.

F. Problems of administration.

In discussing the various units throughout the course there are two points which the students must have clearly in mind:

A. Basic principles to observe when using audio-visual aids.

B. Correlation of audio-visual aids with regular teaching procedures.

Regardless of how well the other work of the class is done, unless the student has a clear understanding of these two points, most of the value of the couse will be lost. It is only when one understands these two points that the motion picture, the radio, and the field tour will be used as a regular aid in teaching—and not as a device for entertainment. This class period also gives the students an opportunity to tell the group of their experiences with audio-visual aids. Later in the term, as a result of their reading and listening to the experiences of others the students are then in a position to suggest ways of improving their own program.

Probably the most important part of the course centers around the proper use of the audio-visual aid in the classroom. No matter how highly-organized, or how efficiently films and other materials are distributed to the different classrooms, the program is doomed to failure unless the teacher uses these aids in such a way that the students get the maximum value from them. I regret that all too many of the students who come into my course look upon the motion picture as a "picture show" and not a teaching aid.

Through *Demonstration* one can show the proper use of films. In most of our teacher colleges there are critic teachers who can demonstrate the use of the motion picture film for the audio-visual students right in her own classroom. This has one advantage, in that the students may see the film presented and note the reaction of children to it. Generally, however, they cannot see or hear all the preparatory or follow-up work.

The instructor of the audio-visual course may also give one or two demonstrations. I have also found that members of the class can give some very interesting demonstrations. I believe the students who plan a demonstration will gain a great deal not only from their own study and planning, but from helpful suggestions from other members of the class.

(*Concluded on page* 146)

The Neighborhood Movie Used in a Social Studies Program

IVA LOU JONES
Carbery School, Washington, D. C.

Some educational possibilities of selected theatrical films when correlated with learning in a sixth grade history classroom.

LEISURE and work activities, distinctive as they are, should be properly balanced. Too much of either one, without a wholesome amount of the other, warps one's outlook on life. Both help the growing child to understand the world in which he lives. He needs a wide variety of real and vicarious experiences in both areas in order to make his world increasingly meaningful to him. The motion picture is one of the newer means of instruction to be used in this connection. It has long been used as a means of entertainment; now, carefully selected, it can be made to help young citizens realize their social heritage and their responsibilities.

In bringing the neighborhood motion picture to the aid of the classroom (instead of being its competitor) the assistance of Mr. Arthur E. Phillips, Manager of

A scene from a pantomime on Founders of Our Nation.

A patriotic pageant staged by students, inspired by the films, "Land of Liberty" and "The Flag Speaks."

the Stanton Theater, Washington, D. C., was solicited. He was most cooperative in furthering the welfare of the school children in that vicinity and readily consented to show certain selected pictures after school hours for a very nominal admission.

The writer selected films that were educational in content and that would correlate well with school learnings. These were ordinary, commercial films, designed for the general public, but with qualities that made them especially useful with younger children.

The use to which the films were put in one sixth grade classroom will serve to illustrate their educational possibilities for the elementary school. In this particular grade the center of interest was concerned with the contributions of great leaders and inventors to the development of our country. To see and to hear as well as to read about the characters and events of history meant that three approaches to understanding were being utilized instead of one.

Certain understandings were common to all films. These included:[1]

The understanding of the interdependence of all forms of life; The understanding of the necessity of man's adaptation to changing conditions; The understanding of man's increasing control of his social environment.

Each film contributed certain understandings that were peculiar to it. The year's program of films, with their basic understandings, together with the activities that followed in the classroom, is shown thus:

November Film: **Edison the Man**

Understandings:

a) Man's increasing control of nature; b) Modern science and the transformation of living and thinking

Activities:

1. Discuss the contributions to communication by Morse and Bell as compared with Edison.
2. Discuss the value of the telephone in the home.
3. Visit a telephone exchange, telegraph office, or broadcasting station to see how messages are sent.

December Film: Dickens' **Christmas Carol**

Understandings:

a) The functions of family life; b) The relation of health to human development; c) Social functions of religion.

Activities:

1. Make a list of well written books and stories that young people might want to read.
2. Read and evaluate specific historical events which were influenced by the church.
3. Give Christmas baskets to the sick and needy.
4. Sing Christmas songs.

February Film: **Adventures of Marco Polo**

Understandings:

a) Man's constant endeavor to improve his living conditions; b) Masses of men struggle constantly to gain freedom from domination by the few.

[1]Course of Study for Virginia Elementary Schools, Grades 1-7, pp 7 to 12.

These sixth-grade students who played minor roles in the pageant, watch their fellow actors.

Activities:

1. Make map showing route of travel taken by Marco Polo.
2. Contrast transportation facilities of Marco Polo's time with those of the time of Lindbergh or Byrd.
3. Make a frieze to show the evolution of transportation.
4. Collect pictures showing the contrasting methods of transportation in different parts of the world.

March Film: **Land of Liberty**

Understandings:

a) Democracy as a method of living and thinking; b) Government in a democracy rests upon the consent and civic responsibility of the governed; c) Control of government by forces invisible to the citizen.

Activities:

1. Discuss the outstanding historical events and periods which were attempts to develop political democracy in the United States.
2. Make a book of pictures of people who have made contributions to the advancement of political democracy.
3. Report on current events which are advancing or delaying the development of political democracy.

April Film: **Wagons Westward**

Understandings:

a) Man's constant endeavor to improve his living conditions; b) Movement of population in relation to man's development.

Activities:

1. Make a classroom book showing episodes in transportation of mail in days of the stagecoach.
2. Make a chart showing how time required to carry mail from New York to San Francisco was shortened by: a) Pony Express, b) Railroad, c) Airplane.
3. Discuss the natural forces which retard travel and communication in different seasons.
4. Discuss how transportation facilities have determined population areas.
5. Discuss the reasons for the location of the large trading centers in the United States.

May Film: **The Flag Speaks**

Understandings:

a) Democracy as a method of living and thinking; b) Government in a democracy rests upon the consent and civic responsibility of the governed; c) Control of government by forces invisible to the citizen.

Activities:

1. Read the national constitution to learn the protection extended to citizens.
2. Discuss the ways that the Federal, States, and County Courts provide for the safety of life and property.
3. Discuss the duties and privileges of citizens of a political democracy.

As a result of this use of the neighborhood movie in the social studies program certain benefits were derived. Among them were these:

1. The children learned to get something from motion pictures in addition to mere entertainment.
2. A greater degree of cooperation between members of the community and the school population was developed.
3. Classroom work was vitalized in a particularly effective way.
4. Pupils were able to see the correlation between community activities and those of the school.
5. Citizenship was taught in a way that was especially appealing to children.
6. The pupils gained an increased respect for the need for orderly behavior in places of public amusement.

Noteworthy Joint-Session of Midwestern Forum and Department of Visual Instruction, Zone IV

FOR the fourth consecutive year the Midwestern Forum on Visual Teaching Aids was held in Chicago, March 26-28, 1942, at the Congress Hotel. This meeting was in cooperation with the Department of Visual Instruction, Zone IV, National Education Association.

The first session, on Thursday evening, was opened by William C. Reavis, of the Department of Education, University of Chicago, and General Chairman of the Forum. Dr. Reavis briefly sketched the history and purposes of the Midwestern Forum. He pointed out that in previous years emphasis has been given to the demonstrating of new techniques, devices, and materials in the various clinics. This year a general session has been added to provide for the discussion of problems of common interest which have arisen out of the war emergency. An additional innovative feature, the exhibitors' evening, provided an opportunity to everyone to inspect the latest developments in audio-visual equipment and materials.

High Place of Visual Aids in Total War Program

Mr. L. W. Cochran, Supervisor of Visual Instruction, University of Iowa and President of Zone IV of the D.V.I., spoke on "Present Trends in Visual Teaching Aids." He emphasized the need for extending the education of teachers in the utilization of visual materials by giving several examples of poor film use in teaching. On the encouraging side, Mr. Cochran pointed out the rapid increase in the use of visual aids, and in the demand for production of new materials, and praised the contributions made by certain centers in experimenting with techniques of film utilization. Mr. Cochran felt that because of the war emergency the use of visual materials in higher institutions of learning would increase.

Mr. Floyde E. Brooker, Senior Specialist in Visual Aids, United States Office of Education, spoke on "How Visual Teaching Aids May Be Used in Furthering Our Total War Program." He pointed out the phenomenal growth of the audio-visual field as indicated by the great increase in number of sound projectors in the schools. The last Government survey disclosed over 20,000 of them. The materials required to supply the demands for visual equipment, in the aggregate, constitute no unimportant demand on the nation's productive capacity. He said, "This demand must be justified by the uses to which the materials will be placed. Is it possible for school people to prove that a ton of pressed steel can better go into four hundred forty film cans than into tank parts? Can educators justify the use of projectors in schools when materials that go into their manufacture are so vitally needed for implements of war?"

As a partial answer to his own question Mr. Brooker called attention to the tremendous task of industrial training that faces the nation. To keep an army of seven million in the field requires approximately seventeen times that number of workers at home. Many of these workers must be trained to do their jobs. The only way in which this can be accomplished in the short time available is through the use of audio-visual techniques.

Governmental agencies are attempting to provide the needed audio-visual aids. There has been an unprecedented increase in the production and utilization of motion pictures designed for specific instructional purposes in the United States at the present time. Mr. Brooker cited the Army and Navy Training motion picture program as outstanding examples, as well as the Office of Education films. During this period, he said, motion pictures may stop being a pedagogical toy but will come of age and become a real tool of society. Teachers can help by freely offering their suggestions and criticisms of the materials as they are released, and by suggesting ways in which they can best be used.

In his address, "Visual Education in International Affairs," Mr. Kenneth MacGowan, Director of Production, Motion Picture Section, Office of Coordinator of Inter-American Affairs, described the role of the motion picture in international relations with particular reference to Latin America. Mr. MacGowan stated that his office is drawing upon and adapting existing theatrical and educational films, as well as producing new material for promoting good feeling among the Americas. Efforts are being made to utilize the film distributing agencies now in operation to circulate materials on Latin America in this country.

In discussing the use of motion pictures in creating international understanding, Mr. MacGowan emphasized the fact that not only is it necessary to interpret Latin America to the people of this country, but it is also essential to interpret this nation to Latin

A scene from one of the Office of Education films on the Milling Machine, released by Castle Films.

American countries and each Latin American nation to its neighbors. Such undertakings require much tact, for minor errors in film presentations may offend Latin American audiences. The problem of interpreting this country to Latin America is further complicated by the lack of projection facilities in those countries.

In closing, Mr. MacGowan described some of the films now in use in promoting Inter-American solidarity. Films from Latin America being prepared for distribution in the United States include: *Americans All* (2 reels), *South American Medley* (4 reels on Rio de Janeiro, Buenos Aires, Montevideo, Colombia and Venezuela), *Our Neighbors down the Road* (4 reels on the Pan American Highway), *Mexican Fiestas* (4 reels), *Argentine Soil* (2 reels), *Guatemala Sketchbook* (4 reels), *Orchids* (1 reel), *Mexico Builds a Democracy* (2 reels), *Argentine Industry* (2 reels). In this work, Mr. MacGowan said, advice is constantly being received from the State Department. Mr. MacGowan also called upon members of the education profession to write in their suggestions regarding study guides, film ideas, and anything else that might help to make the use of motion pictures more successful.

Mr. William F. Kruse, Manager of Film Division, Bell & Howell Company, was called upon to say a few words at the conclusion of the session. Referring to Mr. Brooker's speech, he stated he did not believe it should be a question of "motion pictures or guns." Wars are not won by guns alone, he said, but by men behind the guns, and men behind them as well. In addition to the need for films in the training program, is the need of films for morale. People want to know what is going on and motion pictures provide a medium for mass communication. Every projector should be mobilized and put to work day and night in an all-out war effort.

Reports on Priorities

Mr. H. E. Erickson, Director Educational Sales Division, Ampro Corporation, reported on the effect of priorities on manufacturers of visual equipment. They have been affected in two ways—first in the curtailment of supplies of materials which normally are used in the manufacture of projectors, and second in the limitations of distribution which require the use of a priority number to obtain equipment. Before manufacturers are permitted to ship a projector, the user must prove to the entire satisfaction of Government authorities that the projector will be fulfilling a vital purpose in the war effort.

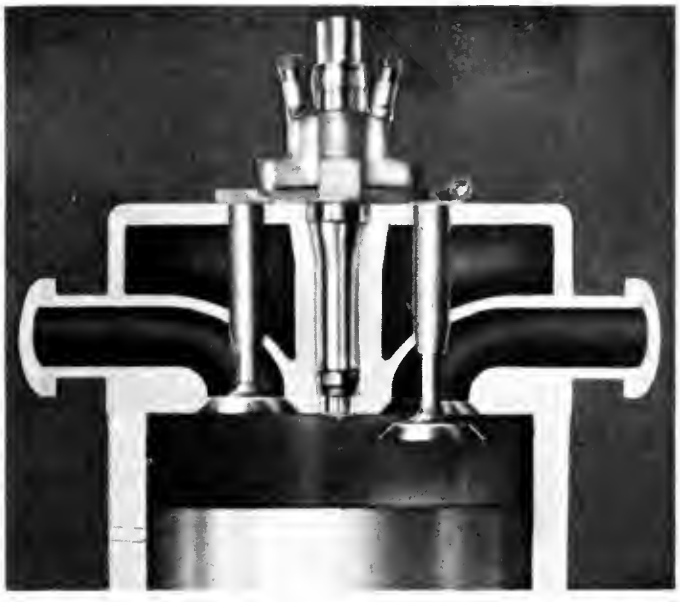


Illustration of the Diesel engine, from the General Motors film "Diesel, the Modern Power," shown in a secondary school clinic.

In addition to the recognition of projected pictures as a vital training medium for speed and accuracy in the war effort, Mr. Erickson pointed out another significant benefit resulting from these regulations in the form of school-owned films and the development of school owned film libraries. Heretofore this has been somewhat restricted because of the amount of money required for film ownership. He stated that the defense training films produced by the U.S. Office of Education have been made available at such a reasonable cost that every school who can use this type of film should purchase them, and through this experience establish the fact that films must be owned if they are to be used efficiently in the classroom.

To cooperate efficiently with the Government in the manufacture, distribution and intelligent use of those equipments which will be available, an association called the Visual Equipment Manufacturers Association has been formed. To further cooperate with the Government, substitute materials have been used where necessary.

Highest priority ratings must be considered first in filling orders regardless of the date of receipt of the order, with the result that the manufacturers cannot promise a time when equipments may be expected by the customer. Priority will be given those who indicate on the application that they are using U.S. Office of Education Defense Training Films actively in their vocational training program and/or a vital similar film use related to our war effort. In conclusion, Mr. Erickson promised that the needs of visual education would be a primary consideration after fulfilling the immediate obligation to the Government itself.

Mr. C. R. Reagan, President of the National Association of Visual Education Dealers, reported on the effect of priorities on the dealers of visual equipment. He expressed considerable concern over the Government's policy in the distribution of its films, and felt that enough was not being done intellectually and emotionally in the war emergency. If motion pictures can help win the war, why not use them, he asked. Mr. Reagan also summarized the progress of the new state organization for visual instruction in his home state of Texas.

Mr. J. E. Dickman, Director of Visual Education, Chicago Public Schools, next told of the effects of priority restrictions on visual education in schools. He cited the case of Chicago schools as an example of the limiting effect of priorities. While they desire to purchase one hundred projectors this year, twenty is the most that can be hoped for. Shortages are also felt in reels, cans, film cleaning fluid, and other accessories. They have been carrying on some experimentation with plastic reels. If projectors cannot be obtained, the money will be used to purchase more films for the school system.

Elementary-School Clinics

ORVILLE T. BRIGHT, Superintendent of Schools, Flossmoor, Illinois, *Chairman*

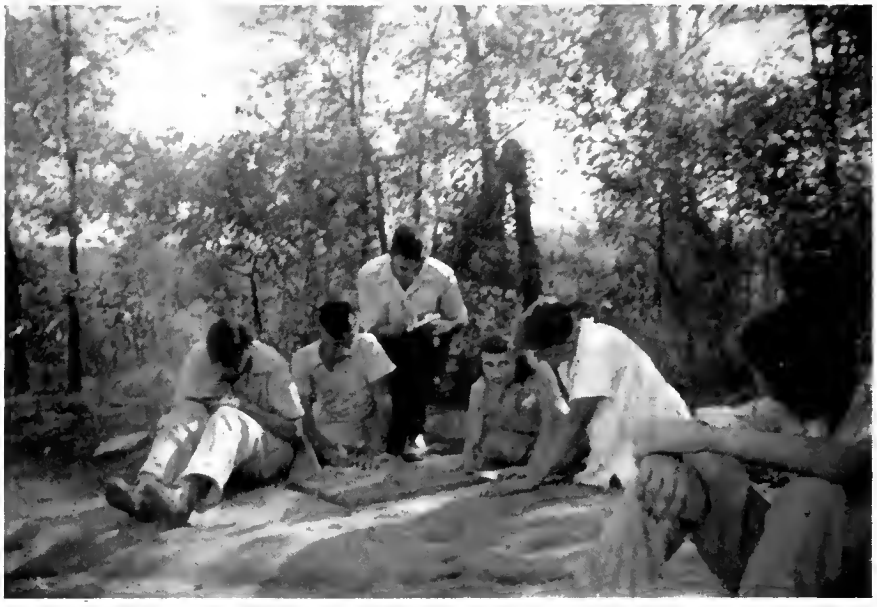
Three Sessions of Elementary-School Clinics included demonstrations of the use of visual aids in six different subject areas at primary, intermediate, and upper grade levels.

The first demonstration, a sixth-grade lesson centering around the sound film *The Perfect Tribute*, was conducted by Miss Mildred C. Letton of the University of Chicago Elementary School. As an introductory to the film-showing, Miss Letton read parts of the story and asked the pupils to see how closely the film followed the book. The significant value of films in correlating history and literature became apparent as the class discussed and compared in terms of their historical significance the motion picture and story versions of Marian Shipman Anderson's classic. A sheet was then distributed to the pupils on which they were to fill in the film version of the various scenes.

Hand-made and photographic slides were used in a primary reading lesson demonstrated by Miss Florence Hedtke of Bowen School, Riverdale, Illinois. The children read a simple story as it was flashed on the screen in thought units. Later these thought-unit slides were combined with other slides which provided situations for the children to identify, and tasks for them to perform to indicate the extent of their comprehension. The point was brought out that many more things were used in this lesson than are normally used in a class period in order that teachers could see the many possibilities.

Physical education and social studies were correlated in the demonstration of Miss Aileen McAllister of the Nichols School in Evanston, Illinois. Other active contributing fields, Miss McAllister stated, were art, music, dramatics, language arts, health and physical fitness. Because of the current interest in South America, the Inca civilization of Peru was selected as the theme for a pageant. Materials used in the preparation included slides and movies related to the subject content and dance composition, and a school-made film for self-evaluation. The children interpreted several aspects of the Inca culture in dance and pantomime. Records of pupil-narration and choral singing were played to explain the action. The class was divided into three groups, each responsible for a scene in each unit. The audience was also shown the film which had been made of the children's work, and which the children had used as a basis for self-analysis and improvement. The film taught them the need to express themselves more freely in movements and to improve posture.

Maps, charts, and slides were used in an introduction to a unit on the geography of Australia by Miss Monica Kurch of the Flossmoor School, Flossmoor, Illinois. In this lesson the visual aids were used to present information that created a background of understanding and raised problems for further research and study. Miss Kurch's upper elementary school class showed by their work that visual representation is an efficient method of summarizing a large body of abstract material.



Students on school journey taking notes from plaque on top of Starved Rock

The use of a film to demonstrate and arouse interest in an art technique was demonstrated by Mrs. Kathryn D. Lee of the University of Chicago Laboratory Schools. In the short period after seeing the film, *Broadstroke Drawing*, the upper elementary school children in the demonstration class created several original compositions. These compositions were then exhibited and discussed in the terms of the contributions of the film to the learning of the specific art techniques used.

A silent motion-picture film, entitled *Learning by Doing*, documenting a second-grade unit in foods, was presented by Mr. George McIntire of Michigan City, Indiana. The activities of the children in planning and carrying out their study of foods were shown in great detail in the film. The teaching technique in this social science unit followed the general principles of progressive education.

Secondary-School Clinics

RODGER E. STUTZ, Science Instructor, East High School, Aurora, Illinois, *Chairman*

Three clinics were held to demonstrate the uses of visual and sound materials in secondary schools.

E. M. Wells, Joliet Township High School, Joliet, Illinois, showed the contribution of various types of visual aids in teaching auto mechanics. It was his belief that the type of lesson plan followed was unimportant. All are equally effective if properly carried out and if some definite objective is reached in the work. Charts are a valuable teaching aid but do not give a complete picture. Projection is necessary for that.

The Joliet Township High School has had vocational trade training classes since 1922. At that time the staff began using a ten-reel film on the automobile. The need for modernization to keep pace with the industry and the lack of suitable films made necessary the development of other means of studying the newer trends in design. The opaque projector was added so that pictures of new ideas and certain parts small enough to fit in the machine could be shown much enlarged on the screen. For these pictures manufacturers' bulletins, advertising and shop manuals were used.

In the industrial arts classes where the balance swings to theory and away from practice, the film strip and slide projector are of greater value. Here the unit of study is relatively large and more can be accomplished in a class period. The film strip projector with audio transcription does the best job in trade-training classes where much detailed information about a single unit of instruction is required. It has the advantage also of a well-prepared script and continuity. The sound movie is used for large coverage of non-technical information requiring a considerable amount of continuity and showing a relationship between several units of instruction. It is best used in teaching larger units to greater numbers than can be done in a single class.

Emphasis should be given to specialized instruments called "Rube Goldbergs" which are used for checking the operation of various parts of the car. These are a boon to the trade and a fine learning device in the shop.

To connect the relationship of the information in a lecture with the hand skill or technique of doing the job a combination of the two may be further augmented by the use of large charts or specially prepared equipment.

To demonstrate the right use of various audio-visual aids, the unit on "Testing and Adjustment of Regulators" was used. As an example of a good teaching sound motion picture, *Diesel, the Modern Power* was projected.

Alvin B. Roberts, Principal, Haw Creek Township High School, Gilson, Illinois, and a panel of students from the Haw Creek School discussed their local and national field tours, and illustrated them with colored slides, most of which were of their own making. One member of the panel had made all four trips which totaled 12,000 miles. The first long tour, which was made in the spring of 1937, is known as the Washington tour. The Canadian tour was made in the spring of 1938 and covered not only Montreal and Quebec, but Niagara and Boston. In 1939 the third trip was taken and the travelers visited dozens of historic sites throughout the southern states. During the summer of 1940 the western tour to Yellowstone Park completed the circuit.

Transportation was furnished by the Board of Education in the bus operated by the district. The per capita cost to the Board of Education was about five dollars. Other expenses, which averaged about twenty-two dollars for each tour, were met by the individual. This low cost was made possible through preparing part of the food before leaving and preparing some of the meals as the journey progressed. The best hotels and tourist cabins were used. All of these accommodations had been carefully selected and arranged for in advance.

Originally planned to stress historic scenes the tours quickly embodied the entire curriculum. The student body is largely interested in agriculture. Each student centers his attention on farm customs and methods and relates the lives of the farmer of other sections with his own. The study of science and geography, music and art are greatly enriched by these travels. Literature has a new meaning when the group visits with a cowboy poet at his ranch in the West.

The planning work is shared in part by the students. Each student is required to complete a rather extensive "plan" of each tour. By this method adequate forethought establishes awareness of what is to be studied on the trip. Study periods and discussions and "write-up" time for notes are part of the daily tour program.

These real experiences were preceded by the use of slides and motion pictures. Classroom and theater films, slides and flat pictures were used to review and to summarize the journey.

(A complete discussion of these tours can be found in the article by Principal Roberts on "The Nation, Our Campus" in the January, 1941 issue of THE EDUCATIONAL SCREEN.)

A demonstration on the use of visual aids in a unit on relations between the United States and Latin American countries, was conducted by a ninth-grade class in social studies under the guidance of Mr. Kenneth J. Rehage, University High School, University of Chicago. Three reports were given by student committees, each one of which presented its material to the class for the first time. They made use of maps, 2x2 Kodachrome slides, slides which students have prepared, and slides which were prepared by students but photographed by the University's Photographic Department. The reports were condensed as much as possible because of the time limitation. A discussion period followed each report to give the class opportunities to raise questions. The committees reported on the following subjects: (1) The History of Latin-American Relations with the United States; (2) Transportation and Communication Facilities in Selected South American Countries; (3) Trade Relations between United States and Selected South American Countries.

After each committee had made their separate presentation, the discussion following brought numerous questions from the audience as well as from the class. The spontaneity of the unrehearsed reception of these carefully prepared reports indicated the merits of this method of studying the world scene. The co-operative venture of planning, arranging the material, preparing and selecting the slides, using mechanical art in making the statistical slides, and having a part in the group adventure are additional values which should be mentioned.

This session concluded with a showing of the film, *Mexico Builds a Democracy*, one of the goodwill films to be released by the motion picture section of the Coordinator of Inter-American Affairs.

(Copyright by Publishers Photo Service) (Courtesy Society for Visual Education)

A native water carrier in Venezuela

School Administrators' Clinic

The School Administrators' Clinic which assembled Saturday morning, was organized by William J. Hamilton, Superintendent of Schools, Oak Park, Illinois, with a view to assisting administrative officers in the selection of visual materials for use in school interpretation.

B. I. Griffith, Director of Public Relations, Illinois Education Association, discussed the merits and limitations of standard glass slides in the preparation of statistical material for public information. Selmer H. Berg, Superintendent of Schools, Rockford, Illinois, dealt with the film strip and sound recording as used by the Citizens' Organization of Rockford in carrying on the campaign to secure an increase in the tax rate for educational purposes.

The making and presentation of local school films for use in informing parents regarding the activities carried on in the schools was demonstrated and discussed by Elvin G. Byers, Supervising Principal, Henry W. Longfellow Elementary School, Oak Park, Illinois. Kodachrome lantern slides as used by a city superintendent to acquaint teachers and parents with outstanding activities in the schools, were demonstrated by Charles Bruner, Superintendent of Schools, Kewanee, Illinois.

General discussion followed the four demonstrations.

(*Concluded on page* 142)

MOTION PICTURES— NOT FOR THEATRES

Installment Thirty-six. — Big Business marches on in a continuing parade of large organizations that made non-theatrical history in the Nineteen Twenties.

By **ARTHUR EDWIN KROWS**

MACALARNEY now had the full pressure of delivery on his shoulders. He realized that there was no merit in having just one or two pictures, but that, for a working sales plan, there had to be a sufficient number to constitute a regular, recurring program. He knew, also, that costs could be much reduced by "meshed" production, by a shooting schedule which would enable facilities to be shared by several units at work. Unfortunately, the educational committee was not to be hurried, and it took the position that in some of the earlier scenarios it had been stampeded into acceptances which it would like to reconsider. Glasgow did have a persuasive way with him. That is how leaders get things done.

It was truly an unenviable situation for any production man, even for one of courage and capacity such as MacAlarney. He had to combat not only vexations and misunderstandings from within, but unscrupulous, preying harpies from without. Ordinary pictures representing modern life cost heavily, but films purporting to reproduce the life of bygone periods, with especial settings, properties and costumes to be provided, with all manner of fussy antiquarian details, could run their expenses rapidly into thousands of dollars too much—even in a plan that had begun with a scheduled budget of $12.50 per foot. And when, in order to provide for professorial convenience, there could be no fixed time schedules, there was no anticipating where the costs would end.

Stories, true or not, were rife about the Chronicles casting director having to submit all principals chosen to the scrutiny of professors untrained in such delicate work; about a company and production crew being held on full salary in an Adriondack location for upwards of eleven weeks while alleged experts debated whether the cabin occupied by the characters should have its logs notched or mortised at the corners: about a professor who allegedly scrapped a set at shooting time because a decorative molding was out of period; about some regimental buttons, which were never to be seen closer than about twenty feet, having to be remolded for an entire company of soldiers who were on salary in the interval. And, as even rumors such as these will do, they inspired a disrespect, a tongue-in-cheek service from most of those who were engaged to give a hand. The word spread like wild-fire through the theatrical district that here was a fine, fat, foolish cow waiting to be milked, and players and technical men flocked without conscience to share the cream.

None the less, MacAlarney tried desperately to withstand onslaught. In the production of "Jamestown," the action of which occurred virtually all outdoors, he endeavored to curtail expense by renting the old Kinemacolor lot at Whitestone, Long Island, on which to build a reconstruction of the famous Virginia settlement, but when the production came to be made, the weather was raw and cold, and one of the players, pretending to be an Indian, and half-naked, developed pneumonia and died.

From the start of the enterprise there had been numerous bids from outside

William Wallace Kincaid's intelligent non-theatrical attempt was based on his interest in opportunities there for popular education.

production companies to take over the work of actually making the pictures. Applications had come from Visugraphic (represented then by Tarkington Baker), and others. Some had wanted merely to contract for certain phases of the work, as P. J. Carey and Tec-Art Studios (then situated in the East), for building and dressing sets, some to supply the costumes, others to provide all the players. Now MacAlarney decided that perhaps it would be as well if somebody else did take the responsibility on a flat contract basis. Edwin Hollywood, by this time, had departed from the scene. Kenneth Webb had directed some in 1924. There was a third director named Mitchell, son of Langdon Mitchell, the dramatist. But none had been able thus far to hold the situation in satisfactory control.

The enterprise now favored was headed by Fred Waller, lately in charge of photographing the highly decorated titles on Paramount Pictures, and an expert on camera tricks employed theatrically. Waller had come to us very early in the work, asking for the contract to make all our titles for us. But his fortune had changed since then. With some friends and associates formerly at the Paramount Studio in Astoria, he had formed an organization called The Film Guild, to produce independent theatrical features. One of their ventures had very creditably presented a new actor named Glenn Hunter in "The Second Fiddle." They also did Percy Mackaye's "The Scarecrow." At this particular time they were joined by the celebrated actress, Maude Adams, who was expected to make some experimental productions.

In all events, it was with the Film Guild that the Chronicles of America Picture Corporation now contracted for some of their most economical productions. The director was Frank Tuttle, a former head of the dramatic Society at Yale and subsequently assistant editor of the magazine *Vanity Fair*. He came into film production when Charles Maigne, a director and former scenarist at Paramount, had taken him on, Maigne being disgusted with the lack of imagination of the usual professional writers and looking for a man wholly without studio experience. During his year with Maigne, Tuttle had struck up his friendship with Waller and Osgood Perkins, who was another of the Film Guild group. He did a creditable job for the Chronicles corporation, and today he is an esteemed director of theatrical features in Hollywood.

One of the later Chronicles scenarists was J. Clarkson Miller, long on the staff of Paramount and lately then their script writer for the stars Thomas Meighan and Gloria Swanson. Miller did not want to follow the Paramount production staff to Hollywood, so he accepted the proffered place with the Chronicles. With Courtney he prepared most of the scripts in the later period. The professors themselves tried their hands at scripts, and, it is said, that unit called "The Eve of the Revolution" was composed anonymously by the late George Pierce Baker, the celebrated teacher of playwriting who recently had moved from Harvard to Yale.

Courtney bore the trying situation as long as he could, and then, feeling that it compromised his self-respect, resigned. Miller presently followed. About here, also, MacAlarney decided that he could stand no more, and he left, not so long

thereafter to become editor of the *Ladies Home Journal*.

In all, about fifteen subjects out of a contemplated thirty-six were produced in forty-eight reels: "Columbus," four reels; "Jamestown," four; "The Pilgrims," four; "The Puritans," three; "Peter Stuyvesant," three; "The Gateway to the West," three; "Wolfe and Montcalm," three; "The Eve of the Revolution," three; "The Declaration of Independence," three; "Yorktown," three; "Vincennes," three; "Daniel Boone," three; "The Frontier Woman," three; "Alexander Hamilton," three; and "Dixie," three.

Stephenson brought in, as co-worker on the production scene, Dixon Ryan Fox, of Columbia University, head of the New York State History Teachers Association. At New Haven, Ralph Gabriel gained prominence in control. All that was after my time. When the first two or three units appeared, an effort was made to collect from theatrical release, although from the start MacAlarney and I had protested against any hope of gain from that quarter if the series was to be properly "educational" in the classroom sense. They were shown in theatres by arrangement with Pathé, which later and for a prolonged period became the physical distributor non-theatrically through its nationwide exchanges.

Outsiders did not have their first glimpse of the washed and ironed "Columbus" until October, 1923, the sponsors apparently having considered long before releasing it. The public, on amusement bent, viewed these specimen "Chronicles" respectfully but without enthusiasm, and the theatrical plan was not thereafter pressed. Today the Chronicles representatives hotly insist that there is not and should not be created a basis for comparison between these pictures and the productions of Hollywood; and all that remains to plague such contenders is a statement in their *Teacher's Manual* that "they were professionally made in accordance with the highest standards of the motion picture industry." A recent promotion letter, prepared by an organization official, says, "We are, of course, the first to recognize that their entertainment appeal is low—actually has been since the beginning, when action was purposely held to a minimum."

One of MacAlarney's first undertakings, upon associating himself with the Chronicles organization, had been to gather all material immediately available concerning history teaching requirements in the schools, that production objectives might be made to conform with them. This had followed preparation, several months before and under the personal supervision of Glasgow, of brief synopses of all thirty-six of our intended subjects for the confidential criticisms and approval of a number of carefully selected educators in primary and secondary schools throughout the country. Although at that time, about 1921-1922, there were few recognized standards of "visual education," there was much interesting and valuable speculation; and the start had not been made blindly.

The Reverend Paul Smith gave up his all in pursuit of the will-o'-the-wisp called American Motion Picture Corporation of Delaware.

But now, with some of the picture Chronicles really produced, the sales division became aware of an especially serious obstacle. The educators who were expected to purchase sets for their schools demanded proved teaching procedures in using these films before they would buy. So the sales division, through the University Press, brought pressure to bear upon the Yale School of Education to supply reports on proper tests which apparently no outsider would undertake or finance. In 1924, consequently, the Yale Department of Education began a study of ways and means in which these motion pictures might become actual classroom apparatus. Professor Irving N. Countryman was, perhaps, most active in the preliminaries. Field work was undertaken in the junior and senior high schools of New Haven, and continued until 1929, when a full report was published by the Press under the title *Motion Pictures in History Teaching*, by Daniel V. Knowlton and J. Warren Tilton of the new department there of visual education. In the summer of 1927, a year after his coming into the work, Professor Knowlton toured 6,000 miles to give demonstrations with the picture Chronicles in approximately a dozen leading colleges and university summer schools.

I am told that the released picture Chronicles are the best available films for American history teaching and that, on the whole, they have done good work. The American Museum of Natural History has had three sets of 35mm prints of the Chronicles, and nine sets of 16mm sets continuously on loan to the New York Public Schools. The Chicago Board of Education, by November, 1941, had ordered for use in its public school system fourteen complete sets, or "658 reels" (this is the number reported in various places, although 14 x 48 is really 672). Pittsburgh has been a faithful user, and so has the State Board of Education of Ohio. All this is gratifying to know; but, in the calmer perspective of these intervening years, I cannot forego wondering whether or not "the nearly ten years of exhaustive research and a cost of approximately one and one-quarter million dollars" (over $26,000 per reel for forty-eight silent reels or $26 per foot) which the *Teacher's Manual* admits are represented by the extant picture Chronicles, could not have served the field of visual education more richly in some other way. That is merely my personal reaction, you understand.

Vain efforts have been made by many responsible persons active in educational films distribution, to persuade the owners to add sound to the Picture Chronicles. In reply the owners have averred that outstanding educators have urged them not to tamper with the existing form in any way because, as silent subjects, they are more flexible in teaching. The *Teacher's Manual* even goes so far as to state that, "These photoplays are silent, as sound would lessen their authenticity" —a strange depreciation of word values from established publishers of successful printed books.

The Subscription Idea

Early in 1922 the non-theatrical field was stirred once more by an announcement in leading newspapers that a new, sizeable organization had opened elaborate New York offices at 250 Madison Avenue. Its name was Pictorial Clubs, Inc., and there was significance in the address because it was also that of William Wallace Kincaid, president of the Spirella Manufacturing Company of Niagara Falls, wealthy corset manufacturer, who was backing the project.

Kincaid, greatly interested in popular education, especially in the departments of history and good citizenship, and, at that time of life—the mid-fifties—when successful men usually turn to benevolences, had become convinced that business organization alone would set the non-theatrical field of motion pictures going. What seemed to be an especially feasible plan for doing this had been brought to him by William A. Kelly, an architect (from Seattle, I believe), a man of intense earnestness and great personal magnetism. Kelly's idea was to build distribution by club subscriptions, whereby local groups would agree to accept a regular release of so-many subjects per month. The markets thus being opened, Kelly reasoned, returns would justify the acquisition of more product and, as time went on, also the making of pictures better adapted to educational needs. The groups which were expected to support the plan most strongly at first were schools and churches, and these, of course, unlike most other users of non-theatrical films, could provide those definite statistics which reasonable business men require. The only seriously needed factor was the sum to set the wheels in motion. This Mr. Kincaid had decided to supply.

To those who had followed the passage

of events in the non-theatrical field with even a casual attention, the plan bore many points of resemblance to a proposal which Charles Urban had offered for discussion in Dolph Eastman's *Educational Film Magazine* in February, 1920. Urban had suggested there, as a possible line of development, that all individuals and groups in each community, that wanted motion pictures to show non-theatrically, might pool their funds for creation of a local film library to which all subscribers might have access.

When Mr. Kincaid had supplied the needed financing, rights to use a quantity of existing material were acquired, and spaces to handle the reels were taken at 729 Seventh Avenue, one of New York City's approved film buildings, and in Chicago, at 808 Wabash Avenue. As to product, an announcement about the end of January, 1922, said that Ollie Sellars had completed several photoplays for the Clubs, and was then collaborating with Pacific Coast churchmen on "a drama of historical interest." William R. Lighton was reported to be adapting several of his *Saturday Evening Post* stories for the service, and Archer McMaken was allegedly directing two-reel Bible dramas. In all, six production units were said to be at work for the Clubs on the West Coast. "Headquarters," says my source of this information, "formerly at Chattanooga, have been moved to New York" —which is a little confusing, because Chattanooga was presently to become the swaddling place of an entirely different non-theatrical venture involving John Edgerton.

By the spring of 1926 branch offices of Pictorial Clubs had been established at Boston, Philadelphia, Pittsburgh, Minneapolis, Indianapolis, Detroit, Cincinnati and Omaha—although, for some reason, the Detroit office was presently dropped. Beginning with the efficient John F. Burhorn, in Chicago, one could read the familiar non-theatrical names of branch managers down the list and realize that, in this division, too, Kelly was following through his idea of utilizing existing forces. Naturally there had to be some shaping. The acquired product demanded readjustment, and examination of that process reveals some unusual facts. To edit and title one series of Bible pictures Bruce Barton, no less, high-priced author of a best seller book about Jesus, was engaged, and seven animated cartoons were made especially for the Clubs by Walt Disney, then unknown to fame, however, because he still had to present his immortal Mickey Mouse. Carpenter and Goldman were the technical experts in charge, and they must have anticipated a heavy volume of business from this source, for it was about this time that they removed their studios to the Canadian Pacific Building on Madison Avenue, nearby.

President of Pictorial Clubs—or "Kelly Clubs," as the organization was known informally to those engaged in non-theatricals — was Henry Breckinridge, who had topped his service as assistant secretary of war under Woodrow Wilson with a brilliant A.E.F. record, and in 1922 was resuming a long neglected law practice. A large body of directors, giving at least the support of their names, included Maude Adams, who had retired from the stage and was always on the verge of doing something original and different in films; George Barr Baker, distinguished journalist and editor, then lately director of the American Relief Administration and about to become publicity director of the Coolidge presidential campaign; William Beebe, the scientist; Harry F. Guggenheim, copper magnate, aviation enthusiast and philanthropist; Mrs. Aida de Acosta Root, social service worker, publicity director of the American Child Health Association, whom Henry Breckinridge was to marry in 1927; Gertrude Lane, editor of the *Woman's Home Companion;* Arthur W. Williamson, president of the Williamson Heater Company of Cincinnati; John D. Parmain, associated with Edward Bok in the World Court Movement; Walter L. Post, New York corporation lawyer; Kenneth Widdemer, Jerome F. Mantilla and F. Wallace Doying. The names especially recognizable to the non-theatrical field were Mrs. Elizabeth Richey Dessez, then head of the Pathé educational department; F. Lyle Goldman, Arthur Carpenter and Edward A. Eschmann, sales manager of United Artists Corporation, theatrical producers.

Drawn by S. J. Woolf

John Edgerton opened his mills each day with prayers. He held that a great church film circuit would soon clean up the theatres.

A slogan frequently used in the original advertising of Pictorial Clubs was "The Organization the Non-theatrical World Has Been Waiting to See," but the "old guard" in the business, who were not at all in agreement upon what they had been waiting to see, looked upon this new adventure with misgivings which were not allayed in the sight of such sumptuous offices as had been assigned the executives. As to the output of the Pictorial Clubs, it showed pretty much the old familiar numbers, among them "Maker of Men," "The Stream of Life," "The Four Seasons," some of Fitzpatrick's "Men of Letters" series made for Urban, and Pathé's twenty-five single-reelers on the Holy Land. What was so exciting about this?

It really was exciting in many respects, if they had only known it, for the effort was thoughtful, sincere, well-financed and aimed to correct the notorious fault of an unorganized non-theatrical market. It might have shown results in time, although a longer time than business men generally are willing to allow for a new enterprise to prove itself. Unhappily, the success of a project such as this is based on the assumption of the coöperation of grateful customers. In the state of affairs then, in the current condition of the non-theatrical field, there was little chance of that and, after two or three disheartening years, the backers decided to sink no further money. In the middle of 1926 it was announced to customers that thenceforth distribution of the Pictorial Clubs Library would be handled by Pathé Exchange, whose own regular, long-established non-theatrical services were warmly recommended for the provision of additional subjects.

American Motion Picture Corporation

THE early season of Kincaid's experience with Pictorial Clubs had been observed, with shrewd appreciation of his problems and shrewder judgment of his approach to them, by Paul Smith, who had been thwarted temporarily with his International Church Film Corporation. Henry Bollman, who in 1922 had been sojourning in the service of Lincoln & Parker at Boston for a few months, returned to New York to find Smith out of his elaborate suite in the Flatiron Building and occupying a very small office on lower Broadway. Smith was in reduced circumstances, perhaps, but he was not in the least depressed otherwise. On the contrary, he was in prime fighting spirit, and he now had a still better plan. This time he would not rent films to churches; he'd provide them free. Possibly he was thinking of Francis Holley and the Bureau of Commercial Economics just then.

Bollman wrote Smith a promotional booklet around the idea, and with it he is said to have raised another $50,000. That money was soon gone, but Smith's angling this time brought in a splendid catch—John E. Edgerton of Tennessee, wealthy woolen manufacturer, president of the National Association of Manufacturers, and pillar of the Southern Methodist Church. The free film idea was then abandoned in favor of a new one having greater flexibility for the promoters. Smith had called his new enterprise the Church Film Company, but Edgerton, and the other business associates now coming in, wanted something less restricted, a name which would indicate a scope of service to the entire non-theatrical field. The title under which they finally incorporated, in 1923, was the American Motion Picture Corporation.

(To be continued)

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

UTILIZATION

Correlating Audio-Visual Aids—D. L. Kruzner, Supervisor, Upper Grades, King County Schools, Seattle—*Washington Ed. Journal* 21: 152 Mar. 1942.

In the elementary schools of Renton, Washington, films are carefully selected for specific educational objectives. The teaching program is analyzed by each teacher and the best type of aid is selected for a given purpose.

Next the teachers must determine where to get the teaching aid. The King County Visual Education Dept. is attempting to meet this need. The Department has analyzed the curriculum needs of all the classes from kindergarten through junior high school on the basis of county-adopted textbooks.

Teachers must plan carefully so that the film will be correlated with the unit. Grade adaptation must be made. Where the teacher has specific objectives in using a film at one time, there is no danger of lack of interest when the film is shown in another connection another year.

There is no place for haphazard shows during school time in this school system.

Shell Production—Motion Pictures as an Aid to Quantity Manufacture—Lieut. Col. Roy L. Bowlin—*Army Ordnance* magazine, January-February issue.

A significant, valuable, and new application of the motion picture screen to instructional purposes is reported in this article.

Telling the story of how the General Railway Signal Company of Rochester combined sound-and-color motion pictures with words in assembling the production analysis required by Army Ordnance on an educational order, the writer points out that the motion picture may enable other manufacturers to save weeks, possibly even months, in determining whether they have available machines and other facilities to handle similar orders. It is stated too that manufacturers can also learn from the picture of the required floor space, methods of handling shells, scrap disposal, and—more important—the economical sequence of operation and machining methods.

"It appears certain," Lieutenant Colonel Bowlin states, "that the picture represents a valuable service and short cut not previously applied to ordnance manufacture. In this field, at least, it exemplifies a new means of communication. It is, consequently, an interesting question whether any ordnance process involving combined machine work and manual dexterity does not require such audio-visual clarification for maximum efficiency."

STILL PICTURES

Pictures as Aids to Learning in the Social Studies—R. W. Cordier, State Teachers College, Clarion, Pa.—*The Social Studies*, 33:18 Jan. 1942.

Criteria for choosing pictures in the social studies: (a) They should be accurate and authentic. This is especially important for paintings of historical events. (b) They should be centered in such a way as to direct attention to the principal thing or idea. (c) They should stress a point or truth of sufficient importance to justify the use of the time required to study or observe them. (d) Pictures should be thought-provoking and bear interpretation. (e) Pictures should adhere to other recognized principles of art, such as appropriate use of color and the distribution of light and shade.

Pictures may be used to begin a unit. Students should use pictures in connection with their regular study assignments. The display of many pictures on a bulletin board without explanation is not recommended. Nor is the quick display of a small picture before the whole class and passing them around without preparation for their study. Students should be made to feel the need of using appropriate pictures. Often the pictures will be referred to a second time after some extended study, especially is this desirable with motion pictures.

In social studies it is valuable to develop a critical attitude toward historical representations. "Are the facts represented in the picture true?" A study is cited in which the students checked the accuracy of four paintings of the landing of the Pilgrims published in Pageant of America, against the account of the event by Edward Channing.

SCHOOL-MADE FILMS

Showing Education to the Public—Robert C. Wheeler, Waukesha High School—*Wisconsin Journal of Education*, p. 249 Jan. 1942.

The Public Relations Committee of the Waukesha Teachers Association in anticipation of the increasing demands upon education with more limited budgetary provisions, made a film to sell education to the community. It is called, "Dollars and Sense for Waukesha" and is being shown to interested groups in the community. The group believed the film to be effective for three reasons: 1. Most everyone enjoys and will pay attention to a movie. 2. Pertinent facts can be graphically illustrated. 3. The schools and a clear idea of their associated expense can be taken to the taxpayers; they need not come to the schools.

A special committee was assigned to the film project. They wrote the script, took the pictures, wrote the lecture to accompany it. The content differed from the usual scenes of school activities. The film included the main items of school expense: salaries, coordinate health activities, maintenance and operation; bonds and interest; supplies and new equipment. The percentage spent on each item was shown by a circle graph. Scenes in the eight Waukesha schools show janitors, carpenters, engineers and secretaries as well as teachers at work. Boiler rooms, supply rooms, repair shops and offices illustrate other expense items. Meanwhile, the lecture accompanying the film gives pertinent facts and figures. Students are shown through all grades, although they are not the most important part of this film on school financing. In addition to the great effort of showing the scenes, the actual cost of the film was $30.

Taxpayers were thus shown how their dollars are spent in the schools. A teacher group which will take the trouble to carry out this task is at once performing a genuine public service and defending its demands upon the community.

Making a Movie to Make Your Point—William G. Hart, Fordson Board of Education, Dearborn, Mich.—*School Executive*, 61:26 Feb. 1942.

A film production project, such as the Traffic Safety Film Project carried on in nine schools under the direction of the Bureau of Educational Research of Ohio State University; and the community study project of the Denver, Colo. high schools, has a contribution to make in the education program. 1. The completed film is tailor-made to fit the local situation; and 2. The production process provides significant real-life experiences. Many actual experiences are drawn upon to illustrate the two major contributions listed.

Why Teachers Don't Use School Broadcasts—Seerley Reid, Research Associate Bureau of Educational Research, Ohio State University, Columbus.—*Ohio Schools*, 19: 438 Dec. 1941.

A survey was made of the schools of Ohio on their use of radio. Results are available as Bulletin 43 of the Evaluation of School Broadcasts, "Radio in the Schools of Ohio".

Among the findings on radio sets were these: 1. Slightly more than half of the schools own a radio set, some have two; 2 One out of 12 classrooms in Ohio has a radio. 3. More urban than rural schools have radios but the average for all is one in 12. 4. The same proportion of elementary and secondary schools own sets, but more classrooms in elementary schools are so equipped.

As for school broadcasts, the survey found that: 1. Teachers in one out of five schools used school broadcasts regu-

larly, more in the elementary school; 2. Teachers in one out of 8 schools used network broadcasts, in one out of 16 used state programs, and in one out of 12 used local.

Ohio teachers have access to more educational programs than do most others, so that these findings cannot be applied to other states. Reasons given for the fact that no broadcast series had an audience larger than 2% of teachers and students were mainly for lack of good radios; school schedule difficulties, teacher indifferences; lack of curriculum applicability; lack of necessary information about programs.

Conclusions and Recommendations: 1. Schools should make every effort to get radio sets. 2. Teachers should learn more about the sources of information and classroom techniques. 3. Broadcasts should be made to relate more closely to the school program.

Science by Radio—Emilie M. Utteg, Chicago Board of Education Radio Council—*Chicago Schools Journal,* 23: 75-78 Nov.-Dec. 1941.

A discussion of two series being presented by the Radio Council over the FM station operated by the Board of Education. One series, "Science Reporter" is broadcast to 7th and 8th grade classes. The other, "Science Story Teller" is sent to 5th and 6th grades.

The script writer prepares material after a conference with science teachers at the beginning of each semester. Handbooks are distributed with suggestions for preparing the class for each broadcast. The programs are 15 minutes in length. One teacher used kodachrome slides as an experiment in connection with the broadcasts. The results were conclusively successful. A more extensive study is being carried on this year.

Audio-Educational Services for Your School—E. W. Ziebarth, Director Minnesota School of the Air—*North Dakota Teacher,* 21:18 Feb. 1942.

A detailed description of this excellent series of school programs, now available in many northwestern states over the North Central Broadcasting System. Write to station WLB, U. of Minnesota.

Correction

It is to be regretted that a personal reaction on the part of this reviewer may have reflected on the quality of the worthy efforts being expended at the Biggs Union High School, Biggs, California. The school is carrying on a very interesting program financed by school funds, wherein many of the films are shown during the noon-hour recess. Please accept this apology for any misunderstanding that may have followed from the statement in the review. (Jan. 1942 issue)

E. SCHNEIDER

Midwestern Forum

(*Continued from page* 137)

Report of Dinner Meeting of Zone IV of the DVI March 27, 1942

At the first annual DVI meeting of Zone IV, held in Chicago in conjunction with the Midwestern Forum, the following officers were elected for the ensuing year: President, L. W. Cochran, Iowa City, Iowa; First Vice President, A. B. Roberts, Gilson, Illinois; Second Vice President, Harold Watson, Oshkosh, Wisconsin; Secretary-Treasurer, D. W. McCavick, Iowa City, Iowa.

Suggestion by several members that Zone III be invited to meet with Zone IV in cooperation with Midwestern Forum next year. Mr. N. L. Greene, of EDUCATIONAL SCREEN, stated that the first seven months under the Zone Plan the DVI had achieved a larger membership, despite war conditions, than was ever achieved in any previous entire year. General approval of the Zone plan was expressed. Discussion followed on ways and means of interesting more teachers, administrators and industrialists in DVI membership. Mr. H. R. Stamm, West Allis, Wisconsin, asked how to reach the industrialists. Mr. Kruse, of Bell & Howell, suggested articles in industrial publications and individual effort to enroll members, from local industrial plants. He also stated that we were often considered as Administrators Union, not interested in teacher memberships, and suggested a Visual Education Seminar at every State and Local meeting where all departments could come together in numbers.

Mr. Cochran presented a proposal from Business Screen for assembling nationwide information on visual equipment and resources. Discussion. Mr. Watson suggested that films used in schools should also be used for morale purposes with adult groups in the evenings. Mr. Stamm suggested that the Government needs to know the available equipment. Mr. Cochran warned that it might be difficult to get the schools to help, due to the problems involved in moving equipment about and having someone responsible for the equipment. Mr. Stamm suggested that all available reports of equipment should be turned over to the Local Defense Council. Mr. Kruse suggested that multiplicity of questionnaires makes for confusion, that each district should report to its local defense council. Commercial and Government mailing lists would not be given to individuals but would be given to the Defense Councils. Mr. L. V. Peterson, University of Illinois, proposed a resolution that we commend Business Screen for its interest but feel that the matter should be left to local Boards, the DVI standing ready to help at all times. Carried.

After further discussion, the following resolution was adopted: That the Officers and Executive Committee of Zone Four, Department of Visual Instruction, assembled at Chicago, Illinois on March 28th, 1942, do urge their membership to mobilize in the service of our nation at war by placing their experience and equipment in readiness for the following war effort: Namely, that insofar as local conditions warrant, the membership offer to assist defense training instructors in their respective communities by offering instruction in the use of visual aids and equipment and placing available equipment at the disposal of these civilian defense efforts. Mr. Cochran urged all to send him ideas for a better Department, larger membership and bigger attendance for the coming year. Adjournment.

Joint Meeting of Executive Committees of the Midwestern Forum and of Zone IV of the DVI March 28, 1942

Mr. Reavis analysed the registration of the 1942 meeting, revealing that many school administrators and visual directors attended, but relatively few classroom teachers. Discussion followed. It was generally agreed that the program should aim to serve the needs of both administrators and classroom teachers. Mr. Cochran suggested that industrial users of audio-visual materials be invited to participate in the Forum. A suggestion that the Executive Committee work to secure at least one teacher delegate to the Forum from each school system in the region was put as a motion by Mr. Roberts. Carried. Mr. Reavis asked whether the exhibitors were satisfied with the showing of this year's Forum and Mr. F. G. Roberts, of Bell & Howell, and Mr. H. E. Erickson, of Ampro Corporation, both answered affirmatively.

The question of the relation between the Midwestern Forum and the adjacent Zones of the Department of Visual Instruction was next discussed. Speaking as President of Zone IV, Mr. Cochran stated that his group would like to continue such co-operation. Mr. E. C. Waggoner was appointed to contact officers of Zone III at its coming Gary meeting regarding co-operation in the Forum meeting next year.

Mr. Erickson discussed the administrative organization required to facilitate this co-operation and moved that an Executive Committee be set up to consist of a general chairman, vice-chairmen representing Zone III of DVI, Zone IV of DVI, manufacturers of audio-visual equipment, distributors of same, and a secretary-treasurer. Carried. Mr. Reavis suggested also an Advisory Committee consisting of Floyde Brooker, Kenneth MacGowan, and Wesley Greene. Moved and carried. Four of the members of next year's Executive Committee were elected as follows: W. C. Reavis (chairman), H. O. Gillet (Secretary-treasurer), F. G. Roberts, (Vice-chairman, representing distributors), H. E. Erickson (Vice-chairman, representing manufacturers). Two other Vice-chairmen, representing Zone III and Zone IV of the DVI remain to be elected.

(*Concluded on page* 163)

Doing Your Share – In Hand-Made Lantern Slides

By ANN GALE

Lindblom High School, Chicago

ELEMENTARY school students can do their share and are doing their share. Pictures on hand-made lantern slides may show concretely just what they can do. The slides may be used for an assembly program or for a room program to show what every child is doing.

1.) Newspapers and magazines are gathered together for the conservation of paper.

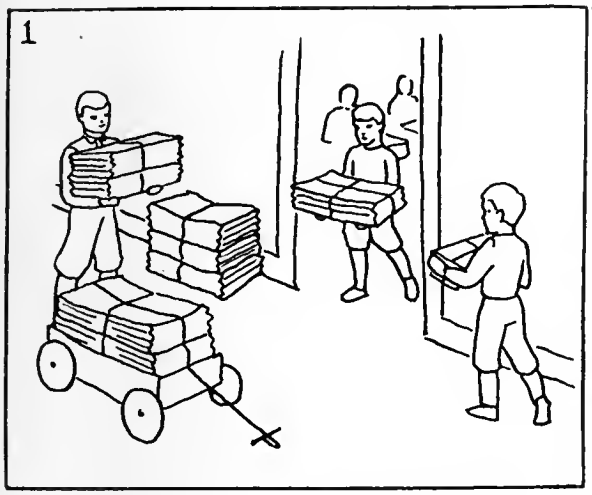
2.) Defense bonds and stamps are bought and sold.

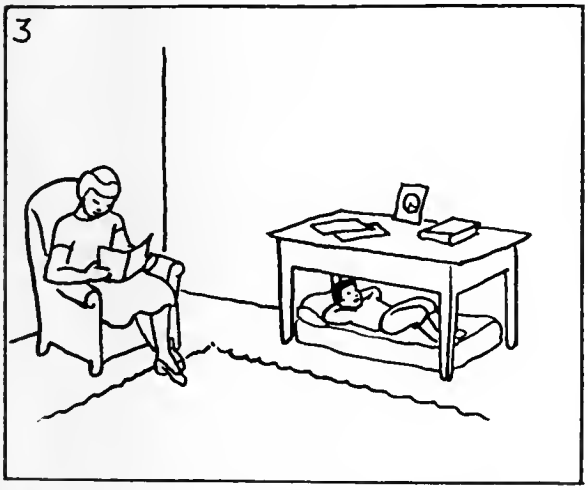
3.) Set aside a special room in your house—without windows, if possible—as an air raid shelter. Put chairs there and for extra safety place a mattress under a table.

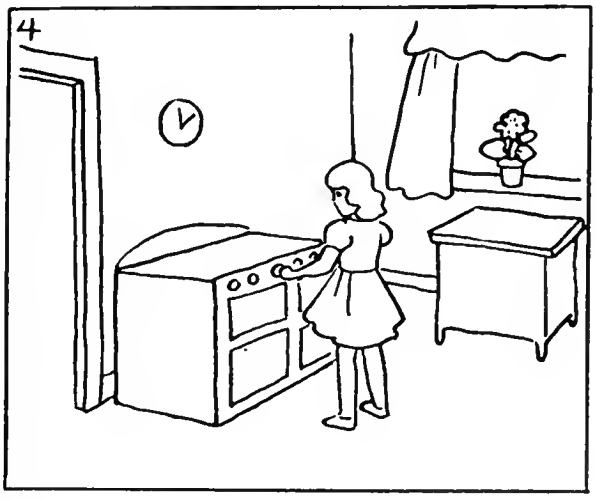
4.) When an air raid signal is sounded be sure to turn off all gas, light and water.

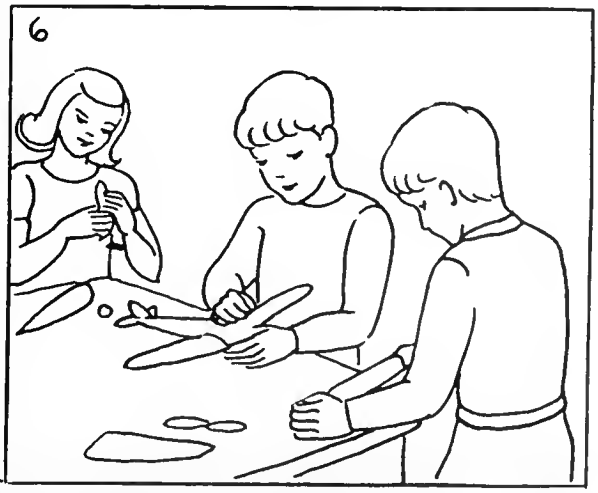
5.) Give books to your librarian for our soldiers and sailors.

6.) Build model airplanes for the navy.









The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.

Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

ZONE I

New England Section (Zone I) of the Department of Visual Instruction, held its annual Visual Education Conference Saturday, April 4, at Boston University School of Education, Boston, Massachusetts. Theme of the program was "Visual Education for Victory." Talks were given by Mr. Floyde E. Brooker, United States Office of Education, Mr. Thomas Rishworth, National Broadcasting Company, Mr. Tom Baird, Films Division of the British Ministry of Information, and Mr. Kenneth MacGowan, Motion Picture Section, Office of Coordinator of Inter-American Affairs.

The afternoon session served as a clearing house of information in the field of teaching aids. This was followed by a meeting of the Directors of the New England Section of the D. V. I.

ZONE II

The first annual meeting of Zone II of the Department of Visual Instruction will take place April 17 and 18 at the American Museum of Natural History in New York City. It will open Friday afternoon at four o'clock with exhibits of latest developments in materials and equipment in the field. The dinner session that evening will feature speeches by Mr. Kenneth MacGowan, Mr. Hugo Fernandez Artucio and James J. Reynolds, Ass't Sup't, New York City Schools. Dr. F. D.McClusky, President of the Metropolitan New York Branch, will preside.

The following classroom demonstrations with pupils will occupy Saturday morning:

A sixth grade unit on "South America," using the sound film *Americans All* and other visual aids; "Our Schools Then and Now," a survey of education in the past and present, using a specially prepared silent film and 2x2 Kodachrome slides (this demonstration is part of the Centennial Celebration of the New York City Board of Education); a Social Studies lesson on "Winning the Peace," organized around the film *We Live in Two Worlds;* teaching Vocational Education with a U. S. Office of Education defense training film and filmslides; and, in Adult Education, an example of Americanization and Citizenship training, using charts and posters.

Miss E. Winifred Crawford, President of Zone II and Director of Visual Instruction, Public Schools, Montclair, New Jersey, will preside at the Saturday luncheon which will be devoted to reports on Activities in the Various States; Activities of Section on Visual Education of the World Federation of Educational Organizations by Dr. John Dugan, Chairman of the Section; The Museum in Education, by Dr. Grace Fisher Ramsey; and Plans and Achievements in Visual Education from the Office of the Coordinator of Inter-American Relations, by Mr. Walter Brooks. In the afternoon, "Audio-Visual Education under War Conditions" will be discussed. Sterling Fisher, Ass't Educational Director, National Broadcasitng, will preside.

The meeting is organized and held under the direction of the Metropolitan New York Branch. Members of the program committee are: Miss Rita Hochheimer, Dr. Grace Fisher Ramsey, Dr. Charles G. Eichel, Mr. Don Carlos Ellis, Mrs. Esther L. Berg, Miss E. Winifred Crawford, and Dr. F. Dean McClusky.

ZONE III

Zone III of the Department of Visual Instruction has prepared an excellent program for its meeting in Gary, Indiana, April 23-25, held in cooperation with Gary Public Schools and Indiana University. Conference chairman is Russell G. Anderson, Supervisor of Gary High Schools. The program has been organized around demonstrations at various schools showing classroom procedure in utilization of the following visual aids:

Museum Materials (Emerson School) Speaker: Miss Margaret Brayton, Director of Children's Museum, Detroit.

School Trips (Emerson School) Speaker: Alvin R. Roberts, Principal, Haw Creek Township High School, Gilson, Ill.

Radio Transcriptions and Phonograph Records (Tolleston School) Speaker: Dr. J. Robert Miles, Research Associate in Radio, Ohio State University.

Motion Picture Center (Lew Wallace School) Speaker: E. C. Waggoner, Director of Visual Education, Elgin, Ill.

Pictorial Materials Center (Horace Mann School) Speaker: D. Arthur Bricker, Director of Audio-Visual Education, Cincinnati.

Panel and discussion groups, comprised of specialists in the use of these materials, will evaluate the demonstrations, exchange experiences, and offer further suggestions.

At the Thursday evening session, presided over by Mr. Ford Lemler, Zone III President, and Director of Visual Education, University of Michigan, Mr. Kenneth MacGowan will report on the progress of the Inter-American film program. Mr. L. C. Larson, Consultant in Audio-Visual Aids, Indiana University, will address the Saturday morning group on "Organizing and Administering an Audio-Visual Aid Program."

There will be a discussion of projects proposed for Zone III at a luncheon meeting Friday, and a brief business meeting called by President Lemler Saturday morning.

Registration will be at Emerson School Thursday morning, April 23.

ZONE IX

(*See page* 154)

Summer Courses in Visual and Audio-Visual Instruction, 1942

The following courses have been reported to date. Figures in parenthesis show credit hours. An additional list will appear in May.

Arizona

University of Arizona, Tucson — July 13-Aug. 15
Visual & Auditory Aids in Teaching (2) — E. L. Larson

Arkansas

Arkansas A. & M. College, Monticello — June 2-6
Visual Education (Reading Institute) (1) — John P. Anderson
State Teachers College, Conway — July 9-Aug. 12
Techniques in Visual Education (2) — H. L. Minton

California

San Jose State College — June 29-Aug. 7
Visual Aids in Education (3) — DeVerl Willey
University of Southern Calif., Los Angeles — June 22-July 31
Introduction to Audial and Visual Education; Workshop in Audial and Visual Education; Educational Use and Appreciation of Films (2 each) — Elizabeth Goudy-Warren Scott
University of California at Los Angeles — June 29-Aug. 7
Administration of Audio-Visual Aids in Education; Audio-Visual Aids in Education; Educational Films (2 each) — Fred W. Orth

Colorado

University of Colorado, Boulder — June 15-July 17
Visual Aids (3) — Lelia Trolinger
Elementary Radio Production (3) — W. M. Spackman

Delaware

University of Delaware, Newark — June 22-July 31
Visual Education (2) — Emma Ehlers

Illinois

Northwestern University, Evanston — June 22-Aug. 15
Visual Aids and Radio in Education (3) — E. S. Lawler
State Normal University, Normal — June 15-Aug. 7
Audio-Visual Education (3) — Clarence Cross
University of Chicago, Chicago — June 23-Aug. 1
Auditory & Visual Instruction (1 or ½) — James W. Brown
Western State Teachers College, Macomb — June 8-July 17
Visual Education (2⅔ or 4 qr.) — Alvin B. Roberts

Indiana

Butler University, Indianapolis — June 9-Aug. 1
Visual Education (Beginning course, and Advanced—3 each) — H. A. Henderson
Indiana University, Bloomington — May 11-Aug. 22
Visual Education (Undergraduate —2½) — May11-June 27
Research in Audio-Visual Education (Graduate)
Visual Education (Graduate—2½) — June 29-Aug. 22
All courses conducted by — L. C. Larson

Iowa

Iowa State College, Ames — June 8-July 15
Visual Methods in Education (3) — Kooser-Twogood
State University of Iowa, Iowa City — June 8-July 31
Visual Education (3); (Credit arranged for Advanced course) — Donald McCavick

Kansas

University of Kansas, Lawrence — June 2-July 24
Visual Education in Elementary and Secondary Schools (2) — Fred Montgomery

Louisiana

Louisiana Polytechnic Institute, Ruston — June 1-Aug. 1
Audio-Visual Aids in the Classroom (3) — R. H. Mount
Louisiana State University, Baton Rouge — July 18-Aug. 29
Audio-Visual Aids in Education (3)
Southwestern Louisiana Institute, Lafayette — June 8-Aug 7
Ed. 390 (3) — G. A. Zernott

Maine

University of Maine, Orono — July 6-Aug. 14
Visual Education; The Motion Picture in Education (2 each) — Paul S. Miller

Maryland

University of Maryland, College Park — June-
Visual Education (2) — Henry Brechbill
Western Maryland College, Westminster — July 6-Aug. 14
Visual Education (3) — M. C. Raver-D. Wright

Massachusetts

Boston University, Boston — July 6-Aug. 15
Use and Management of Visual Aids in Education (3) — James R. Brewster

Michigan

Central Michigan College of Education, Mount Pleasant
Visual Education (2) July 23-Aug. 22 — M. L. Smith
Michigan State Normal College, Ypsilanti — June 22-July 31
Visual-Auditory Aids in Education (1 or 2) — Kenneth R. Utter
University of Michigan, Ann Arbor — June 29-Aug. 21
Visual-Sensory Aids in Education (2) — Ford Lemler

Minnesota

State Teachers College, Winona — June 8-July 17
Learning the Ways of Democracy (4) — Ella C. Clark
University of Minnesota, Minneapolis — June 15-July 24
Visual Aids in Teaching (3 qr.) — Paul R. Wendt

Missouri

Central Mo. State Teachers College, Warrensburg — May 28-July 31
Audio-Visual Education (2½) — Byron Westfall

Nebraska

State Teachers College, Wayne — June 8-Aug. 7
Visual-Auditory Education (2) — Harold D. Griffin

New Jersey

State Teachers College, Trenton — June 30-Aug. 8
Visual Education (2) — Lycia Martin
State Teachers College, Upper Montclair — July 6-Aug. 14
Multi-Sensory Aids (2) — E. Winifred Crawford

New York

Chautauqua Summer Schools, Chautauqua — July 6-Aug. 14
Laboratory Course in Visual Aids (2) G. H. R. O'Donnell
(New York University Graduate Credit Course)
Columbia University, New York City — July 7-Aug. 14
Audio-Visual Aids to Instruction (2) — Wm. H. Hartley
Laboratory Course in Audio-Visual Aids (2) — Etta Schneider
Advanced course in Audio-Visual Aids (2-4) — M. R. Brunstetter
New York University, New York City
Recent Developments in Visual Aids (2) — July 7-24
Advanced Lab. Course in Visual Aids (2) July 27-Aug. 14
Photographic Processes in Education (2) — July 7-Aug. 14
All courses conducted by — Mr. Shaver
Syracuse University, Syracuse — July 6-Aug. 15
Visual Education (3) — Charles Smith

North Carolina

Asheville College, Asheville — June 12-Aug.22
Visual Aids to Instruction (2); The Motion Picture (2); Workshop in Visual Aids (4) — Mary E. Powell-Klaus Hilzheimer
Western Carolina Teachers College, Cullowhee — June 24-July 7
Audio-Visual Clinic (3 qr.) — C. D. Killian

Ohio

Ohio University, Athens — June 8-July 31
Audio-Visual Education (2) — Margaret Hampel
State University, Bowling Green — June 15-Aug. 7
Audio-Visual Aids in Education (3) — Herschel Litherland
Western Reserve University, Cleveland — June 22-July 31
Visual Instruction (3) — William M. Gregory

Oklahoma

East Central State College, Ada — May 25-July 24
Visual Education (2) — Oscar Parker-W. C. Herring

Oregon

Portland Summer Session, (Oregon State System of Higher Education) Portland — June 8-July 10
Audio-Visual Aids in Education (3) — Harold A. Engel

Pennsylvania

Allegheny College, Meadville — July 13-24
Short Course in Visual Instruction (2) — Adela M. Losch
Geneva College, Beaver Falls — June 15-July 15
Visual Education (3) — John S. McIsaac
Muhlenberg College, Allentown — July 20-Aug. 28
Visual Education (3) — John E. Trainer

Pennsylvania State College, State College — June 29-Aug. 7
Laboratory in Visual and Other Sensory Aids in Education; Visual and Other Sensory Aids in Education; Problems in Visual and Other Sensory Aids in Education (3 each) — Fred Kelly
(Unit course may be taken for 1, 2, or 3 credits in 2, 4 or 6 weeks)
State Teachers College, California — Aug. 10-28
Visual Education (1) — Newton Kerstetter
State Teachers College, Clarion — June 29-Aug. 8
Visual Education (1) — Harry S. Manson
State Teachers College, East Stroudsburg — June 8-Aug. 29
Visual Education (1) — F. B. McGarry
State Teachers College, Edinboro — June 29-July 31
Visual Education (1 or 2) — F. S. Heinaman
State Teachers College, Indiana — June 29-Aug. 8
Visual and Sensory Education (2); Photography as an Aid to Visual Education (3) — Wilber Emmert-R. Hitchcock
State Teachers College, Lock Haven — June 8-26; June 29-Aug. 29; Aug. 10-28
Visual Education (1 or 2) — Ruth Holmes
State Teachers College, Mansfield — June 29-Aug. 7
Visual Education (1) — Isaac Doughton
State Teachers College, Shippensburg — June 29-Aug. 7
Visual Education (1) — Leslie C. Krebs
State Teachers College, Slippery Rock — June 29-Aug. 7; Aug. 7-28—Visual Education (1 or 2) — A. P. Vincent
State Teachers College, West Chester — June 29-Aug. 8; Aug. 10-28—Visual-Sensory Techniques (2 each session) — T. J. S. Heim
University of Pennsylvania, Philadelphia — June 22-Aug. 1
Visual and Sensory Techniques (2) — J. H. Minnick

South Carolina

University of South Carolina, Columbia — June 9-Aug. 1
Audio-Visual Education (3) — W. H. Ward

Tennessee

Peabody College for Teachers, Nashville — June 6-Aug. 21
Language Laboratory (4) — M. L. Shane
Visual Education (4) — J. J. Ray
University of Tennessee, Knoxville — June 8-July 15
Audio-Visual Aids to Education (3) — Oscar E. Sams

Texas

Sam Houston State College, Huntsville — June 2-July 11
Administration in Audio-Visual Aids (3) — W. E. Lowry
Southwest Texas State College, San Marcos — June 1-July 11
Audio-Visual Education (3) — J. M. Roady
Sul Ross State Teachers College, Alpine — June 5-Aug. 29
Audio-Visual Education (3) — Leon A. Wilbur
University of Texas, Austin — June 4-July 13
Use of Visual Aids in Education (2) — Holland-Watson
Second Term (2 or 3) July 14-Aug. 24 — B. F. Holland

Virginia

Mary Washington College, Fredericksburg — June 15-July 18; July 20-Aug. 22—Audio Visual Aids to Learning (3 qr.)
State Teachers College, Farmville — June 15-July 18; July 20-Aug. 22—Audio-Visual Education (3 qr.) — E. M. Johnson
State Teachers College, Radford — June 15-July 18; Audio-Visual Aids to Instruction (1 or 2) July 18-Aug. 22 — I. R. Silverman
University of Virginia, University — June 18-Aug. 1
Audio-Visual Aids to Curriculum Activities (⅓) — J. A. Rorer

Washington

Central Washington College, Ellensburg — June 15-Aug. 14
Visual Education (3) — Ernest Muzzall
State College of Washington, Pullman — June 15-Aug 7
Visual Education: Ed. S161b, Ed. S. 161c (2-3) — W. G. Gnaedinger

West Virginia

West Virginia University, Morgantown
Audio-Visual Instruction; Cinematography; Organizing Programs of Audio-Visual Instruction (2 each)
First Term June 8-July 17 — H. B. Allen
Second Term July 20-Aug. 28 — William G. Hart

Wisconsin

State Teachers College, River Falls — June 22-July 25
Visual Aids in Education (2 qr.) — J. I. Malott-Mabel Jorstad
Stout Institute, Menomonie — June 22-July 31; Aug. 1-21
Visual Education (2) — Paul C. Nelson

(Continued in May)

What Shall I do?

(*Concluded from page* 131)

The nature of the *Laboratory Work* will depend upon the room and equipment. Fortunately, at Western, one room is set aside for this work only. Several machines may be set up and used at the same time. Laboratory work is also planned on the basis of student interest. The following work is required of all students:

A. The ability to operate all types of still picture projectors.

B. The ability to operate three different makes of both silent and sound projectors.

a) After the students have had preliminary instruction in operating projectors, if sufficient films are on hand they can get practice in operating a machine and at the same time preview several films. This gives the student an opportunity to preview films in his own field of interest, thereby acquainting him with a number of films suitable for his own use.

b) To make several hand-made slides of different types.

The second part of the laboratory work is based upon student interest. The areas in which help is given are:

A. Photographic work.

a) Use of camera—still or motion.

b) Use of light meter.

B. Experience with the recorder and play-back system.

C. Experience in handling P. A. S. and central sound distributing units.

The *Problem Assignment* rounds out the course. Early in the term the class is organized as a faculty, with supervisors and principals. Insofar as possible each student is assigned work in his own subject field or field in which he is teaching. Each teacher then prepares a complete list of films for his own subject for the year. Through the help of the supervisor and principal the program for the whole group is assembled. Through this work the students become acquainted, not only with the numerous sources from which films may be obtained, but the numerous films available for use in many subjects. The students also learn something about the cost of films (purchase or rental), cost of machines, screens and other equipment. They also learn one approach to setting up and organizing an audio-visual program.

For four years I have been pondering what to include in the audio-visual instruction course to make it more worthwhile to the students. From my experiences I feel that with some changes in procedure and techniques, some minor changes in laboratory and problem assignments, and greater emphasis of certain units, the course in audio-visual instruction will become one of the most worthwhile, and probably one of the basic methods courses in our teacher training institution.

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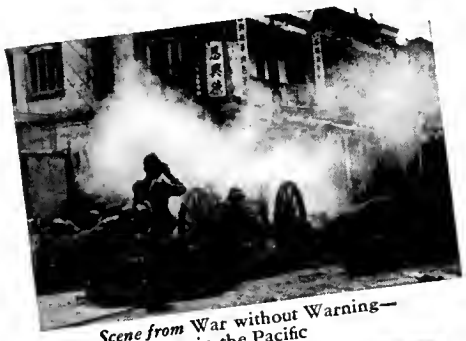

Scene from War without Warning—in the Pacific

Scene from "Mexican Symphony," effective for "Know Your Neighbor" programs

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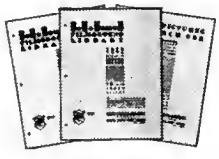
LET US HELP YOU PLAN PROGRAMS

THREE NEW FILM CATALOGS. 1942 editions of *Filmosound Library Educational, Recreational,* and *Religious Film Catalogs* are convenient guides to vast film resources. Free to sound film projector users; 25c each to others. Send the coupon.



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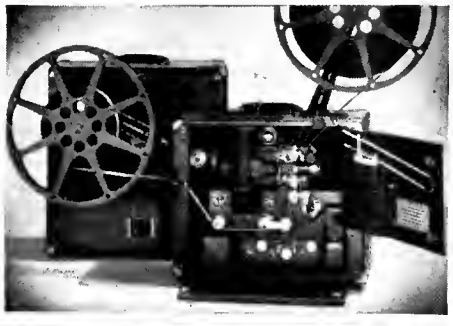

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PRECISION-MADE BY

BELL & HOWELL

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by
GODFREY ELLIOTT, Oakvale, W. Va.
Readers are invited to submit questions.

Does a school-made film influence high school students?

The students of Dover (Ohio) High School felt that a school film would influence their fellow students when they filmed *Second Date*, a one-reel motion picture.

According to *Allied Youth* magazine, "Dover students found a large amount of drinking was being done by the members of the student body." They thought that their own activity might help the drinkers to see themselves as others see them." The health classes had been viewing many commercially-made films when this problem was presented.

The story of the film begins with a group reading the bulletin board which announces the Mid-Year Prom. On the spur of the moment one of the boys invites a girl. She accepts, and the scene shifts to the ballroom with the young couple and others dancing. The couple stops dancing to go to the corner for a drink from a flask. Soon afterward they are ordered to leave because of their behavior.

On the way home they are involved in an accident This is followed by a scene in juvenile court. The high school health instructor pleads for them with the result that they are released in his custody.

Next the film shows the couple learning about alcohol in the high school health class. Soon another dance came, and the couple attended. As before they stopped dancing and left the ballroom. One shot shows that the boy has a bottle with him. However, a close-up reveals that the bottle contains a soft drink.

Richard Roberts, a student of the University of Pittsburgh, was the sponsor of the group that produced the film.

Amateur Film Contest

A prize contest for the best 16mm. or 8mm. motion picture is being held by the Department of Motion Pictures of New York University. The conditions of the contest are as follows:

1) The entry must be the work of a high school motion picture club or some other group of high school students. All entries must be sponsored by a high school teacher.

2) Only one entry will be accepted from any one group or club.

3) Motion pictures submitted must have been made after January 1, 1941.

4) Motion pictures submitted may be on 16mm. or 8mm., in black and white or color, silent or with sound accompaniment.

5) High school clubs or other groups intending to submit entries must signify their intention by filing a contest application blank. This blank should be sent on or before May 1 to the Department of Motion Pictures, Washington Square College of Arts and Science, New York University, Washington Square, New York.

6) The entry must be received on or before May 15. Entries will be sent postpaid, addressed to Department of Motion Pictures, Washington Square College of Arts and Science, New York University, Washington Square, New York.

Film on Chrysanthemums

Edward F. Wheeler, Director of Visual Education, Bristol, Conn., reports the making of a motion picture showing many varieties of hardy chrysanthemums. The film is now available for garden clubs or other responsible organizations. Mr. Wheeler's account of the film, made by his group, follows:

"Each fall the Bristol Nurseries has had the world's largest display of hardy chrysanthemums blanketing nearly four acres with brilliant colors of all shades and hues. The motion picture was made when the majority of "mums" were in their prime and portrays the exhibition beds, the formal gardens, seedling beds and many

visitors who come to Bristol each year to see the exhibit. Many recently developed and newly introduced varieties are strikingly portrayed by colorful closeups.

"The film is a 16 mm silent motion picture in color with a running time of 12 minutes. It will be loaned providing the borrower agrees to pay transportation costs."

Question Box on Production

1. Will you use the enclosed scene-idea to illustrate the manner of breaking it into camera scenes for a safety film?

"Two boys are walking down the righthand side of the highway. A car which they fail to see is coming down upon them from the rear. Another car approaches from the opposite direction. The two cars pass near the boys, almost striking them. A serious accident is narrowly averted when the boys jump to one side just in time."

What you have here is a sequence idea still in its simple narrative form. Naturally, you can not achieve your desired effect by photographing the entire sequence as one long shot; that would merely show the audience a long shot of unimportant and scrambled action. The human eye does not examine a scene with a single overall glance; it examines each detail separately. Those details are then evaluated and interrelated by the brain to compose the total picture. Your task is to visualize the sequence idea in terms of the camera scene that are necessary to make it understandable to the audience. This will be accomplished through scene arrangement, camera manipulation, etc. You must base your camera treatment on the type of film you are producing. Assuming that your film is designed as a teaching-type film, here is one treatment that might be given to the sequence:

(1) FADE IN on a close-up of a highway sign: "Always Walk on the Left—Face Traffic." The camera is placed at a slight angle to the sign, so that when it pans a bit to the right the sign fills only the left one-third of the frame. About 50 feet straight ahead are two boys walking toward the camera and on the same side of the highway as the sign. One walks just on the highway surface, the other beside him. Both carry school books; they talk animatedly.

(2) Close-up of the boys' faces as they continue talking and walking.

(3) Long shot from about 40-50 feet away from the highway sign and looking toward the boys as they approach. They engage in a little horseplay. A car is coming up behind them, still some distance away.

(4) Long shot from the rear seat of the car about 100 yards behind the boys, looking through the windshield with the driver silhouetted in the left of the frame. Another car is about equal distance from the boys coming in the opposite direction.

(5) Medium shot facing the boys. They laugh at some joke.

The boy on the outside laughs and pushes the other out into the highway. The car behind them is coming closer, but they have not seen it.

(6) Long shot from the rear seat of the car, as in Scene 4, just as the boy is pushed. Both cars are now much closer.

(7) Medium shot facing the boys just after the pushing occurs. They are still laughing, and take only casual notice of the car in front.

(8) Long shot from rear seat of the car, same as Scenes 4 and 6 .The driver blows his horn vigorously, braces himself as if to set the brakes. The boys suddenly hear him, and jerk their heads around.

(9) Close-up of boys' faces as they hear the car behind them. They jump to one side and out of the frame; the car fills the frame and rushes by.

(10) Medium shot showing the boys where they have fallen near the highway sign used in Scene 1. In the near distance the driver of the car has stopped, opened the door, and is leaning out to look back at the boys. One boy rises and looks toward the stopped car. The other boy, still half sitting, rubs his head ruefully where he bumped it against the sign. He looks up at the sign, grins slowly, and calls the other boy.

(11) Close-up from the opposite direction, as the boys read the sign. They look at each other, then grin sheepishly. FADE OUT.

2. Since one No. 4 photoflood equals two No. 2 photofloods in power, shouldn't we buy lighting equipment for the larger lamps and thereby economize in the number of fixtures?

If you are thinking in terms of your basic lighting equipment, your plan probably represents false economy. It is true that two fixtures with mogul sockets to accommodate No. 4 lamps give the same total light value as four fixtures fitted with No. 2 lamps. However, it is most important to remember that in movie making the placement of lighting units takes precedence over total light value. Several smaller units will provide the flexibility necessary to good movie lighting. It is too often a fault of amateurs to "pour on the heat" from a frontal placement on either side of the camera, forgetting that side lighting and backlighting provide the depth and perspective and smoothness of lighting that are essential to good photography. A recommended basic lighting outfit for the school crew might consist of the following: two twin-light stands to provide overall lighting, and two single-light units (on stands or with clamps) to use for highlighting and for filling in shadow areas.

3. Will you recommend a cleaner for occasional use on the few reels of film we have produced and wish to keep?

Although many good cleaners are available commercially, there is no necessity for the school to look further than its science laboratory. Carbon tetrachloride will perform any task claimed for a commercial film cleaner. Just moisten a soft rag with this chemical and wipe the film surfaces thoroughly while the film is being rewound.

4. How much use is there in school production for a camera having a speed of 64 frames per second?

It is doubtful if the average school production unit will have any real need for the ultraspeed of 64 frames. It might be used on rare occasions for trick shots as a comedy gag, or in certain situations where it was desired to analyze swift motion: for example, in photographing the motions of a runner or jumper in track and field events. At 64 frames per second, your 100-foot roll of film is zipped through the camera in just 62 seconds. G. E.

Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

Title: SOUND AND ACTION IN TODAY'S INSTRUCTIONAL FILM

Investigator: VIRGIL J. O'CONNOR

Purpose of Study

The problem was to arrive at an estimate of the degree to which the instructional sound film employs its intrinsic qualities, namely interpretive sound and realistic action. The investigation was carried on at the past two summer sessions at the University of Michigan, the first course conducted by Dr. F. Dean McClusky, the second by Ford Lemler.

Procedure

One hundred instructional sound films were examined. The sampling must be qualified with the word *selected*. Although the one hundred titles were picked haphazardly from the library of the Visual Education Bureau of the University of Michigan, that three-year-old library is naturally a selected one in itself. Further evidence that these films were not the average, but rather above it, was obtained by comparing the list with the directory of five hundred educational films being issued by the American Council on Education. Ninety of the one hundred films used in this study may be found listed in that directory.

A preliminary examination of ten films was made in order to gain practice in identifying the technical elements that were to be measured in the analytical study. The data obtained during the preliminary study was not used in the final calculations.

Each of the one hundred films was viewed at least twice. In cases where the accuracy of the timing was in doubt, or the identification of a still scene was not certain, the film was always reviewed for a third time. The amount of time spent in the process of measuring and recording the sound and motion utility of a single reel was ordinarily thirty minutes.

As well as getting an analysis of the motion efficiency of present-day teaching films, it was possible to make a comparison with a similar study made in 1923 by H. Y. McClusky. By adhering exactly to definitions stated in his 1924 report and consulting him personally for borderline applications, it was hoped that the present study would provide an accurate follow-up.

Still scenes were defined rigidly as those scenes in which there was no apparent action. Scenes that were still except for rippling or running water, rising smoke, or movement caused by wind were considered action pictures. A chart or diagram was termed as still until it was altered; then it was termed action whether the alteration was actual animation or just a changing legend, moving arrow, or shifting line. Thus a measurable amount of still chart and diagram actually was timed as motion.

Measurements made for the motion study were in seconds of time. H. Y. McClusky used a mechanical film winder, and calculated in terms of linear measure. He believes, however, that measuring in units of time with accurate stop clocks during actual projection (as was done in the present study) is the more adequate method.

The unit of measure used in figuring percentages was the scene. All of the film shot from a single setting of the camera was considered one scene. Panning could take place within a scene. In films that contained interpretive sound the ratio of the number of scenes including such sound to the total number of scenes formed the basis for the percentage.

For the purpose of this study, it was assumed that the lecture on the sound track had no sound utility. Sound that was actually an inherent element in the scene was considered the only sound that increased reality of presentation.

(*Concluded on page* 157)

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS
Assistant in Audio-Visual Aids
Extension Division
Indiana University, Bloomington

Land Birds of the Eastern United States (Heidenkamp Nature Pictures) 3 reels, kodachrome, 16mm. silent. Sale price $80 per reel. Apply to producer for prices of 100 ft. reels combined in any sequence purchaser desires.

In natural color thirty-two common land birds of the Eastern United States are shown in activities which include feeding, flight, nesting, and feeding young. In nearly all cases differences in coloration between male and female are illustrated. Titles between each of the sequences give the name of the bird.

Reel 1: Downy Woodpecker, male, feeding; Northern Flicker, male and female, young, flight, feeding young; Prairie Horned Lark, both sexes, feeding, nest and egg, young; Purple Martin, flock by house, flight, both sexes; Barn Swallow, both sexes, building of nest, feeding young; Tufted Titmouse, feeding in winter; Black-capped Chickadee, feeding in winter, tamed; White-breasted Nuthatch, feeding; Eastern House Wren, nesting; Catbird, nesting, tame young bird ready to fly; Brown Thrasher, male and female, feeding, feeding young.

Reel 2: Eastern Robin, both sexes, feeding, nest and young; Wood Thrush, nesting, feeding young; Eastern Bluebird, both sexes, nest, young; Cedar Waxwing, both sexes, nest and young, feeding young; Red-eyed Vireo, both sexes, nest and young, feeding young; Black and White Warbler, male; Louisiana Water Thrush, demonstration of protective coloration; Black-throated Green Warbler, male; Magnolia Warbler; American Redstart, male; Yellow Warbler, both sexes, feeding.

Reel 3: Eastern Cowbird, flocking, male and female, egg in another bird's nest, feeding; Baltimore Oriole, both sexes, nesting, young, tensile strength of nest is demonstrated; English Sparrow, nesting in woods, male and female, bathing, feeding, feeding young; Eastern Song Sparrow, both sexes, nest and young, feeding; Eastern Cardinal, male and female, nesting, feeding young, young bird ready for flight; Eastern Field Sparrow, nest and young, feeding young; White-throated Sparrow, male, feeding; Rose-breasted Grosbeak, both sexes, nest, feeding young; Eastern Chipping Sparrow, nest, feeding young; Eastern Goldfinch, both sexes, feeding, nesting, care of young.

COMMITTEE APPRAISAL: An excellent film for a study of the natural habitat of Eastern Land Birds. It can be used in nature study and science classes to show color-marking, location of nests, kind of materials used in building nests, food habits and parental care. The film cannot be used to show the different types of flight. The photography, in general, is outstanding for authentic colors and excellent close-ups.

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer, and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

Americans All (Office of the Coordinator of Inter-American Affairs) 2 reels, 16mm. sound. Apply to distributor for free sources or permission to purchase prints for $17.60.

This film, by Julien Bryan, presents the ways of life—industries, schools, and recreation—in the twenty American republics south of the Rio Grande.

By means of animated maps, the film points out that South America was settled more than a hundred years before North America. Shots of Aztec dances, of the ruins of architecture and terracing of the Inca capitol, Cuzco, show the ancient civilization. Animated maps again are used to point out the political and economic dependence upon Europe prior to the political revolts of the early 19th century. Modern communication and transportation between North and South America are shown.

A series of flash shots show some of the natural resources and industries of the country, together with the varied landscapes of the different sections. These include harvesting of coffee, of bananas and sugar; views of ranches in the Argentine, and of herds of llamas in the Andean country. Commentator suggests mineral wealth of the continent: copper, nitrate, tin, manganese. Remote village scenes are contrasted with modern industrial cities. Some modern industries: building, meat packing, and newspaper publishing are pictured.

Some of the problems of education and public health are suggested and scenes are shown of public and church schools, both urban and rural, of institutions for medical research and of field clinics.

The film closes with a series of scenes showing the recreational activities of the people. These include a gaucho picnic, polo game, crew racing, soccer, pato, bull fighting, folk-dancing, movies, chess, swimming, and scenes from a debutante's ball and a city supper club.

COMMITTEE APPRAISAL: The teacher will find in this film much material useful for the study of the agricultural, natural, industrial, or human resources of the Latin American countries. It emphasizes the need for fostering cultural relations and an exchange of ideas as well as goods between the United States and Latin America to develop the policy of hemisphere solidarity. The committee was unanimous in declaring "Americans All" to be the best general film on Latin America now available for educational use.

Tall Tales (Brandon Films, Inc.) 1 reel, 16mm. sound. Apply to producer for rental sources. Sale price $40.

"Tall Tales" presents ballad singers Burl Ives, Joshua White, Will Geer, and Winston O'Keefe singing three authentic American folk songs: "Strawberry Roan," "Grey Goose," and "John Henry." Background for the singers is a farmhouse kitchen-yard after the noon-day meal. Dressed as farmhands and cook, the singers play horse-shoes and sing the ballads with a guitar accompaniment to while away a carefree quarter-hour before returning to their work in the fields.

The homely philosophy of "Strawberry Roan," in which an over-confident bronc' rider is chastened by a fall in the dust from a bucking western cow-pony; the childlike delight in fabulous exaggeration and fireside tales of wonder to which "Grey Goose" appeals; and the inevitableness of "John Henry's" tragedy, in spite of his super-human effort are true growths from the rich mould of the pioneer generations of America. As Alan Lomax, Curator of Folk Songs for the Library of

Congress, says in his introduction to the contemplated series, of which "Tall Tales" is a part, "There is nothing in italics in these ballads, nothing stressed—the people who sing and listen know the facts, it's their story, the story of America."

COMMITTEE APPRAISAL: This film can be used to great advantage to enrich student experience in the study of literature and music. Students of American literature will bring greater understanding and appreciation to the reading and discussion of the folk ballad after seeing and hearing these three ballads sung. The atmosphere and informal mood of folk music is well demonstrated. It is to be hoped that in future films of the projected series the personalities of the singers will be submerged more successfully into the types they represent.

Addresses of Producers and Distributors

Brandon Films, 1600 Broadway, New York, New York.

Heidenkamp Nature Pictures, 538 Glen Arden Drive, Pittsburgh, Pennsylvania.

Office of the Coordinator of Inter-American Affairs, Motion Picture Bureau, 444 Madison Avenue, New York, New York.

Masterpiece Paintings in Color Slides

(Reviewed by a committee of art teachers at Indiana University)

A set of forty reproductions of famous paintings has been prepared by O. J. McClure Talking Pictures, 1115 W. Washington Boulevard, Chicago in the form of 2x2 Kodachrome glass slides, and single or double frame filmstrips, accompanied by two double faced 12″ 33⅓ r.p.m. records.

These forty full color slides with recorded lecture by Dr. Dudley Crafts Watson present a pleasantly casual approach to the appreciation of painting through a medium very closely approximating the conditions of an actual tour through several galleries of the Chicago Art Institute. The slides include examples of Byzantine; Siennese; Flemish; French and Dutch Realistic; French Impressionistic; English Dynamic; Colonial American; Modern American; and Modern Experimental painting. Religious paintings, landscapes, seascapes, portraits, and genre subjects are shown in a variety of treatments. Dr. Watson's interpretation of the subject matter of the paintings is generously interspersed with informative, non-technical discussions of styles and movements represented, together with interesting details about the personalities of the painters.

Adult study clubs, extension lecture programs, elementary, high school and university art appreciation classes should find the slides with the recorded lectures useful as introductory and motivating material preceding detailed discussions on the appreciation of painting. Many of the individual slides could be grouped to illustrate chronological variations in the treatment of landscapes and portraits, historical developments, and stylistic variations.

The recording is of good quality, though the inclusion of a chime signal or other slide-changing cue would have made the program easier for the projectionist. A few of the slides fail to do justice to the original paintings, but they are, on the whole, very satisfactory. Though a more orthodox organization of the material and the inclusion of additional critical comments would have made the lectures more generally useful in high school and university classes studying composition and technique, it would have lessened the appeal on both the elementary and adult levels.

News and

Texas Conference on Radio and Visual Education

The Second Annual Texas Conference on Radio and Visual Education, sponsored by the State Department of Education, will meet at Baylor University, Waco, on April 23, 24, and 25. Zone IX, Division of Visual Instruction of the National Education Association and Region 5 of Association for Education by Radio will meet in conjunction with the conference.

The Texas Conference on Radio and Visual Education is designed to promote a wider and more effective use of radio and visual aids in education and is held annually in a different section of the state in order to bring its benefits closer to the schools. This year the over-all theme is the role of radio and visual aids in the national war effort.

Featured speakers to be presented at the conference are Thomas D. Rishworth, Director, Public Service, National Broadcasting Company; Dr. I. Keith Tyler, Director, Evaluation of School Broadcasts, Ohio State University; Dr. Winifred C. Cullis, Women's Section, British Library of Information, New York; Wesley Greene, National Film Board, Ottawa, Canada; Kenneth MacGowan, Office of Coordinator of Inter-American Affairs; W. T. Powell, Chairman, Zone IX, Division of Visual Instruction, NEA; Dean B. F. Pittenger, School of Education, University of Texas; L. A. Woods, State Superintendent; Pat Neff, President, Baylor University, Waco; Dr. Joe P. Harris, County Superintendent, Dallas.

Work study groups and special clinics will constitute the real heart of the conference. The work study groups will consider such problems as: Organizing and Administering a Visual Education Program; Problems and Functions of Film Libraries; Teacher Training in Radio and Visual Education; Utilizing Visual Aids in the Elementary and Secondary School Program, and in College Instruction; Audio-Visual Aids in Religious Education; Special Problems of Radio and Motion Pictures; Radio Workshop and the Simulated Broadcasts; Problems in Utilization of Radio in the Elementary and Secondary School.

The clinics, which will combine practical demonstrations of techniques and procedures as well as equipment, will deal with projection and equipment, production of educational films, construction and use of mounted materials, still objects and museum pieces, techniques in classroom utilization of visual aids, educational script writing, studio production of radio programs, production and use of transcriptions, and evaluation of radio and propaganda analysis.

During the course of the conference the latest films will be shown on health, social science, vocations, civilian defense, natural science, inter-Americanism, documentary films, arts and crafts, teacher-training, vocational guidance, and music. Special broadcasts will be presented by the Texas School of the Air, by the University of Texas, by the Waco Public Schools, and by WFAA, Dallas.

Cooperating with the State Department of Education in the conference are Texas universities and col-

Notes

leges, Texas State Teachers' Association, Texas Congress of Parents and Teachers, Texas Federation of Women's Clubs, Division of Visual Instruction of NEA, and the Association for Education by Radio.

Visual-Vocational Joint Session

On Friday evening, March 27, 1942 a joint meeting of the Visual Instruction Section and the Vocational Guidance Section of the New York Society for the Experimental Study of Education was held. The program included the showing of two new guidance films, "I Want a Job" and "Courtesy Comes to Town" with a panel discussion by guidance counselors from city junior and senior high schools, based on an evaluation of the films in the light of the objectives of guidance counseling and of pupils' reactions.

The film made in shadowgraph technique, "Columbus" was the basis of another kind of discussion. The film was produced in Vancouver, B. C. by a school principal, Mr. Morrison. Mrs. Gertrude H. Selkowe, a sixth-grade teacher, told how her class responded to this film.

The chairman of the Visual Instruction Section for the meeting was Mrs. Esther L. Berg, Assistant Principal of Junior High School 159. Dr. Iona Logie of Hunter College High School acted as chairman for the Vocational Guidance Section, and as panel leader.

Hoban with U. S. Signal Corps

Charles F. Hoban, Jr., formerly with the Philadelphia Public School System as Special Assistant in Visual Education, has been commissioned Captain in the U. S. Signal Corps and will handle the distribution of the Army's training films. These films are not made for the general public, but are distributed to Army camps through Corps area libraries. They give men in the armed forces instruction in use of equipment, military strategy, and vital technical problems affecting the welfare of the modern army.

It has been reported that 370 reels of army films are scheduled for production during the first half of 1942. Many of these are being made by the Research Council of the Academy of Motion Picture Arts and Sciences in Hollywood. They include: *Personal Hygiene, Military Courtesy, Anti-Aircraft, Searchlight Battery, Engineer Corps Equipment, Instruction of the Individual Infantry Soldier.* The Signal Corps has moved recently from Fort Monmouth, New Jersey, into the building in Astoria, New York, which formerly housed Erpi Classroom Films and Audio Productions.

Equipment Committee to Advise WPB

A Visual Education Projection Equipment subcommittee of the Photographic Equipment Industry has been formed by the Bureau of Industry Advisory Committees, Washington.

Jesse L. Maury is the Government's presiding officer. Members of the sub-committee are:

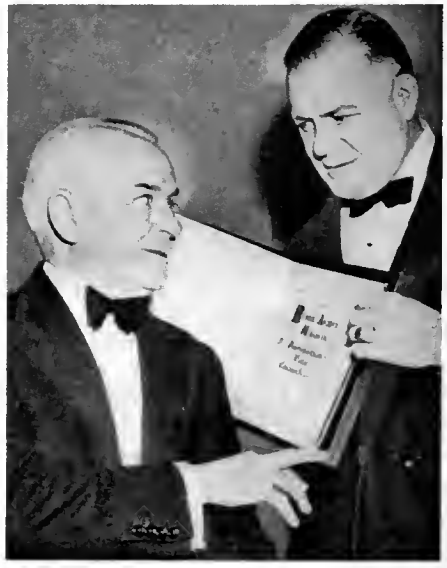
A. J. Bradford, Motion Picture Engineering Co., Detroit; Ellsworth C. Dent, RCA; E. B. DeVry,

DeVry Corp., Chicago; G. P. Foute, Raven Screen Corp., New York City; Lonis B. Fisch, Motion Picture Screen and Accessories Co., Inc., New York City; J. C. Heck, Da-Lite Screen Co., Inc., Chicago; Ben Marks, Keystone Mfg. Co., Boston; C. H. Percy, Bell & Howell Co., Chicago; I. L. Nixon, Bausch & Lomb Optical Co., Rochester; Philip S. Malickson, Sentry Safety Control Corp., Philadelphia; Axel Monson, Ampro Corp., Chicago; W. S. Vaughn, Eastman Kodak, Rochester; Alexander Victor, Victor Animatograph Corp., Davenport, Ia.; L. J. Welch, Classroom Laboratories, Inc., Chicago; H. E. Eller, Radiant Mfg. Corp., Chicago; B. J. Kleerup, Society for Visual Education, Inc., Chicago; B. H. Witherspoon, Spencer Lens Co., Buffalo.

This committee will consult with and advise officials of the War Production Board concerning problems caused in the industry by the scarcity of essential materials, and on priority problems.

H. C. Grubbs Presents Educational Award

The 1942 Educational Award of the Associated Exhibitors, National Education Association, was presented to Dr. Robert Andrews Millikan, of the California Institute of Technology, by H. C. Grubbs, Vice President, Erpi Classroom Films Inc. As retiring President of the Associated Exhibitors, Mr. Grubbs made the presentation before some forty-five hundred guests of the organization in the San Francisco Municipal Auditorium Tuesday evening, February 24. The event was a feature of the convention of the American Association of School Administrators.



Dr. Millikan, left, receiving the Award from Mr. Grubbs

After citing in detail Dr. Millikan's achievements in the field of physics and his service to education in general, Mr. Grubbs presented the eminent scientist with an especially prepared illuminated manuscript bearing the citation.

SMPE Spring Convention

Emphasizing the important role played by the motion picture industry in maintaining American morale, the Society of Motion Picture Engineers has decided to hold its Spring Convention in May as has been its custom for 25 years. The five-day session will be held in Hollywood, starting May 4.

Ten Best 1941 Features

Gone With the Wind, David O. Selznick's production of Margaret Mitchell's novel, was voted the best film of 1941 by motion picture critics and reviewers in the annual poll conducted by FILM DAILY. The production, distributed by Metro-Goldwyn-Mayer, received 452 votes out of a total of 548. The other nine features in order of their selection are: *Sergeant York* (Warner Bros.); *The Philadelphia Story* (Metro-Goldwyn-Mayer); *Citizen Kane* (RKO Radio); *Here Comes Mr. Jordan* (Columbia); *The Little Foxes* (RKO Radio); *Kitty Foyle* (RKO Radio); *The Great Dictator* (United Artists); *Meet John Joe* (Warner Bros.); *Blossoms in the Dust* (Metro-Goldwyn-Mayer).

Experimental Research

(*Concluded from page* 151)

An examination of the results shows that the still scene percentage is 12.2 for the one hundred sound films. It appear that more than twelve percent of the content of teaching films can be presented as faithfully by stereopticon slides, stereographs, or even flat pictures.

H. Y. McClusky found in 1923 that 11.19 percent of the films he used was still picture material. His calculations prove that at least 43.27 percent of the educational films available then (he claims to have used better-than-average films in his study, too) was wasted motion utility. He concludes that "about half of the standard film dealing with educational topics is composed of material inherently no different from photographs and reading matter which constitute the common textbook."

It was the amount of subtitle (32.08 percent) that gave McClusky the principal basis for his indictment of the early teaching film. Today a sound commentary has all but eliminated subtitles. However, in substituting the sound track for subtitles it was found necessary to increase the speed of the film from twenty-four feet per minute to thirty-six feet per minute. One-third (33.3 percent) of the film is sacrificed for the change from printed to spoken commentary. This percentage is based on the projection time for the silent film. Calculated on the basis of silent length films, the 12.2 figure for still percentage in sound films would become 8.1. Thus the up-to-date figure for percentage of unused motion utility (with which to compare McClusky's 43.27 percent) is 41.4.

Results show that if the interpretive sound percentage is averaged for one hundred films it amounts to 16.84. Only fifty-six of the subjects contain interpretive sound in any degree. Of the forty-four films that are simply "talking" pictures there are twenty-four that could well make use of natural sound. Using eighty-one films as a basis for calculations, the percent of sound utility will be 20.80. Averaging the amount of interpretive sound just among the fifty-six actual "sound" films will raise the percent figure to 30.80.

Conclusion

Eighteen years of ever increasing educational film production apparently have seen a negligible amount of progress in utilizing the inherent element of action that the motion picture film possesses.

The backers of the silent films have not lost the weight of their decade-old arguments. The sound commentary still dictates the form of the lesson. The spoken words narrow the age limits for which the film is useful. Unfamiliar accent of the commentator, or just the strangeness of the voice, may cause misunderstanding and loss of attention.

In time the instructional sound film will surely realize all its inherent possibilities for faithfulness of presentation. Natural sound will be as much a part of the film as the photographs themselves. Then there will be no doubt as to its worth. Nevertheless it is evident from this study that some of the educational motion pictures mistakenly called sound films are today no better in motion and, yes, sound utility than many silent films produced twenty years ago.

Current Film News

■ ERPI CLASSROOM FILMS, INC., 1841 Broadway, New York City, reports the following recently completed productions, each 1 reel, 16mm. sound:

The Development of Communication—presents the need for more rapid communication during the pre-electric age and the inventions which made possible instantaneous communications: the battery, ground connection, electromagnet, telephone, telegraph, cable, wireless, and radio.

Simple Machines—shows the basic features of the lever, the inclined plane, the wedge, the pulley, and the screw. Applications of these devices to modern complex machines are demonstrated. The evolution of the machine and its part in contemporary civilization also is treated.

The Weather—explains the Polar Front weather theory and describes meteorological instruments and methods. Animated photography portrays solar radiation, atmospheric circulation, and cyclone wave phenomena. Types and formations of clouds are shown and their significance interpreted.

■ CASTLE FILMS, INC., 30 Rockefeller Plaza, New York City, has released another subject in their "World Parade" series:

Bryce-Zion-Grand Canyon, presenting the amazing wonders and splendor

A glimpse of Bryce Canyon

of these national parks—titantic sculptured images chiseled by ages of erosion. Bryce's horse-shoe-shaped bowl with its "Queen Victoria," its "Organ," "Bluebeard's Castle," "Tower Bridge", and "Moon Temple." A journey on tunneled highways leads to Zion Canyon and its parade of inspiring peaks . . . "Majestic," "The Watchman," and the austere "Court of the Patriarch." Then on to the mightiest gorge of them all, the Grand Canyon. 16mm Kodachrome prints, silent or sound, are also available on special order.

■ WALTER O. GUTLOHN, INC., 25 W. 45th St., New York City, has released a timely feature film in 16mm sound, namely:

Fight On Marines—7 reels—an exciting, comedy-drama filmed with the active cooperation of the United States armed forces, much of the footage being photographed at the Opa Locha Marine Airport in Florida. The story concerns the attempts of foreign spies to steal the plans of a new bomb release, and has for background the interesting life and activities of Uncle Sam's seagoing soldiers. Wallace Ford and Toby Wing head the cast.

■ IDEAL PICTURES CORPORATION, 28 E. Eighth St., Chicago, has added many timely and significant films to its rental library of 16mm sound films. Among outstanding additions of this kind are:

Youth Takes To Wings—4 reels—an official National Aeronautic Association motion picture, produced with the cooperation of the Franklin Institute of the State of Pennsylvania. A vivid exposition of the science of aerodynamics, presented in simple layman's language.

Sky Defenders—5 reels in color—Produced with the cooperation of the Army Air Corps. Canfield Cook, aviation authority, describes and pictures the training of U. S. Army Air Cadets.

Aviation Engines—2 reels—Produced with the cooperation of the Missouri Aviation Institute. A training aid for the primary student in the study of aviation engines.

■ NATIONAL FILM BOARD OF CANADA, Ottawa, announces the following 16mm. sound subjects for distribution in the United States through established film repositories:

Maple Sugar—11 minutes, in color—story of the maple sugar industry, one of the oldest industries in French Canada. The color of Quebec woods in early spring is pictured as the habitant farmer drives his sleigh over the snowy earth and taps the maple trees for syrup. Commentary has been recorded in habitant English and also in the more conventional English.

Peace River—20 minutes, in color—a panorama of the conquest of the wilderness from early settler days up to the present. How pioneers have created great wheat lands, established fur farming and fished the rivers 1000 miles north of the Canadian border.

Battle of Brains—13 minutes—story of the army that fights behind the army, the research men working in their laboratories to perfect weapons of war more powerful than the enemy.

Call for Volunteers—10 minutes—showing the activities of Winnipeg women in war-time. They realized early that whatever was happening overseas, morale at home must be maintained, and set up the first Canadian volunteer bureau in 1939.

IDEAL PICTURES CORPORATION, 28 E. Eighth St., Chicago, has acquired these subjects, as well as some thirty-odd other films on Canada produced by the National Film Board of Canada, for rental through their exchanges located in Chicago, Los Angeles, Memphis, Dallas, Portland (Ore.) Atlanta, New York, and Littleton (Colo.). The films are classified into 5 groups: "Democracy at War," "Human and Natural Resources," "Geography of Canada," "Sport," and Color Films."

■ BRANDON FILMS, INC., 1600 Broadway, New York City, is distributing

The Warden on the job

the first American instructional film on a phase of the problem of air raid precautions:

Air Raid Warden—1 reel, 16mm. sound—designed for use as an auxiliary teaching aid. It presents the functions of a local air raid warden, prior to and during a blackout. The subject is handled as a story, told by a typical warden as he performs his varied functions in a real life situation.

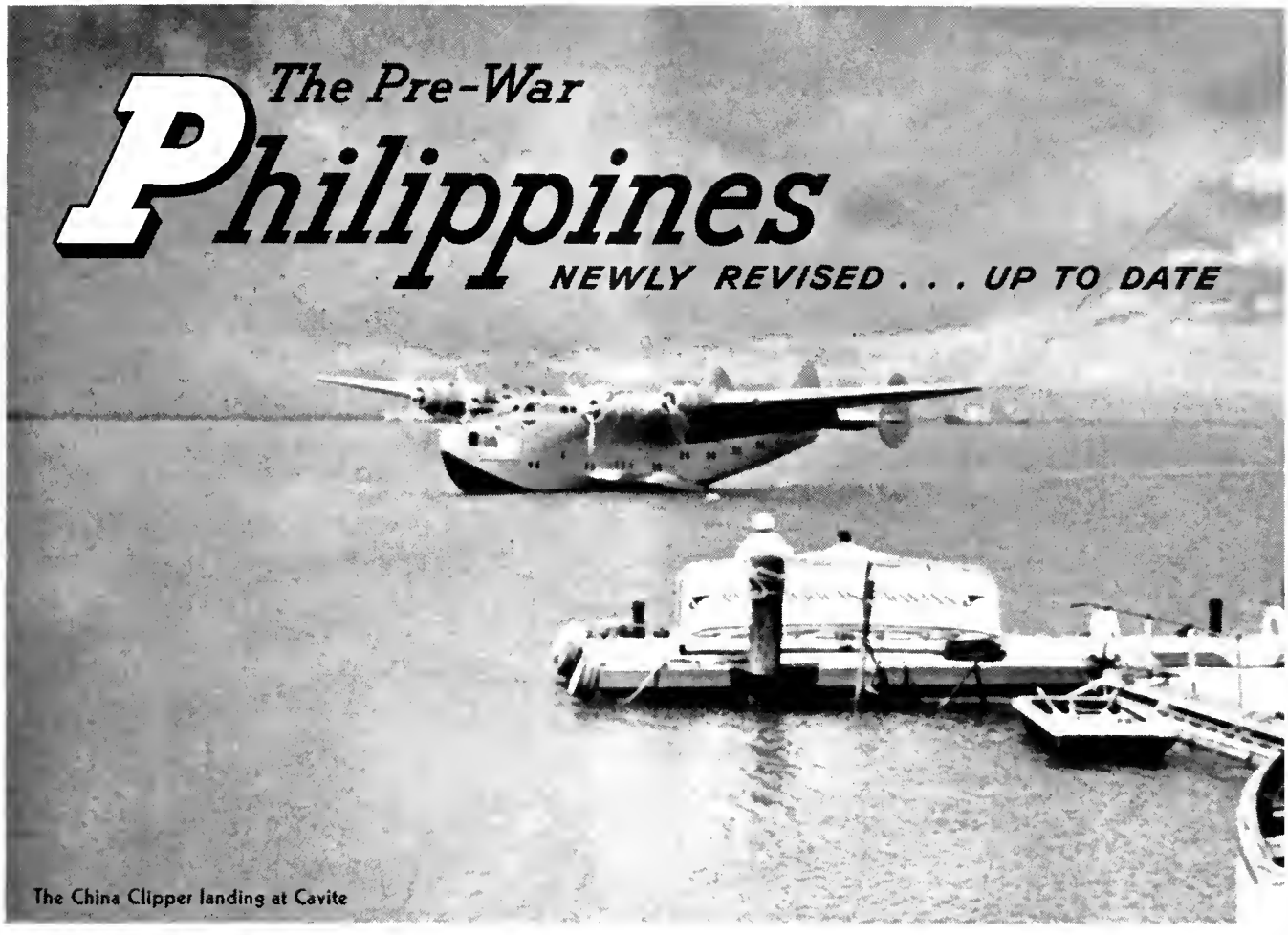
The film was produced by Photo & Sound, 153 Kearney St., San Francisco in cooperation with officials and industrial executives. Copies will be available for rental and sale from Brandon Films, as well as the producers.

■ THE AMERICAN SOCIAL HYGIENE ASSOCIATION, 1790 Broadway, New York City, aware of the increased importance of social hygiene in wartimes, and the need for films in this field for public, army and navy education, has issued a new talking picture sponsored by the Association's Committee on National Defense, under the title:

Health Is a Victory—1 reel, 16mm or 35mm sound. The picture opens with scenes in an industrial plant. The company physician explains to an audience the facts about gonorrhea—its diagnosis, treatment and cure. Animation traces the spread of the disease and compares its prevalence with other diseases.

The film was produced by Willard Pictures and photographed by Norman Dyhrenfurth.

(*Continued on page* 160)



The China Clipper landing at Cavite

WITH world attention focused on the Far East, Eastman's authoritative classroom film, *"The Philippine Islands,"* assumes a new importance for students everywhere. In vivid, graphic sequences, this film portrays the life and activities of the islands immediately preceding America's entry into the war. Included is a brief picture of the islands and their chief industries . . . Animation showing the time required to travel from San Francisco to Manila by ship and by plane . . . Views of modern Manila . . . The sugar and coconut industries . . . Rice culture . . . Scenes of the hemp industry showing harvesting, preparation of the fiber, and the use of modern machinery in rope-making. 1 reel—$24.

Also revised and brought up to date . . . "The Automobile." Completed just before the change-over to war production, the film depicts American mass production in its best-known form . . . follows the manufacture of the automobile from raw material to the finished product . . . covers production of tires and safety glass—testing new cars—modern highways and traffic conditions. 1 reel—$24.

Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Eastman Classroom Films

A street scene in Manila

Rope-Making—a major Philippine industry

(*Continued from page* 158)

■ Eastman Kodak Company, Teaching Films Division, Rochester, New York, has revised their pre-war reel on the Philippines to bring it up to date and give it more significance for students of current events.

The Philippine Islands—1 reel, silent—depicts life and industries in the islands immediately preceding America's entry into the war: sugar and coconut industries, rice culture, and the complete story of the hemp industry including factory scenes showing rope-making. There are views also of the city of Manila before the Japanese invasion.

The Automobile—1 reel, silent—has also been re-edited. It presents a picture of American mass production of automobiles from raw material to the finished product. The manufacture of tires and safety glass is also included.

■ Vision Educational Productions, 509 Fifth Avenue, New York City, have produced four new one-reel safety pictures in 16mm. sound, including two timely subjects to aid drivers of motor vehicles in war-time.

Drive for Victory illustrates and narrates the various essentials of motor vehicle, petroleum and rubber conservation. It shows drivers the parts of a car that get the greatest wear, and the correct way to reduce that wear.

Check Well Before Using emphasizes the importance of checking commercial vehicles before starting out on their daily tasks. The film illustrates proper checking of tires, oil, lights, gasoline, brakes, radiator, etc.

Hustle and Bustle deals with safety in motor coach operation. It portrays every-day hazards of city and suburban bus drivers, and shows how to avoid accidents.

Kitchen & Dining Room Safety presents hazards that beset restaurant and kitchen workers, and customers in commercial eating places, and relates safety measures in well-regulated hotels and restaurants.

All prints are for sale.

■ Capital Film Service, 44 Michigan Theatre Bldg., Lansing, Mich., is distributing a new color film produced through the cooperation of the Michigan Tuberculosis Association, entitled:

The Case History of Lucy X—800 feet, 16mm. sound, Kodachrome. It is the story of a young girl who, after her mother dies from tuberculosis, goes to live with an aunt in the country. Infected with the dreaded germ in her early years, Lucy's condition becomes steadily worse and she finally enters a sanatorium for treatment. There she learns the value of the tuberculosis association and sanatorium.

This film is available for outright purchase.

■ Bell & Howell Company, 1801 Larchment Ave., Chicago, has exclusive distribution on a series of six single reels of 16mm motion pictures produced by the noted New York surgeon and medical cinematographer, Dr. Jacob Sarnoff, for practical instruction in first aid.

Bleeding, Resuscitation and Shock is the title of a reel which follows a general introductory reel on the human body. Principal blood vessels and pressure points to check hemorrhage are shown, and artificial respiration illustrated.

Bandaging for Wounds and Burns is next demonstrated, using the triangular bandage, wound disinfection and other types of bandaging. Two other reels deal with emergency treatment of fractures—first, the simple, improvised splints; then, the application of fixed traction in splinting fractures. The final reel treats various methods of transporting the injured.

The series follows the same general line of presentation that is used in the official Red Cross handbook and will be found most useful if used with that manual or other text under study. Though "technical" in a sort of "popular science" vein, the films are of sufficient general interest to be used by other than first-aid study groups.

Silent versions in color or black-and-white are now ready for rental or purchase. A sound version is in preparation.

■ Visual Education Service, Inc., 131 Clarendon St., Boston, Mass., has issued three catalogues listing films on "America at War," "Civilian Defense," and "Our Heritage," available from their library.

America at War is a compilation of 16mm. silent and sound subjects—48 films showing the countries involved in the "War in the Pacific", and 23 films which give the "Background of War," from the beginning of Japanese aggression in 1891 depicted in "Thunder over the Orient" to the bombing of Pearl Harbor. Films covering the war in Europe also comprise this group.

Civilian Defense offers a group of 40 sound films which stress the need for civilian training. Included are many from Britain, visualizing their war experiences, "Fighting the Fire Bomb," "Stop That Fire," "Battle of Brains," "Fight for Liberty," and the Red Cross production "Marching with Old Glory."

Our Heritage lists 33 subjects, in silent and sound, which present the development of our American way of life.

■ RCA Manufacturing Company, Inc., Camden, New Jersey, announces two new sound motion pictures, the latest in a growing series designed for use by schools.

Command Performance—2 reels—is the story of Victor Records, from the recording studio to the finished product, told by Milton Cross. The final sequence, in natural color, reviews a number of the Victor Record albums.

Electrons on Parade—2 reels—tells of the heart of all radio—the radio tube. It shows the function of one type of tube, the careful testing of materials used in its making, the complete process of manufacturing and testing, and many of the usual and special applications of radio tubes.

National distribution of these two free films is handled by William Ganz Company, 19 E. 47th St., New York City. Prints can be purchased from the Educational Department of RCA.

Father Hubbard Cooperates With War Department

One outstanding case of the value of motion pictures in the present emergency comes to light in the information that Father Hubbard, the "Glacier Priest," has placed his entire Alaskan film library at the disposal of the United States Army. The importance of this is seen when it is recalled that during the past fifteen years Father Hubbard has been exploring Alaska, gathering scientific data through the medium of both the motion and still camera. During this time he has acquired over one and a half million feet of 35mm. motion picture film, and over 100,000 still pictures, covering all parts of Alaska and including details that are of much value to the armed forces at this time. With this convenient access to Father Hubbard's educational film library, pictures of vital areas can be quickly obtained by the Army. When it is realized that Alaska has a coast line of over 27,000 miles, it becomes evident that Father Hubbard and his husky assistants have gone to much effort in gathering such valuable photographic data.

Father Hubbard has been building up an educational film library for many years. His 16mm. sound library known as Father Hubbard Educational Films, located at the University of Santa Clara, Santa Clara, California, with branches in Washington, Illinois, Pennsylvania, New York, and Massachusetts, is available to schools on a rental basis. A 16-page, illustrated catalog lists over one hundred films, covering all parts of the world. A 4-page folder, "Training for Defense," has just been issued containing motion pictures portraying air raids in other countries, and scenes on various battlefronts.

Don Oliver, formerly District Sales Manager for Victor Animatograph Corporation, has joined Father Hubbard Educational Films as Midwestern Sales Distributor, with offices at 188 W. Randolph St., Chicago.

Among the Producers

Contents of Teaching Kit—filmstrips, charts, diorama, photographs, maps, symbols, teacher's guide

Visual Teaching Kit

A "Kit of Visual Teaching Aids on United States Geography," manufactured and distributed by Foley & Edmunds, Inc. Visual Teaching Aids, 480 Lexington Avenue, New York City, represents a new development in visual education. It presents an integrated body of visual aids of various types which together make up an extensive reservoir of teaching tools on which the teacher can draw for enriching her presentation of the indicated subject. The materials are closely correlated with the approved courses of study in Geography and the basic text-books used in this subject.

Every effort has been made to arouse and evoke student thought and student activity. The accompanying teacher's guide contains suggestions toward that end. The guide also provides background factual materials on which both student and teacher can draw. The arrangement of the material and its nature permits great flexibility of use.

The materials of the kit have been developed with the cooperation of a distinguished group of visual education experts, under the chairmanship of Dr. Daniel C. Knowlton of New York University, and with the aid of classroom teachers and other curriculum consultants.

The contents of this kit are as follows:

Filmstrips—(1) A Trip through the United States, 38 frames, emphasizing principal activities and occupations of the people which characterize each geographic region; (2) Corn Industry; (3) Cotton Industry: (4) Lumber Industry; (5) Coal Industry. The four industrial films, each containing approximately 30 frames, were selected as being typical major activities in four different sections of the country. Appropriate captions and questions designed to arouse interest, guide observation and challenge the pupil's thinking, have been inserted.

Charts and Maps—Titles of the charts are: (1) Growth of Transportation and Its Role in the Growth of America; (2) Peoples Who Helped Build Our Country; (3) The United States Is a Great Manufacturing Nation; (4) Some Kinds of Work Men Do; (5) Power, The Forces Man Uses to Do His Work. Each chart is 25 x 38 inches, in color, and printed on sturdy paper.

Diorama—A scene showing the Colonists and Indians in New England. Size 25 x 15 x 8 inches, assembled.

Adhesive Symbol Set—108 individual one-inch symbols, in color, on the following subjects: Farming, Lumbering, Trade and Commerce, Mining, Manufacturing, Grazing, Fishing, Dairying. Each symbol has an adhesive backing which may be applied to any smooth surface. The symbol can be re-applied an unlimited number of times without losing its adhesive quality or injury to the surface. It gives to the teacher new possibilities and opportunities for pupil activity in constructing graphs, maps, etc.

An Outline Map of the United States, Showing State Boundaries—For use as a base map in connection with the adhesive symbols.

A Set of Twenty-Four Photographs on United States Geography—Approximately 8 x 10 inches, printed on 8½ x 11-inch paper.

Teacher's Guide

Spencer Reader for 35mm Microfilm

Spencer Lens Company of Buffalo, New York, has developed a Microfilm Reader designed to meet the specifications of the Committee on Scientific Aids to Learning established as a result of the Committee's investigation of the requirements for a simple, inexpensive film reader. The instrument consists of a projection head, a glass film book, and the shadow box and screen. The projection head is a modern, well-designed optical projection system. This head is held by spring clips to the shadow box, which also serves as a support, and may be rotated to project the film in either a vertical or horizontal meridian. Operation of the instrument is simple. The microfilm is placed in the glass film book and moved to show the desired page or illustration. The glass film book consists of two pieces of glass, hinged and bound at the edges with cellophane tape, which spaces the film properly and protects it.

Film reader with glass film book in place.

The image is projected onto the special screen and is so protected by the shadow box that a darkened room is unnecessary. The image is flat and undistorted and microfilm material may be read for hours without optical discomfort.

The Reader in its simple form will accommodate rolls of film from a few inches to several feet in length. With long rolls, however, it is desirable to use the roll film attachment which is designed for rolls of film up to 100 feet in length.

New "RADIANT" Screen

Announcement is made by Radiant Manufacturing Company, makers of projection screens, at 1140 West Superior Street, Chicago, of a new portable glass-beaded screen recently added to their line of product. The new unit —housing a large-size screen surface that can be quickly and easily set up—is said to embody minimum weight with maximum strength and rigidity. Other described features are the RADIANT "Auto-lock" development which eliminates set screws and other locking devices, an automatic clutch that permits raising and lowering quickly and easily to any height on the tripod, which is constructed of strong square tubing on both upright and extension support.

The new screen is known as the "Institutional Model DS" and comes in four sizes: 52"x52", 45"x60", 60"x60" and 52"x72".

Bell & Howell "Flat Rate" Service Policy

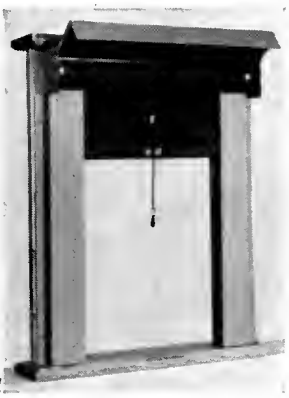
With all photographic equipment becoming increasingly difficult to obtain, Bell & Howell has taken what seems a wise step in making it easy and inexpensive for the Filmo owner to take the best possible care of his present camera and projector. In line with the conservation order of the day, the makers of Filmo have inaugurated a low-cost, flat-rate service system which applies to all models of their 8mm and 16mm cameras and projectors, and to Filmosounds. Customers have their choice of several standardized service levels from simple cleaning, adjusting and lubricating, to complete overhauling.

For further information, see a Filmo dealer or write to Bell & Howell Company, 1801 Larchmont Avenue, Chicago, Illinois.

Lite-Lock Shading

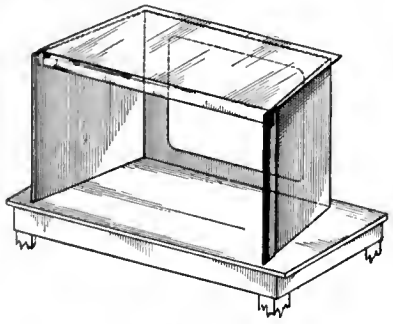
Latest improvements to the complete line of Draper darkening shades manufactured by the Luther O. Draper Shade Company, Spiceland, Indiana, include the hinged-cover roller box for *Lite-Lock* shades. This new principle—as illustrated—gives easy removal or application of the roller shade. Draper *Lite-Lock* shading is highly efficient for laboratory and motion pictures.

New and exclusive is the Draper *Pakfold* shade for economical and portable darkening. This shade is instantly demountable from the patented Draper pulley bracket. It folds, then may be rolled, into a compact bundle securely held by a protective flap that fastens with turn buttons to the top slat. After use, *Pakfold* may be pulled above the window, handily transferred to another room for darkening, or easily demounted from its bracket and stored for future use. In the alternate hanging of the translucent and the darkening shade on the same window, both shades use the same bracket. Write for complete description and illustrations.



A New Classroom Screen Shade

A screen shade that permits the projection of pictures in school rooms that cannot be completely darkened, thus enabling students to take notes while the picture is being shown, is announced by Central Education Association, Green Bay, Wisconsin. It is lightweight and folds away into a storage container when not in use. Black in color, it absorbs reflected light; made of corrugated board, the complete shipping weight, including the storage container, is only 10 pounds. The 21-inch wings can be expanded and contracted, depending upon the light interference and the size of the audience. It accommodates any table model screen up to 30" by 40". A patent was issued by the U. S. Patent Office February 10 covering this new shade.



Screen shade set up.

Visual Aids for Good Teaching

A series of nine teacher-training slidefilms—eight of them available with sound records—has been released by The Jam Handy Organization, 2821 E. Grand Boulevard, Detroit, Michigan. The set includes the following titles: 1. The Teacher; 2. Some Principles of Learning; 3. I Want to Learn; 4. The Lesson Plan; 5. Make Your Chalk Talk; 6. Teaching a Vocation; 7. Shop Teaching; 8 and 9. Designing Examinations (2 parts: the Essay type, and objective type tests).

The records play at 33⅓ r.p.m. and contain amplification of the titles. The slidefilms, which may be purchased with or without the records, all have reading titles.

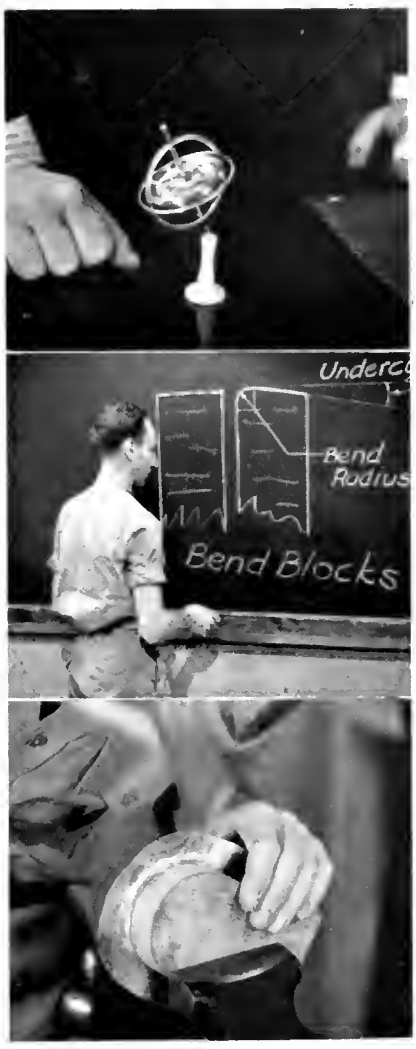
Two 16mm motion pictures on teaching technique, 2 reels each, are also offered to schools, on a rental basis.

Tips for Teachers gives a dramatic presentation of the three "P's" of good teaching—Personality, Preparation, and Presentation. Classroom scenes show both the "How" and the "Why" of good teaching.

Giving a Shop Demonstration, a clinical example of good teaching practice in a shop, covers the demonstration by the teacher which must precede practical work by the class.

S.O.S. Moves

It has been announced that the S.O.S. Cinema Supply Corp. would move May 1st to 449 West 42nd Street, around the corner from the Film Center district at 44th Street & 9th Avenue. The company's general offices, showrooms, stock room, shipping room, and repair shop will be housed in the new, more spacious and more centrally located quarters. Its manufacturing plant and warehouse will be moved to 452-458 West 46th Street. Provision will be made for expansion there caused by recent war orders, and other contracts now being negotiated. "Even though our Government has first call on our facilities", says J. A. Tanney, President, "our stock of replacement parts will be maintained to the limit."



Top: from "Tips for Teachers"; Center and bottom: from "Giving a Shop Demonstration."

Founded in 1927, S.O.S. this year celebrates its 15th Anniversary. Starting with a single desk space, S.O.S. now occupies a floor area roughly equivalent to an entire city block. During that time, many other firms were absorbed, merged, or partially liquidated.

Midwestern Forum

(*Concluded from page* 142)

NAVED Session

Treasurer's report, as approved by Auditing Committee, was presented by H. O. Gillet and accepted. Adjournment.

C. R. Reagan, Austin, Texas, was reelected President of the National Association of Visual Education Dealers, which convened Saturday afternoon. Other officers of the association are: Olson Anderson, Vice President, Bay City, Mich.; D. T. Davis, Secretary-Treasurer, Lexington, Ky.; Board of Directors: Frank Bangs, Kansas City, Harry Barr, Morgantown, West Va.; J. E. Foss, Pittsburgh, Penna.; Richard F. O'Neil, Boston, Mass.; Keith H. South, Minneapolis, Minn.; J. M. Stackhouse, Richmond, Va.; and Louis H. Hill, Portland Ore.

Mr. E. C. Waggoner, Director of Science and Visual Education, Public Schools, Elgin, Ill., and Mr. L. C. Larson, Consultant in Audio Visual Aids, Extension Division, Indiana University, Bloomington, Ind., appeared on the program which was attended by more than fifty Visual Education dealers, manufacturers and producers.

Mr. Reagan reported on recent developments concerning Government activity and plans for the use of motion pictures and other audio-visual aids.

A resolution was adopted offering all Government Agencies the facilities of the national association of Visual Education Dealers, representing the 16mm. motion pictures distribution industry.

HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 147)

Brandon Films (3)
1600 Broadway, New York City
(See advertisement on page 146)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on page 125)

Commonwealth Pictures Corp. (2)
729 Seventh Ave., New York City
(See advertisement on page 150)

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago
(See advertisement on page 148)

Dudley Visual Education Service (1)
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Co.
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 159)

Eastman Kodak Stores, Inc. (3)
Eastman Classroom Films
356 Madison Ave., New York City

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erpi Classroom Films, Inc. (2, 5)
1841 Broadway, New York City
(See advertisement on page 161)

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
25 W. 45th St. New York City
(See advertisement on page 151)

Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.

Heidenkamp Nature Pictures (1)
538 Glen Arden Dr., Pittsburgh, Pa.
(See advertisement on page 156)

Hoffberg Productions, Inc. (2,5)
1600 Broadway, New York City

Hornstein Photo Sales (3)
320 W. Ohio St., Chicago
(See advertisement on page 156)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 155)

Knowledge Builders Classroom Films
130 W. 46th St., New York City (2, 5)

Manse Film Library (3)
1521 Dana Ave., Cincinnati, O.
(See advertisement on page 153)

Photo & Sound Inc. (2)
153 Kearney St., San Francisco, Cal.
(See advertisement on page 156)

Post Pictures Corp. (3)
723 Seventh Ave., New York City

Douglas D. Rothacker
729 Seventh Ave., New York City

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 153)

Visual Art Films (2)
1303 Porterfield St., Pittsburgh, Pa.
(See advertisement on page 150)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
Old Colony Bldg., Des Moines, Ia.
(See advertisement on page 149)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 128)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 147)

DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago
(See advertisement on page 148)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 150)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 155)

RCA Manufacturing Co., Inc. (2)
Camden, N. J.
(See advertisement on page 126)

S. O. S. Cinema Supply Corp. (3, 6)
636 Eleventh Ave., New York City

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on page 161)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 149)

Radiant Mfg. Corporation
1140-46 Superior St., Chicago
(See advertisement on page 157)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILMSTRIPS

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 155)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 129)

O. J. McClure Talking Pictures
1117 W. Washington Blvd., Chicago
(See advertisement on page 151)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 156)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 156)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago
(See advertisement on page 148)

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Keystone View Co.
Meadville, Pa
(See advertisement on page 129)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on inside front cover)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16 mm silent.
(2) indicates 16 mm sound.
(3) indicates 16 mm sound and silent.
(4) indicates 35 mm silent.
(5) indicates 35 mm sound.
(6) indicates 35 mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.

EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION

25¢ A COPY $2.00 PER YEAR

MAY, 1942

KEYSTONE Follows the Defense Needs of Education

Despite the overwhelming military needs of today schools have the obligation of preparing the pupils of today for the, perhaps, more overwhelming demands of tomorrow.

In this obligation what is more important than to familiarize students with our outposts and our friendly and allied neighbors?

Keystone offers units—25 stereographs or 25 lantern slides to each unit—as follows:

OUR OUTPOSTS

19A Hawaii **19B Alaska** **19C The Philippines**

OUR NEIGHBORS

(Units published in recent years.)

No. 20 Our Neighbors in Eastern Canada
No. 21 Our Neighbors in Western and Northern Canada
No. 22 Our Mexican Neighbors
No. 23 Living in the Caribbean Lands
No. 24 The East-Coast Countries of South America
No. 25 The West-Coast Countries of South America

(Units published very recently.)

No. 22A Cuba and the West Indies
No. 23A Central America
No. 25A Venezuela, Colombia, Trinidad, Curacao, and the Guianas
No. 25B Brazil
No. 25C Argentina, Uruguay, and Paraguay
No. 25D Peru and Ecuador
No. 25E Chile and Bolivia

Title Lists and Other Additional Information Will Be Sent Upon Request

Keystone View Company

Meadville, Penna.

TIME IS SHORT!

50 SUBJECTS

16 MM SOUND-ON-FILM

THESE 33 IMMEDIATELY AVAILABLE

5 ON THE ENGINE LATHE

1. Rough Turning between Centers
2. Turning Work of 2 Diameters
3. Cutting a Taper With the Compound Rest and With the Taper Attachment
4. Drilling, Boring and Reaming Work Held in Chuck
5. Cutting an External National Fine Thread

5 ON THE MILLING MACHINE

1. The Milling Machine
2. Cutting Keyways
3. Straddle and Surface Milling to Close Tolerances
4. Straddle Milling
5. Plain Indexing and Cutting a Spur Gear

3 ON THE VERTICAL BORING MILL

1. Rough Facing, Turning and Drilling on a Vertical Turret Lathe
2. Rough Facing and Boring and Turning a Shoulder on a Vertical Turret Lathe
3. Facing, Turning, Boring, Grooving, Chamfering on a Vertical Turret Lathe Using 2 Heads

5 ON PRECISION MEASURING

1. The Steel Rule
2. The Micrometer
3. Fixed Gages
4. Vernier Scale
5. Height Gages and Standard Indicators

3 ON THE SHAPER

1. Cutting a Keyway on End of a Finished Shaft
2. Machining a Rectangular Cast Iron Block
3. Machining a Tool Steel V Block

2 ON THE RADIAL DRILL

1. Drilling and Tapping a Cast Steel Valve Body
2. Drilling and Spot Facing a Cast Iron Valve Body

10 SUBJECTS ON SHIPBUILDING!

1. Preparing and setting a keel block and bottom cradle
2. Inner bottom section: Sub-assembly of a closed floor, Sub-assembly of a solid floor
3. Inner bottom section: Setting up and fitting floor
4. Deck Girder: Sub-assembly
5. Side Frame: Sub-assembly of a web frame
6. Girders: Setting transverse web frame and a harning girder
7. Bulkhead: Laying off the boundary and stiffeners on a transverse water-tight bulkhead
8. Bulkhead: Laying off and fitting a center line stiffener
9. Bulkhead: Setting o transverse, water-tight bulkhead and hull
10. Deck Plates: Regulating and setting

17 OTHER SUBJECTS ON MACHINE SHOP WORK WILL BE RELEASED SOON!

USE

U. S. OFFICE OF EDUCATION

MOTION PICTURES

that help to teach

MACHINE SHOP WORK!

RIGHT NOW, every second is precious. You can make best use of the time at your disposal by using every aid that is in your power to obtain.

U. S. OFFICE OF EDUCATION motion pictures that help to teach machine shop work are *great aids*. Produced by the U. S. GOVERNMENT for the specific purpose of speeding production, they are accurate, authentic, low-cost text books in celluloid. Thousands of them are being used right now. Those who are using them call them one of the greatest contributions to speeding up training in American industry ever made.

These films were made under the supervision of old-line experts. Leading industries cooperated in their making. They conform to the best principles in machine shop practice. All are available in 16 mm. Sound-On-Film. Don't wait! Put them to work in your organization today! Without delay, write for complete information on prices, lengths, and subjects. Act NOW!

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Distributor for

THE UNITED STATES OFFICE OF EDUCATION

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Please rush complete description of all U. S. OFFICE OF EDUCATION Motion Pictures on Machine Shop Work! Also put me on FREE mailing list for news of future releases.

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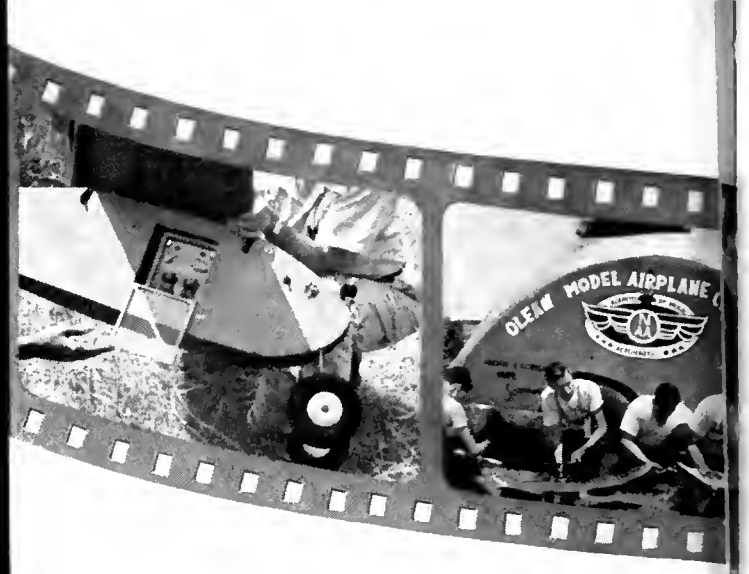
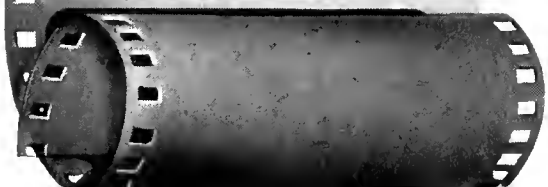
Youth takes to Wings

Dedicated to the
AIR MINDED YOUTH OF TODAY



Endorsed and Approved by
NATIONAL AERONAUTIC ASSOCIATION



Our Government Needs an Air Force of Two Million Men

HELP UNCLE SAM GET THAT AIR FORCE

By Booking

Youth Takes To Wings

An Official

NATIONAL AERONAUTIC ASSOCIATION

MOTION PICTURE

Produced by BRAY PICTURES CORPORATION with the cooperation of the FRANKLIN INSTITUTE of the State of Pennsylvania, Philadelphia, Pa.,—whose valuable facilities and technical experts were made available for its production

YOUTH TAKES TO WINGS is a quick, vivid exposition of the science of aero-dynamics that any school child can understand, yet presented so dramatically that grown-ups are lost in astonishment.

We see how birds control their flight by manipulating wing and tail feathers; we see demonstrations of air flow, force, mass, density and thermals, and hear in simple layman's language, an explanation of these phenomena; we see the science of flight applied, a-b-c fashion, in the assembling and flying of small model planes, and immediately we are whisked up into space or out to an airport for a close inspection of full size commercial and defense planes.

The fierce determination of America to build the WORLD'S GREATEST AIR FORCE in the QUICKEST POSSIBLE TIME puts a serious responsibility on ALL EDUCATIONAL INSTITUTIONS to participate in every possible way in the aviation training program.

Book YOUTH TAKES TO WINGS for showing to your entire student body. If possible invite the parents and help make them more air-minded too.

The high school boys of today will be the airplane pilots and mechanics of tomorrow.

Send in your booking for YOUTH TAKES TO WINGS now. Time is short. Let's go! *Let's help get that air force.*

52 minute version
1 day's rental $12.50

16 m.m. Sound

40 minute version
1 day's rental $10.00

Write for nearest distributing office to

BRAY PICTURES CORP.
729 7th Ave., New York, N. Y.

OR

IDEAL PICTURES CORP.
28 East 8th St., Chicago, Ill.

Keep 'Em Flying!

The EDUCATIONAL SCREEN

VOLUME XXI MAY, 1942 NUMBER FIVE
WHOLE NUMBER 202

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Address communications to The Educational Screen, 64 East Lake St., Chicago, Ill.

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* * * * * * * * *

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Emergency First Aid. A series of six reels by Dr. Jacob Sarnoff in cooperation with the Brooklyn, N. Y. chapter of the Red Cross.

"War Without Warning" Series. Informative films dealing with the war on the fighting fronts and on the home fronts.

"Know Your Neighbor" Programs. To increase knowledge about our allies and about the geography of this first global war, select programs from the scores of suitable Filmosound Library films. Or tell us your wishes and let us suggest programs.

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Plan to send your Filmosound to Bell & Howell when school closes next month, so that our skilled servicemen can ready it for the next school year. And while it is being inspected and adjusted, perhaps you'll want it modernized . . . given features of current models . . . for better performance and for broader utility. Here are some of many practical modernizations:

Remote Volume Control. Permits teacher to modify volume from her position near the screen (so that comments can be interposed).

Pilot Light. The same as on current models. Supplies illumination for threading in a darkened room.

New Take-up Assembly. Protects film by controlling tension automatically, regardless of take-up reel size and film load. Simplifies rewinding, too.

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• • •

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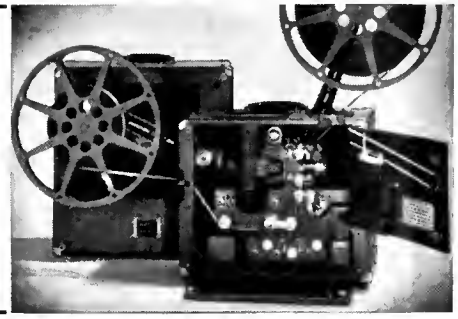

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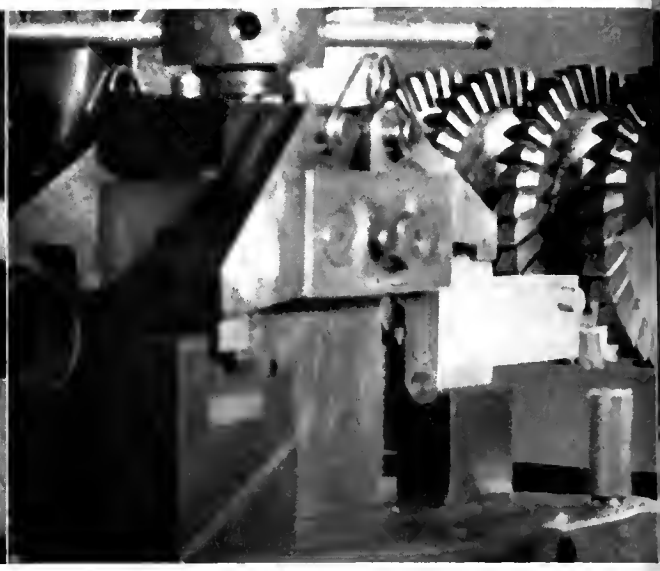


Extreme left, a scene from one of the films on the Vertical Boring Mill; other three are from the series on the Milling Machine.

SPEEDING TH

WILLIAM E. MORSE, JR.
Director, Audio Visual Education, National Defense Training, State Board for Vocational Education, Boise, Idaho

FOLLOWING the decision of the State Director for Vocational Education, Mr. William Kerr, backed by the State Board for Education, to inaugurate a state-wide visual instruction program for Vocational Education, National Defense Training, under the supervision of Mr. T. H. Mork, State Supervisor, Trade and Industrial Education, it was first decided that a plan of action be adopted including, among other things, these fundamental principles, provisions, and procedures:

Appoint a trained, responsible person to administer program throughout the state.

Establish basic library composed mainly of carefully-selected 16 mm sound films for each course, supplemented with film slides for intensive study of certain phases of work involving technical and complicated manipulations.

Secure from industrial and other organizations certain high-quality films that deal directly and specifically with essential defense training skills, either on long-term, free-loan basis, or outright purchase, all films to be previewed before purchase.

Cutting an External National Fine Thread. (One of the films on The Engine Lathe)

Select films that teach essential skills with minimum loss of time, thus making film program practicable.

Use first-class projection equipment to insure maximum illumination, rock-steady pictures, natural sound, and long trouble-free service, and accompanied by glass-beaded screens.

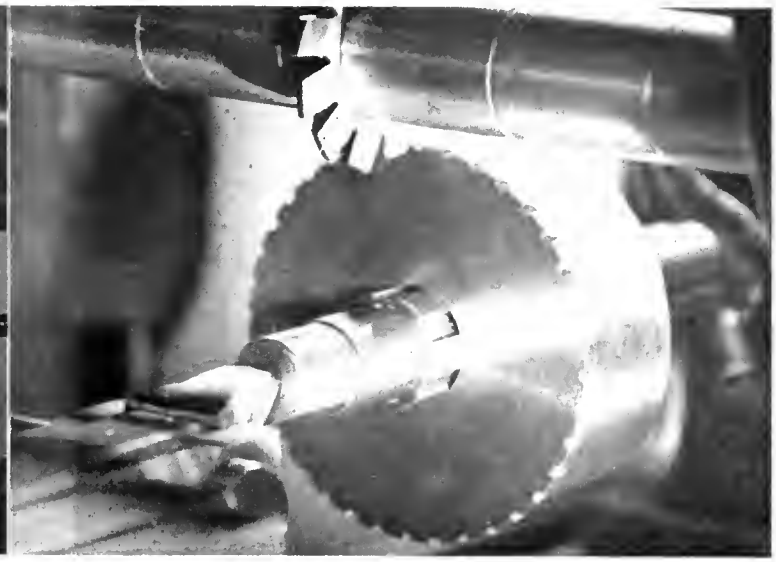
Schedule operator, equipment and films to each location. (If it is worth doing, it is worth doing well.)

Prepare and make mimeographed copies of study guides, including set of questions, for each film.

Place up-to-date accumulative list of films, together with Request-for-Film-Showing forms into hands of local supervisors and instructors so that films may be provided when they are needed, thus making for most effective use.

Meet instructors' requested schedules for film lessons in preference to arbitrary forced schedules. Meet these schedules day or night with full realization that every minute counts and no sacrifice in time and effort we can give can begin to compare with those giving their lives. War time of all time is no time to waste time.

Relieve instructors of projectionist duties, leaving them free for a concentrated teaching job—to discuss, demonstrate, test and check, and to request re-showings of the film for all or part of the class. Instructors should be encouraged to use their initiative and individuality and to experiment to determine the most practical and efficient teaching techniques in using audio-visual aids.



stributed nationally by Castle Films.

(Photographs courtesy Bell & Howell Co., a rental source.)

ICTORY PROGRAM

Emphasizing the vital contribution made by the U. S. Office of Education Machine Shop Films in defense training courses.

Follow each film lesson with demonstration and actual supervised application by trainee of principles and operations learned, until he has ability without supervision to perform operations in a manner comparable with the standards so vividly portrayed in the film.

Cooperate with War Department in making use of war training films, including those of the Signal Corps, for classes of Army Personnel and Civil Service Workers when such classes are in locations other than the Air Base.

Preparation for Class Use of Films

For the instruction of our Defense Training classes the United States Office of Education films on Machine Shop Work, distributed by Castle Films, have proved of inestimable value. A single preview of these films assured success for the proposed audio-visual teaching program. With the aid of Mr. Mork and his assistant, Mr. J. E. Harmon, instructors present at the previews prepare lesson guides, consisting of the operations covered in the films and questions based thereon.

Suggested procedures for instructors:

(a) Preview films as an indispensable part of your preparation for film lesson
(b) Have all material on hand
(c) Keep things moving
(d) Have students answer questions using complete statements.
(e) Stress fact that habits of cleaning, oiling, dress, etc., portrayed in the first or any of the series of films, carries over and is taken for granted in all subsequent operations.
(f) Have student keep questions with answers correct and complete, together with operations and notes, in loose-leaf binder.
(g) Follow film lesson with demonstration on actual machines immediately.
(h) Emphasize importance of visualizing each job before beginning.

The following procedure in class use of films has proved quite successful:

Instruction to class prior to film showing:
Summarizing operations covered in film and setting them forth on the blackboard with student participation
Film showing (without interruption)
Class discussion
Students prepare written answers to questions
Exchange papers and check
Instructor emphasises parts of film to observe closely
Reshowing of film
Final discussion, and complete answering of all questions

In our experience film lessons have proved most

(*Concluded on page* 175)

Rough Turning Between Centers. (Engine Lathe Series)

Teaching First A

An energetic Visual Education Director applies his skill and experience to a program of Civilian Defense training.

"Tell the doctor we need help for girl with a broken back."

NEVER before have so many needed to learn so much in so short a time. Visual education workers can help them to learn quickly, to understand clearly, and to remember easily the kinds of first aid treatment which are most likely to be needed when air raids come. We can contribute materials, equipment, and the mechanical and clerical services required.

I believe that we are also needed for educational leadership: to promote the use of visual materials, and to coach in the techniques of teaching with films. Since Pearl Harbor, I have shown films on first aid and talked to eight thousand. Our staff arranged other showings. On April 16 we reached our first goal of ten thousand.

Wishing to offer my services, I wondered what could be done by a fat old "has-been" with a stiff knee and an unreliable golf swing. The leg injury cancelled mountaineering and woodcraft. A gas poisoning eliminated chemistry. The best combination appeared to be lifelong interest in biology and first aid coupled with science teaching and administration of visual education.

Attendance at some civilian defense meetings, ten hours of first aid with air wardens, and thirty hours in a course for first aid instructors convinced me that there was a vital need for an improved instructional program in first aid to meet the specific requirements of the tremendous number of citizens who have gone back to school to fit themselves for service when air raids come.

In my opinion the standardized procedures of the Red Cross textbook are excellent but new lessons from this war should be introduced promptly. The reorganized courses in cooperation with the Office of Civilian Defense approach the current needs but their hasty changes are open to improvement. Methods of teaching first aid are out of step with 1942. Provision for use of visual materials is very inadequate. Specialists in medicine or in education have volunteered as a wartime measure but the training of teachers is still geared to the normal peacetime sequence when speed did not matter.

The Start with Films

Permission was granted me to show films to courses for instructors but they were merely "shown" instead of being integrated with teaching lessons. I had assumed that a mere showing would be sufficient to suggest potential values to everyone present and cause each one to plan enthusiastically to use them in his courses. I was disappointed to find some apathy, inertia, and even hostility to the idea of using films. It became obvious that considerable demonstration teaching and promotional effort would be needed if films were to reach people in time to help them. Therefore, such efforts were made at many times and places.

The first films secured were either old or designed for use under different conditions. During Christmas vacation I planned the production of a film in color to emphasize treatment for broken backs, abdominal wounds, and shock. On January 13 the first showing of this film, *First Aid Functions,* was made to air raid wardens. Illustrations with this article show types of scenes. Views of a skeleton and an anatomical model are used to explain the major functions of the body and the effect of surgical shock. A case of broken back is dramatized. Artificial respiration is shown by operator with a stiff knee. Painted signs help to clarify ideas for the silent picture. In actual presentation, I use a microphone and interrupt the film several times to discuss its significance.

Other Recommended Visual Materials

FILMS ON FIRST AID:

Control of Bleeding; Care of Minor Wounds; Artificial Respiration. 16mm silent. Black and white. Purchase. Eastman Teaching Films.

First Aid for Wounds and Fractures. January 1942. 16mm sound. Black and white. Sale. Erpi Classroom Films, and Red Cross.

Before the Doctor Comes. February 1942. 16mm sound. Sale or rental. Advisable to get approval of local chapter of Red Cross first. Reel 1: Bleeding and Shock. Reel 2: Artificial Respiration and Burns. Reels 3 & 4: Traction and Transportation. William Ganz and Red Cross.

ith Films

RY E. CHILDS
visor of Visual Education,
dence Public Schools, Rhode Island

Treatment for shock. "Make the victim breathe and make him hot."

Emergency First Aid. Announced in April 1942. 16mm silent now available, sound later. Black and white or color. Sale or rental. 5 reels: Bleeding, Resuscitation and Shock; Treatment of Wounds and Burns; Fractures; Fixed Fracture Splinting; Transporting the Injured. I have not yet seen these films, but the series has been highly commended by leaders of civilian war service groups as a valuable asset to courses in first aid. Bell & Howell, Brandon Films.

Fractures. 16mm silent. Black and white. Free loan. Aetna Life Insurance Co.

Anatomical Models. 16mm sound. Black and white. Free. Denoyer-Geppert.

Four U. S. Army training films. Two sections of 1200 feet each may be borrowed by applying to the Signal Officer of the nearest Army Corps. Application must be approved by local director of Civilian Defense. No. 33 includes bleeding wounds on battlefields, pressure points (using thigh instead of groin), splinting with improvised materials but without traction, grass for padding, and use of stretcher. No. 8-150 includes sunstroke, fainting, burns, eye injuries, and rescues from electric wires. Sound. Black and white. Free loan.

FILMSTRIPS—Series of six strips on first aid: Bandaging Wounds; Control of Bleeding; Fractures; Artificial Respiration. Society for Visual Education.

Red Cross instructors usually have a small chart on the blood system, borrowed metal traction splints, and a few other items. We prefer notched wooden splints because few metal ones will be available for use in air raids. Denoyer Geppert have excellent colored anatomical models but these are not easily transported.

Kinds of Programs

We presented films whenever we could as best we could. Therefore several types of programs were used. Since the size of groups, their major interests, the extent of their training, and their educational and cultural backgrounds varied, I tried to adjust myself accordingly in choosing an introduction to catch interest, and a good combination of demonstrations and talk to hold attention.

Eight men lift victim with broken back onto the edge of a stretcher.

Orientation programs

A program varying from sixty to ninety minutes was used to show the scope of first aid and to emphasize the kinds of serious trouble most likely to be met in air raids. Such a program includes Erpi's *First Aid*, our Providence film *First Aid Functions*, and two or more reels of the Red Cross subject *Before the Doctor Comes*. The Eastman First Aid series and the Army films were also used sometimes. This program has been shown to air wardens in groups of forty to nine hundred in three cities and to all fire auxiliaries to two cities.

General programs later in course

We selected films to syn-

chronized closely with the progress of classes. Every film available on the topic was used. Both instructors and students got new suggestions. Films showing work with victims on the floor encouraged dignified adults to get down likewise.

Promotion Propaganda Programs

Senior high school boys in Hi Y clubs have sponsored me at assemblies conducted by their officers in three high schools. I manhandled volunteers from the club in a few spectacular demonstrations, kept the crowd interested with transitions from clowning to brief emphatic statements, and closed the thirty minute program with the Erpi film. The principal of a junior high school has asked for a similar program to build enthusiasm for the new course in first aid which is now being inaugurated in the ninth year.

Integrated Teaching with Films

It has been possible to use a film for nearly every lesson in my own teaching of a ten hour course for air wardens and in twenty hour courses for the school janitors and school administration staff.

At one meeting we opened with individual activities reviewing previous work on pressure points followed by a problem case of serious bleeding in which each team captain organized his group to carry out the full process. We then proceeded to new work. The Eastman film *Artificial Respiration* was shown to give the general procedure. I raised questions on techniques and suggested less pressure. Blindfolded individuals then tried the same action pressing on bathroom scales. Pressures ran from sixty to ninety pounds. The demonstrators were then trained down

Courtesy Bell & Howell Company

From the Emergency First Aid Series.

to forty pounds. Later in the evening everyone tried out on the scales. The cadence was timed with stop watch, adjusted, and practiced at fifteen per minute while pressing on the floor. All trained at that speed. The Red Cross Reel 2 *Artificial Respiration* was shown. I emphasized details of position of hands and knees to ensure proper pressure. Half of the class stretched out and their partners were placed and coached by microphone and loud speaker to get set properly before any pressure was put on anyone's amidships. That prevented lameness! Very soon all were proceeding smoothly and effectively.

The next assignment included "blue unconsciousness," the chapter on artificial respiration, fireman's drag, and practice on bathroom scales in measured cadence. During the next session we repeated the Red Cross film *Artificial Respiration* with emphasis on rolling the victim over, treating for shock, and changing operators. A tricky "roll-over" was demonstrated and practiced. The "change-over" was attempted by "draftees" on the stage, criticized, improved, and practiced. They stopped when they talked or signalled! The Army film showing drowning and artificial respiration was shown and criticized. The next section on three types of rescue from live wires and artificial respiration is excellent.

If the large artery in the throat is severed, press fingers firmly beneath the wound, with thumb back of the neck. (From the Erpi production "First Aid")

Each team was then assigned a problem case involving a rescue from electric shock and complete process of treatment. Since I have a stiff knee and since some other first aiders have trouble in bending, *First Aid Functions* shows my modification of technique whereby I can give proper pressure although I can not squat on my heels. Some men found this procedure more comfortable.

I assume that some of my men can read and that all can learn through seeing and doing. Therefore, I do little "parroting" of the textbook and have no "oral recitations." We find time for a lot of practical activity by the class. The films bring in experts, allow all to see the same action together, permit impersonal criticism of techniques, and show some activities under conditions which we can not duplicate in our classroom. Demonstrations in the films can be repeated quickly and easily. They are always the same although instructors vary.

Time is conserved through use of four teams with special responsibility for each member.

Recommendations for Improved Instruction

I am greatly indebted to all agencies mentioned below. They are doing many things well. These friendly suggestions may help them to do one job better.

To instructors in first aid

Think in terms of the specific needs of individuals. Consider differences in education and intelligence. Remember pride of adult volunteers. Use more films. Make them timely. Gain time through use of films that substitute in part for some of your slower demonstrations and lectures. Select essentials only for

your own comments. Provide more time for activities by your class.

To schoolmen in visual education

Provide materials, equipment, and personnel. Provide educational leadership in community now and in schools later after adults have been properly trained.

To U. S. Army Signal Corps

Use other available films in addition to your own. Allow loans to schools, Red Cross and Civilian Defense. Permit us to buy prints so that you can have more use of them and can rearrange sections to make their use more timely. Deposit films with educational libraries as is done with some other government films.

To Office of Civilian Defense

Clear confusion on requirements in first aid for air wardens in relation to their other duties. Plan programs integrating films. Find resources and plan systematic use of facilities.

To American Red Cross

Prepare bulletins for instructors on use of film integrated intelligently with first aid teaching.

Push distribution of your films and give favorable notice of other good ones. In addition to distribution through your own chapters, use other channels to reach schools and civilian defense groups.

Provide bulletins on new techniques as they are learned in the present war: notably the contributions of Pearl Harbor and Bataan on shock treatment and prevention of infection.

In conjunction with the Office of Civilian Defense, further modify present publications to meet more adequately the specific needs of special groups. The recently established "half-standard course" omits vital procedures which these people need to render appropriate first aid for serious injuries when air raids come to America.

Speeding the Victory Program

(*Concluded from page* 171)

effective after a short period of actual training by the student in the machine shop.

Questions and lesson outlines vary as to type with different courses; however the following questions relating to the film *Rough Turning Between Centers* from the series on "The Engine Lathe" are representative of those used for other U. S. Office of Education films on Machine Shop Work.*

Rough Turning Between Centers

1. What does the operator check when studying blueprint?
2. How does operator clean machine?
3. What is used in cleaning machine?
4. How does operator oil machine?
5. Why do you clean and oil threads on the dog plate?
6. What is used to clean head and tail stock spindle sockets?
7. Why is tail stock spindle oiled?
8. Why is rough stock checked?
9. What should be remembered in selecting tool bit?
10. What precaution should be taken when inserting tool bit in holder?
11. Why should chips never be touched with bare hands?
12. Where does safety begin?
13. To be safe, what should the operator wear?
14. What instrument was used to measure diameter?
15. How is a micrometer used?
16. Why is the amount of metal removed twice that shown on the indicator?
17. What is the first law of the machinist?
18. What safety precautions are essential when sharpening tools?
19. Why is trial cut made?
20. What length of cut was taken in making trial cut?
21. When was work checked?
22. Why was not stock removed from entire length of piece during first machine operation?
23. When reversing the shaft to turn the other end, how was the same diameter obtained?
24. What would happen if the tail stock center and head stock center were not lined up?

*The completed films in this series include 5 on The Engine Lathe, 5 on The Milling Machine, 3 on the Vertical Boring Mill, 5 on Precision Measuring, 3 on The Shaper, 2 on The Radial Drill and 10 on Shipbuilding.

Summary of Specific Values

Our program is new; however, our results are most gratifying. While no controlled tests over a long period with large numbers have been conducted, these results are obvious:

These films will carry a good portion of the instructional burden. They are of sufficient length to provide adequate instructional coverage with clarity to each subject, and at the same time they are not too long to prevent continuous, concentrated interest. Workers not only learn faster and better but retention is greater, providing broader knowledge and better all-around understanding.

Instructors found better ways for doing certain things than those to which they had become accustomed through habit.

Standardization for students and instructors alike was achieved, not alone in machine shop practices, shop terminology, but in goals of perfection that will stand all tests and meet all specifications called for, and imbue the workers with a feeling of success which comes with the accomplishment of a job well done.

The films assist in making intelligent workers—workers who not only know how to do, but why. They help immensely in inculcating and making permanent, through supervised practice, the correct habits of work, cleanliness, constant checking, working to close dimensions, measuring and safety. The worker sees and hears from the film how each movement counts with no lost motion. He is stimulated to detect labor-saving movements making work easier, safer and less fatiguing.

To the new, untrained student the films provide a solid foundation and preparation in the basic principles which are demonstrated, and so efficiently explained by the commentator. They simplify complicated operations which would otherwise be less comprehensive to the untrained worker, and they provide a clear concept of the whole job to be done. Some of the machines shown in the films are different from those on which the trainees work, affording opportunity for study and comparison.

If the reaction of some of the trainees is a proper criterion by which to judge the efficiency of audio-visual instruction for defense training, the program certainly rates tops. One single film lesson frequently contributes as much learning as would have been acquired in a period of three weeks without the film aid.

Our country needs intelligently trained workers. Our goal is to train these workers to do specific tasks with all possible speed and thoroughness. The U. S. Office of Education films contribute notably to this program.

A Low-Cost School Museum

A story of a museum development which presents convincing argument for greater use of this frequency neglected visual aid.

WILLIAM G. HART
Principal, Thayer School, Dearborn, Michigan

TEACHERS everywhere are asking themselves searching questions about our schools. Is our education adequate to meet our national crisis? Are we really turning out citizens who can solve the staggering problems which our nation faces now and after the war? What experiences can we give children which will prepare them for their responsibilities in a democracy?

Certainly we can see pretty clearly now that it isn't enough to just have children memorize facts about citizenship, about health, and the like. The war has simply emphasized what has been true all along, that our education won't amount to much unless our pupils actually become more intelligent citizens, live healthier and more fruitful lives. We must somehow make the transfer in children's lives from knowing into doing. We must somehow get children to *want* to be healthy, to *want* to act safely, to *want* to share in democratic living.

This goal cannot be reached by the use of any single material or device. We know that some children are profoundly affected by what they read. We know how movies can change the attitudes and behavior of other pupils. We have evidence that radio programs turn the trick with still other children, that field trips get results in other cases, and so on. Clearly, the lesson to be learned by the teacher is that he must use a variety of materials if he is to change the thinking and acting of his pupils.

Exhibits in The Fordson School Museum.

The school or classroom museum is one of the most useful—and one of the most neglected—sources of pupil experiences. Museum materials, however, offer several advantages to the teacher.

In the first place, museum exhibits can usually be so planned that they can be handled by children. It is ordinarily a thrilling experience to a pupil to actually hold in his hands a fossil, a piece of iron ore, a mounted hummingbird, a model of a covered wagon, a replica of Edison's original phonograph, a foreign costume, or an Indian tomahawk. Through the use of such materials the urge to "touch it", which every teacher has noted in his pupils, can be turned into a powerful incentive to learn.

Museum materials have a second important advantage. They tend to emphasize aspects of the child's immediate community. Many contributions for such a museum will come from local factories, local businesses, and townspeople. The use of these materials will therefore place a greater emphasis on things closest to the child. He will be likely to study the animals or birds that actually live around him, the products his father is making in the local factory, the minerals he has seen in the fields.

Most teachers will probably agree that museum materials could be valuable aids in teaching. The average teacher, however, looks on such materials as too costly —as something desirable but out of his reach. Yet museum materials need not be either expensive or difficult to obtain. Most communities have great potential resources for such materials. On a number of occasions, in fact, successful school museums have been set up with little or no financial backing.

Such a case is found in the museum which classroom teachers J. Edgar Bigelow and Matthew Godfrey have established in the Lowrey School, Dearborn, Michigan.

The Museum's Transportation Exhibit.

First graders examine model of Edison's phonograph.

A brief look at the development of their project should be helpful to any educator interested in effective teaching materials. In the fall of 1940, these teachers made, as part of a university course, a survey of about 100 school museums in the United States. They were impressed with the possibilities of such materials. They talked with some of their fellow teachers and found a ready enthusiasm and a willingness to help in obtaining exhibits.

But the average school museum, their survey showed, cost a good deal of money. It was understandable, of course, that commercially-prepared exhibits, and cases, and a staff of workers should be costly. On the other hand, it seemed to these teachers that there should be many useful teaching materials that could be obtained without much expense; and that ingenuity could go a long way toward providing inexpensive facilities for exhibiting these materials. A thoughtful inventory of the community re-enforced this conviction. There were numerous industries and businesses, all potential sources of materials. Moreover, there were in the Detroit area several government agencies which could provide materials at little or no cost. It seemed reasonable, too, to assume that a good many articles would be contributed by homes in the community.

One day four little-used display cases were discovered, and enthusiasm boiled over. The cases were moved into a classroom and the museum was underway.

Of course, the job of obtaining good exhibit materials still lay ahead. Bigelow and Godfrey now went back to the classroom teachers. These teachers in turn discussed the museum project with their pupils. There was immediate enthusiasm, and a few days later the deluge began. There came a steady stream of minerals, old books, models of ships airplanes and engines, mounted birds and animals, and relics of the "old country" which for years had gathered dust in basements and attics.

The problem quickly shifted from one of getting materials to one of classifying and displaying these materials for their most effective use by pupils. Related exhibits were grouped together under headings suggested by the curriculum. For example, a case of mounted animals was entitled Adaptations of Animals, with exhibits showing Food Getting, Protection, Defense and the like. Labels for all the exhibits were made by pupils in the printshop.

The museum was put to almost immediate use by classes. Student interest soon resulted in the formation of a Museum Club to assist in the cataloging, labelling, and arranging of exhibits. The original four display cases were quickly outgrown. Additional cases had to be found. What, wondered Bigelow, did department stores do with outmoded cases? He visited the largest local department store. For eight dollars, he found, the school could have several old cases, definitely in need of repair, but originally costing several hundred dollars. But there was no money, not even eight dollars. It was apparent that if the museum was to continue to grow, some money must be found.

They petitioned the Board of Education for a small appropriation. They showed their exhibits to the superintendent and representatives of the Board. They even took them on a trip through a WPA Museum Project and a Federal Arts Project so that the school officials could see for themselves the potential sources of materials. These demonstrations along with the enthusiasm of the two teachers got results. The Board made a small appropriation and opened the Museum to the Fordson schools as a whole. Classes from other schools began to visit the exhibits. The old room was outgrown and a larger room was found.

The story of the growth of the museum from an idea to a sizeable project of over 3,000 exhibits is one of unending search for likely sources of materials. It is significant that once the project was explained, organizations were eager to provide materials. Local

History is vitalized when compared to age of tree.

merchants and manufacturers, for example, contributed exhibits showing the evolution of the motor car, the uses of soy beans, how a newspaper is published, and local birds.

Of equal importance was the assistance given by government agencies. The WPA Museum Project and Federal Arts Project provided exhibits of ceramics, pottery and period furniture, as well as many maps and pictures. Even the window drapes for the museum room were made by these agencies. The State Department of Conservation, CCC, and the University of Michigan cooperated to provide an extensive exhibit of Michigan Indian Craft.

This year the value of this Museum is recognized with a modest budget of $100. All the schools in the system are being served. It is important to note, however, that the "spadework", the early development of the museum idea, was all done without funds or influential backing. It is clear, too, that a small museum could be run indefinitely with almost no funds, and that a classroom museum is within the power of almost any teacher.

A number of useful generalizations can be drawn from this project:

1. A museum has value only to the extent that it contributes to the general goals of the school. A teacher could easily assemble a collection of objects which would contribute little to the school program. Of course even an unplanned collection of materials could have some value. A gun pointed at random into the air will occasionally hit a bird. But the intelligent hunter doesn't hunt that way. And the effectiveness of a museum (as of any teaching material) will depend upon the intelligence and skill with which we "aim" our materials.

In considering a museum project, then, one would want to ask himself a number of questions. What areas of my course of study or of the school curriculum are most in need of concrete teaching aids? What are the resources of my community? Can they make a worthwhile contribution to the curriculum? Can these materials be organized and displayed to teach effectively?

2. Most communities are rich in teaching materials. Homes, stores, factories, government agencies, all are eager to contribute to such a project.

3. Museum materials tend to place an emphasis on the problems and projects of the local community. Few educators would deny that we too frequently

(*Concluded on page* 183)

Varied Uses of Slides in Intermediate Grades

A collection of teacher-reports on the advantages of slide utilization at this educational level, with special emphasis on hand-made slides.

SIBYL VAUTER
School 49, Indianapolis, Indiana

THIS is a brief survey of numerous reports of very simple projects and experiments in which slides were constructed and used by teachers in the intermediate grades. These reports were submitted to the teacher of visual education at Butler University and made into scrapbooks. The examination of these scrapbooks together with reference material from various other sources, consituted the survey.

If nine-tenths of the energy spent in learning were spent in seeing that the proper images were formed in the child's mind, the educational process would be speeded up enormously and made more effective. If you hear a thing, you soon forget it. If you see it done, you remember half of it. If you do it yourself, you remember it all.

The following experiments show the use of lantern slides by teachers in the intermediate grades, in subjects indicated.

Experiment 1 (Spelling) A teacher wrote sentences containing children's names and words on cellophane—a child's name and one word from the spelling list on each piece of cellophane. As the slide was projected, each child read his or her name, spelling the word. The slide was removed and each child wrote the word. Slides were projected again, and the words were checked by the children to see if correct. The children were keenly interested. Only two words were missed by the entire class. The class was not a superior one.

Experiment 2 (Grammar) A teacher of fifth grade found the teaching of possessives difficult, so she divided her class according to intelligence quotients. The higher ranking group was taught in the usual way, presenting the subject by talking and doing the usual amount of demonstration on the blackboard. The poorer group had the lesson presented in the same way with the exception of the use of slides in addition. At the close of this unit of work the same test was given to each group. The perfect score for this test

was fifty (50) points. The mean for the group with low intelligence quotients with the use of slides was 28.7 only 2.1 less than the group of high I. Q.'s without slides, which scored 30.8. The average score on the retention test for the group with high intelligence quotients, taught without the use of slides, was 19.4. The average score for the group with low intelligence quotients, taught with the use of slides, was 18.5.

Experiment 3 (Grammar) A teacher divided her fifth grade pupils into two groups of equal I. Q. Each group was taught the correct usage of the words *this* and *that*. Lessons were presented to Group II with the use of lantern slides while Group I was absent from the room. Group I was taught without the use of slides while Group II was absent from the room. At the close of the unit of work, the same test was given each group. Group II, using lantern slides, made a five per cent higher average than Group I.

Experiment 4 (Social Studies) A unit of work on Baltimore, Maryland, was taught to a group of fourth grade pupils, using no slides. The same group of pupils was taught a unit of work on Washington, D. C., using slides and some other visual material. A true-false test was given at the close of each unit of work. The average for the group when taught without the use of slides was 70 per cent. The average of the group when taught with the use of slides was 82.5 per cent. The gain of 12.5 per cent may be attributed, in part at least, to the value of the lantern slides.

In a fifth grade geography class the use of fifty slides showing cities, industries, products and surface features of Mexico, resulted in a marked increase in an understanding of that country. Tests given at the conclusion of a study of Canada likewise showed a considerable gain in favor of the use of slides.

Experiment 5 (Social Studies) A group of fifth grade pupils traced maps on etched glass and, then, projected them on muslin. Pupils then traced the projected map on the muslin. Another group projected maps, made in the same way, on a window shade. These were fastened to a window shade roller. Water colors were used to indicate states. The maps were accurate and the cost was low. These maps were in constant and beneficial use for a long time.

Experiment 6 (Reading) Ten slow learning pupils of a fourth grade were taught the poem, "Hiawatha", a selection in the *Good Reading Book, Fourth Reader*. A set of Hiawatha slides was used. These were supplemented with pictures and other visual aids such as pine cones. Another group of ten pupils of the same mental caliber and in the same grade was taught the same poem without the use of slides. Apparently, interest was lacking with the second group since only about one-third of the entire poem was read by this group while the group using the slides read it all. The teacher who conducted this experiment was convinced that slow learning pupils particularly need visual aids in reading.

Experiment 7 (Safety) Slides shown on various types of accidents that occur were prepared for a Safety Forum. On the day of the Safety Forum the students seemed very much interested and asked numerous and pertinent questions which showed they were giving much thought to safety. The writer pronounces it the best safety forum held at that school. Special interest was unmistakably aroused by the use of slides.

Experiment 8 (Holidays) A certain teacher decided to have a different kind of program for her 5A's and 6B's on Washington's birthday. From a folder on Mt. Vernon, pictures were traced on slides. Colored pictures of the entrance to Washington's home, the home itself, each room, the old tomb, and the later one, were made. As the slides were shown, the children told about them with evident enthusiasm. It was enjoyable learning.

To summarize the advantages reported by teachers in the use of hand-made lantern slides in the intermediate grades:

1. Hand-make lantern slides stimulate interest.
2. They provide variety in teaching methods which appeal to pupils.
3. Hand-made slides are inexpensive, costing only about ten cents each.
4. Accurate and effective maps, which the children make themselves, cost very little.
5. Tests show that pupils, especially those slow in learning, make almost as high scores, when slides are used, as those of high intelligence when taught without use of slides. Even in a retention test, the slow learning pupils made almost as high scores as those of superior intelligence.

MOTION PICTURES—NOT FOR THEATRES

The thirty-seventh month of the first detailed history of the non-theatrical field of motion pictures. Concerned primarily with screen rations for the progressive churches of North America.

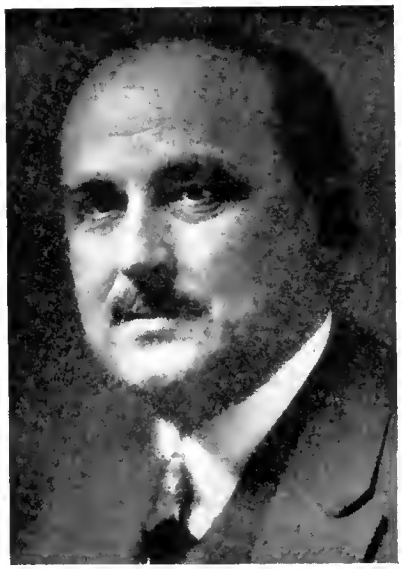
By **ARTHUR EDWIN KROWS**

THEY took an entire floor in the Masonic Temple Building, New York. I remember the suppressed excitement of most of the other non-theatrical tenants there when Paul Smith and his associates moved in. Their offices had few if any partitions, as I recall, but many fine tables, desks and chairs. We used to glimpse busy conferences in progress there when the passing elevators stopped for impressive passengers to get on or off. At first all those to be seen seemed to be clergymen. Some we knew—for instance, James Shields, J. E. Holley and Ilsley Boone. After awhile we recognized others, in the lay ranks. Later some fellow non-theatrical worker, whom we knew well enough to chaff about sluggish business, would suddenly become tight-lipped, and a week or two thereafter we would find him working for the American Motion Picture Corporation.

The Corporation's fundamental idea, suggested, perhaps, by Edison's "Conquest Pictures" plan, which had been introduced into the theatres by George Kleine without sufficient success, was to provide non-theatrical exhibitors with unit programs—that is, completely organized and balanced individual entertainments—together with all needed equipment. To supply projectors, screens, extra reels, rewinds, splicing-blocks and so forth was a relatively simple matter, orders for such apparatus being merely relayed to the regular dealers in such goods. "Local aids in advertising," a much touted form of the service, comprised program leaflets, announcements for newspapers, window cards and posters. This material was prepared at headquarters; and no doubt there might have been detected here the influence of Bronson Batchelor, publicity man who was on the board of directors. "Music cues," guiding the customer into combinations of standard musical excerpts for "atmospheric" accompaniment to his show, in all likelihood reflected the judgment of Henry Bollman, one-time student of the Boston Conservatory.

John Edgerton seems to have been at times rather sophomoric in his enthusiasm. Early in 1925 he was quoted by the press as saying that plans for the church to enter the motion picture business on a competitive basis with the theatres, "which were making many films of dubious quality," were being submitted to all church people in the United States. "We have at our disposal 10,000 Y.M.C.A. buildings and church auditoriums," he said. "We propose to turn these into motion picture theatres and then proceed to produce suitable films." Smith was wiser. He kept his glowing utterances for his backers and his subscribers, who needed the principal encouragement. It was all very well to talk of competing with theatres, but that was something for the theatrical managers to wake up some day and find out. After all, the American Motion Picture Corporation material was composed mostly of used theatrical stuff and there was nothing to be gained by stirring up antagonism of the professional showmen when they themselves were taking no particular action against this attempted diversion of their audiences. In other words, better to let sleeping dogs lie.

Service was rendered from headquarters in New York, and from twelve branch offices situated at Cleveland, Boston, Cincinnati, Kansas City, Missouri, Philadelphia, Chicago, St. Louis, Minneapolis, Atlanta, Omaha, and Buffalo and Sycracuse in New York State. About ten others were slated to open as the business grew. Thirty program units, averaging six reels each, were offered for rental as suitable to general audiences. Looking casually at the list one recognizes used Triangle features, old Charlie Chaplins, an Ernest Shipman subject or two, Helen Keller's picture "Deliverance," and Knud Rasmussen's celluloid record of his then recent arctic dash, with miscellaneous travelogues interspersed. These were for the "weekly unit" programs. For serious-minded church audiences there were forty one-reel "Bible Pictures" presented in pairs, mostly in story form.



President and treasurer of Paul Smith's American Motion Picture Corporation was William H. Barr of the National Founders group.

Then offer was made, "on an especial lyceum course plan," of Holley's Holy Land series in thirty-six reels, without immediately mentioning Holley; of Benjamin Chapin's "Lincoln Cycle," comprising eight "chapters" of two reels apiece; thirteen reels on geography under the general title "The United States—a Ten Talent Nation," which, from the description, strongly resembled a series featured long before by the Bureau of Commercial Economics, and a few extra-special subjects to be had by particular arrangement, including Russell Conwell's "Johnny Ring and the Captain's Sword."

For those who passed all this in favor of composing their own programs from material not specifically named in the general literature, prospective subscribers were offered selections from the Beseler Educational Library of approximately 1,000 reels, referred to with slight exaggeration as "the first educational film service to be established in this country." By another sales hyperbole it was claimed that "The American Motion Picture Corporation has set a new safety standard in the non-theatrical field, in that all releases are printed on non-inflammable or acetate film."

In the Educational Division some production was announced, but as far as I know, nothing of importance was done that way unless it was to gather some ready-made film to be reëdited into originally unintended form, as so many so-called educational releases always have been made. However, the announcements were ambitious enough. Jeremiah Whipple Jenks, research professor of government and public administration at New York University (named on the board of directors), was declared to be preparing twenty reels on civics based on a textbook which he had written in collaboration with his university colleague, Rufus Daniel Smith. This must have been because they could not come to terms about acquiring Fred Wythe's valuable civics series. Paul Smith certainly was acquainted with it; it was available; and Wythe's office was even then just a few floors above in the same building. Another announced series was one on economics, to be based on a book by Dr. Joseph French Johnson, professor of political economy at New York University. Dr. Johnson was to supervise production. The Jenks series was to be entitled "We and Our Government", that of Johnson, "We and Our Work." I have seen no evidence of the completion of either.

John E. Edgerton was chairman of the board of directors. The functions of president and treasurer, and very active indeed they were for a time, were combined in the person of William H. Barr, president of the National Founders Association. Dr. Paul Smith and Frank

F. Porter were vice-presidents, Smith in charge of the department of film operations, and Porter of fiscal operations, these being the major executive divisions. John E. Griswold was secretary. Other directors, in addition to the officers named, were G. Charles Gray; the Rt. Rev. Charles H. Brent, bishop of the Protestant Episcopal Church of Buffalo, New York; Bronson Batchelor; the Rev. James Cannon, Jr., bishop of the Methodist Episcopal Church of Birmingham, Alabama, and a short time previously editor of the *Christian Advocate;* Clifton A. Crocker, president of the Crocker-McElwain Company, Holyoke, Massachusetts; Warren D. Foster, president of the Community International Corporation of New York City; Julius Goslin, president of the Joubert & Goslin Machine and Foundry Company of Birmingham, Alabama; Dr. Jeremiah W. Jenks, of New York University; Herbert Maynard, Jr., of New York; R. W. Nelson, president of the American Type Founders Company, Jersey City, New Jersey; R. M. Patterson, treasurer of the Eisemann Magneto Corporation, Brooklyn, New York, and Harry M. Vale of Princeton, New Jersey. The board was well balanced, as will be seen readily enough, by the metal trades and the clergy.

Henry Bollman had been in importantly at the start, but he did not appear among the directors, possibly because he did not wish to and possibly because he had some difference of opinion with Smith about how the business should be conducted. The enterprise was a stock-selling proposition, although the larger aim was benevolent enough. Numerous small investors, including, it is said, many church widows and orphans, were attracted by a project headed by a crusading minister, backed by substantial business men and having the intention of offsetting the alleged depraving influences of the theatrical screen, and confidently purchased shares in American Motion Picture Corporation. But surely there was no deliberate deceit. Certainly neither Smith, nor any of his moneyed associates, anticipated the eventual disaster.

While the corporation was being formed it was obviously necessary that picture properties must be acquired quickly and in large volume. There was competition on that score, the Kelly Clubs and other agencies having bought in much of the good second-hand material on the market. Henry Bollman proposed to Smith taking over the Community Pictures list of four thousand to five thousand reels. Smith being well disposed, Bollman went to the Fosters and made a tentative deal to buy the lot at $1.50 per reel, his intention being then to sell it to Smith at a profit. Smith seemed generally satisfied with the terms but wanted Bollman, it is said, to enter upon his bill of sale a higher valuation against which Smith might issue a million dollars' worth of stock. Bollman apparently shied at this. But while he was thinking it over, Smith went directly to the Fosters and purchased the

William Harmon did not live to see how much his idea of a relatively small Foundation would do to encourage religious films.

Community library for a reputed $150,000.

Payment was made to the Fosters in the form of notes, acceptable to them because Smith was willing at the same time to put the Foster family on the American Motion Picture Corporation payroll for organization and editorial services. So the veteran Fosters closed their idle desks upstairs in the Masonic Temple Building, and descended, so to speak, to the tyro American Motion Picture level. That explains the presence of Warren Foster's name in the directorate. Two other acquaintances who joined prominently were William Brotherhood, who came downstairs with his camera and animation stand, and his artist assistant, Bill Sherman, whose duty it became to letter and decorate the many new titles specified by Mrs. Foster in her extensive reëditing.

One day—I think it was fairly late in 1926—there fell a great hush over the tenantry of the Masonic Temple Building, succeeded by a dreadful whisper that the American Motion Picture Corporation had gone under. Still, the collapse was not wholly unexpected. For several weeks the number of unoccupied desks had become more noticeable. At last a descending elevator paused at the floor, and through the briefly parted doors I saw a group of strangers, men and women with tense, strained expressions, listening to the harangue of a thin, dark man dressed in black. I recognized him and understood. He was Pat Powers, stormy petrel of the motion picture industry, who was usually to be seen, in his capacity as lawyer, commanding the dissolution proceedings of any considerable film receivership. Shortly afterward the furniture was cleared from the floor. In August, 1936, about ten years later, I saw a notice that the American Motion Picture Corporation, originally formed under the laws of the State of Delaware, had surrendered its certificate. I take it for granted that it was the same organization whose history is sketched here. If it was, this must have been the end.

The end, that is, of another ambitious non-theatrical enterprise, but not the end of the persons who had composed it—unless one wishes to moralize on the fact that in January, 1936, the same year, Paul Smith, had died on the Pacific Coast. Apparently the American Motion Picture was forgotten then, for his leading obituaries seem not to have mentioned it. What the press remembered him for was that occasion, so much longer ago, when the fallen women of the Barbary Coast had appeared in a body at his church service to insist that, if he was going to deprive them of employment by closing the local dens of iniquity, it was his responsibility to provide them with something else to do.

As for the Fosters, they still held the promissory notes for purchase of the Community library, and, as the notes could not be taken up now, they compromised by taking the library back again, reconditioned and polished and generally in excellent shape for renewed life. Luck had played fantastically but well with the Fosters. First it had been a War which poured valuable properties into their laps under the driving force of nationwide patriotism; next it had been an Armistice which left the properties for them to claim because no one else then wished to traffic further in the trappings of battle; now it was the collapse of a corporation which could no longer pay its bills.

Henry Bollman went through some independent ventures in editing and releasing foreign travel films produced by alien governments and overseas transportation companies for propaganda purposes, until he came to rest for awhile with Visugraphic. Bill Brotherhood joined Cranfield & Clarke, New York representatives of English theatrical film producers who were seeking American release. After a year or two there he went to Canada as production manager for Bruce Bairnsfather, popular English comic artist, who was undertaking a theatrical series featuring his famous wartime character, "Old Bill." In company with him there, by the way, was Don W. Bartlett, who had been with me briefly at the Chronicles.

The Harmon Foundation

THERE probably has never been a more consistent or more complete school for promoters of capital than the ministry, and it will be found that even most of those notable promoters who are not ministers or who have not been connected with religious projects, are sons of clergymen. This is a possible reason for the strong ecclesiastical cast over so much of the development of the non-theatrical field. Of course, the church pastor has much more place for motion pictures than the schoolman. In meeting his parish house needs he can use many sorts of entertainment film which the educator must exclude. This gives his division of the field a much larger

bulk of usable product, and hence a broader experience with the medium. But it is the educator who has done, and who will continue to do, most to delimit the non-theatrical field. From the schoolman active in visual education, therefore, one may expect to see the major improvements in non-theatrical production techniques—whether he devises them or they merely pass through his hands—and from the church exhibitor are likeliest to come the refinements of distribution.

This observation is caused by reflection upon the next major attempt of Big Business to enter non-theatricals, namely, the Religious Motion Picture Foundation of New York City. The personage here was William Elmer Harmon, wealthy operator of suburban real estate. At the inception of his picture project, incorporated under the laws of the State of New York in June, 1925, he was about sixty-three years of age. He had been educated at the National Normal University of Lebanon, Ohio, where he was born, and had studied medicine. But when he was only twenty-four he had hit upon a plan for overcoming the great expense of foreclosing unpaid-mortgage properties, issuing a bond at the time of purchase instead of a deed, and this invention had turned his career into the small-payment development of suburban real estate in some twenty-six American metropolitan areas.

That churchmen confided to William Harmon their hopes for better religious films may have been in part because his brother Clifford, also prominent in real estate, had gone seriously into the motion picture industry in 1915, when he had become president of Mirror Films. That theatrical venture, producing subjects starring Nat Goodwin, had been a bad failure amid charges of high pressure stock promotion, but William Harmon apparently did not let this weigh adversely in his present consideration of serving the churches. In the motion picture plan of ministers trained in social service he saw, without contradiction by his wary business judgment, an opportunity to accomplish a real good. He was especially impressed, I understand, with views favorable to the case held by his respected friend, Bishop William Lawrence, of the Protestant Episcopal Church of Boston. Mrs. Harmon was an ardent Episcopalian at this particular time, and Bishop Lawrence was raising an Episcopal fund to stimulate churchgoing. He had definite plans for the expenditure of the money when obtained, but would be glad to know of any more effective method of attaining the objective. Harmon said that he did not at the moment know of a better way, but he was sure that he could find one.

Several accounts have it that Harmon himself first broached the subject of films. Professor Samuel McCune Lindsay, professor emeritus of political science at Columbia University and then a member of the committee on social and industrial relations appointed by the General Assembly of the Presbyterian Church of the U.S.A., wrote, in a foreword to a Foundation booklet in 1932:

> "William E. Harmon believed that the church everywhere found it increasingly difficult to keep up church attendance and active interest in religious matters 'not because people are irreligious or irreverent, or dead to spiritual impulses,' but because 'old eternal truths occasionally require new habiliments—a refurbishing and sometimes entirely new clothing.' What stained glass windows once accomplished as an appeal to the emotions through the eye, and what music later added to the richness and dignity of devotional worship, could be done, in the Founder's words, 'through faithfully depicted, inspirational and beautiful motion pictures on Biblical and religious texts,' to bring about today a renaissance of Christian devotion in the service of the Master."

The first year's activity of the Religious Motion Picture Foundation, intended to be mainly a study of the field, with production of "a few" demonstration pictures, was made possible by Harmon's initial gift of $50,000. He was named president. Vice-president and general manager were combined in the person of the Rev. George Reid Andrews, who had been chairman of the educational and religious drama department of the Federal Council of Churches of Christ in America and whose eloquence is said to have principally started Harmon in the enterprise. On the board of directors were the great eloquent liberal Dr. S. Parkes Cadman; Dr. John H. Finley, associate editor of the New York *Times;* W. Burke Harmon, son of the founder; Dr. Samuel McCune Lindsay and former Governor Carl E. Milliken of Maine, later secretary of the Motion Picture Producers and Distributors of America, but then very prominent in Baptist activities. There was also a "national committee" of advisors and critics composed of about sixty other well known men and women.

The opening public announcement was exceptionally frank and promising. It included these words:

> "The officers of the Foundation are very much aware of the difficulties to be overcome: they have looked carefully into the matter and know of the numerous attempts and failures in the past. Millions of dollars have been wasted by eager promoters throughout the country. The Board is under no illusions concerning difficulties in the way. At the same time they believe these many activities in the past mean that the church and school represent vast fields of opportunity practically untouched. If the first year's study and experiment produce satisfactory results, the corporation plans an enlarged program of activities for the second and subsequent years. The first year is to be a qualitative rather than a quantitative test."

The pictures to be produced were to be kept strictly undenominational, stressing just the universal aspects of religion. "Representatives of the church, of business and of the motion picture industry," continued the statement, "will be asked to coöperate according to the spirit that has inspired Mr. Harmon to make the first generous contribution. . . . This does not mean, however, that religious motion pictures should remain a matter of benevolent subsidy. It is the plan of the Religious Motion Picture Foundation to make the work financially self-sustaining and allow for expansion equal to the need. If, later, the invested capital can be returned at a fair rate of interest and reasonable profits realized, the cause will be stronger and made more permanent; but first, last and always must be the motive of service for the church and in the spirit of the church."

It was early decided that the pictures to be produced would fall into six religious groups. They would be biblical, biographical, historical, missionary, pedagogical and inspirational. The last-named would include the general entertainment, "wholesome" films suitable for church presentation. These conclusions had been based upon an interesting survey. Before the motion picture foundation had been definitely established, but after Harmon's interest had become known, Will H. Hays, of the Motion Picture Producers and Distributors of America, whose many background distinctions included his post as a church deacon, had volunteered his services in starting the venture properly. The offer accepted, he had set up an especial section in his own office to round up available church reels that Mr. Harmon might see for himself what the field already contained. About 900 subjects were thus brought together and shown to Harmon's committee. But the committee chose only eleven of all these, concluding that further production was certainly necessary.

The selected eleven, however, were used to test congregation reactions in ten country churches near New York City, without previous advertising. The resultant increase in congregational attendance there was then estimated to average 36% and, with this assurance of a service to be rendered, the Foundation was definitely begun. The first of the experimental pictures, it may be mentioned as an item of passing interest, was an Italian production called "After Ten Days," procured from the theatrical house of Weiss Brothers and edited for this newer purpose under supervision of Lew Wallace, grandson of the celebrated author of "Ben-Hur."

Carlyle Ellis and I were sufficiently impressed with the first announcements to seek out the Rev. George Reid Andrews to see if we could not combine our interests for mutual advantage. We had never met him or done business with him previously. But we now had quite a chat with him, although at the outset he greeted us by saying that he was receiving us out of courtesy, had no need of our services, but would listen to us if, after what he had said, we still wished to talk with him.

We found that he had definite ideas about what he wished to accomplish, having planned motion pictures for his particular field long before while he was with the Federal Council of Churches of Christ in America. He didn't tell us about that, but, as a matter of fact, his ideas had already considerably ripened when the quicker development of the Harmon Foundation had made it expedient for him to put them aside. With the Rev. Frank E. Jensen, who conducted a church films department in *Educational Screen*, and an incorrigible promoter named Leroy Curtiss, connected with the Greater New York Federation of Churches as treasurer, he had even considered a start on his own.

(To be continued)

In Memoriam

Arthur G. Balcom

Died February 28, 1942

AGAIN we must add a name to the growing roster of those who pioneered in the visual field, served long and well, and now are gone. Arthur G. Balcom, after forty-seven years of service in the Newark Public Schools, from 1890 to his retirement in 1937, died on February 28, 1942.

After his appointment to the Principalship of the Franklin School in 1895, Mr. Balcom, one of the early advocates of the lecture illustrated with lantern slides, became Supervisor of Lectures for the school system. With the establishment of Newark's School Museum in 1918, he was named an Assistant Superintendent of Schools and head of the Department of Visual Instruction. Those were early days in the visual movement. Only those of real vision saw "visual education" as anything but a novelty, a fad, or at best a dubious experiment. It took courage then to say, as Balcom did repeatedly, the "projection apparatus will soon be recognized as an essential in school equipment." He lived up to his dictum. Rapidly he developed a central collection of slides for the city system. In 1919 Newark owned one motion picture film; within a year, twenty. In 1924 the Department issued one of the first publications of the kind in the country, "A Catalogue of Slides and Films and Instructions to Teachers," of outstanding worth to the visual cause. It was used not only in the Newark schools but was widely requested in nearly every State in the Union.

Long before systematic research began in this field, Mr. Balcom was enunciating theses that research has confirmed. The whole emphasis by his Department was in the direction of "close correlation between visual materials and classroom methods." He insisted that "the value of films and slides rested with the personality of the teacher." Because "teacher training" in the use of these materials was a vital need, Mr. Balcom developed "demonstration lessons" at regularly designated schools for the benefit of teachers.

Balcom's service was not limited to Newark. He was a leader in the foundation and development of the "New Jersey Visual Instruction Association," one of the outstanding organizations in the national field. The last of many articles he contributed to our pages was a description of that organization's activities in the April and June issues of 1934. Our twenty-three year correspondence with him ended with a letter this year, signed sturdily "A. G. Balcom" as always. It is one of the lustrous names in the history of the visual field. N. L. G.

Carlyle Ellis

Died April 7, 1942

IT comes as especially sad news to many readers that Carlyle Ellis, one of the real pioneers in production of non-theatrical films, has passed away. He died April 7 at Palmdale, California, at the age of 63.

Canadian born in Toronto, a grand nephew of the great Thomas Carlyle, he turned early to writing. From 1910-1912 he was editor of the *Alaska-Yukon Magazine*. In 1913, following a period on the staff of *Everybody's*, he became managing editor of the *Delineator*. When Triangle Films Corporation was organized about 1915, as the largest motion picture organization of that day, Ellis was made West Coast representative and, a little later, Scenario Editor in the East. During the First World War he served with George Creel's Committee on Public Information as film editor and producer of a number of important propaganda subjects. After the Armistice he formed his own production unit, among his first ventures being experimental "documentary" reels for the National Industries Conference Board. While the term "documentary" was not then used in that connection, there is no doubt that he was one of the first to employ a "human interest" treatment for non-theatrical releases.

He became especially well known for his productions in the health and social service fields, his more notable clients including the Children's Bureau of the U. S. Department of Labor, the Tuberculosis and Health Association, the Y.W.C.A. and the Metropolitan Life Insurance Company. With the coming of sound pictures he disbanded his independent organization and joined the American Telephone and Telegraph Company to write and produce talkies under the Western Electric patents. Declining health obliged him to seek a milder climate in 1932, so he went to Palmdale, about sixty miles from Los Angeles, where he divided his time as West Coast Editor of *Spur Magazine* and staff reviewer of the *Hollywood Reporter*.

He was naturalized as a United States citizen in 1917. His name appeared in the dedication of *The Talkies*, the first general account of modern sound pictures in book form, published in 1930, as follows: "To Carlyle Ellis, one courageous pioneer in the production of films for popular education." *A. E. K.*

A Low-Cost School Museum

(*Concluded from page* 178)

neglect our own neighborhood and its problems in favor of a study of distant and more romantic lands. Because most museum materials come from within the community, there is a wholesome local emphasis.

4. A museum need not be expensive. Naturally if such a project grows, the collecting and housing of exhibits will sooner or later involve some cost. Ingenuity, however, can keep such expenses very low. Most exhibits in the Fordson School Museum were obtained free. Almost never did exhibits cost more than the actual materials involved. Display cases can be built or purchased used at small cost.

5. The small classroom museum has interesting possibilities for nearly every teacher. Such a collection provides materials which pertain directly to the course of study and pupils can get the experience of collecting as well as using the materials.

The demands of the war have served to dramatize the need for more effective education. Obviously, no one teaching device can bring about an educational renaissance. Certainly, however, museum materials can contribute a good deal to any curriculum seriously interested in turning out better citizens.

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

STATUS AND TRENDS

The Case for Modern Communication Devices—H. A. Gray, Director of Field Studies, Erpi—*Progressive Education,* 19:153 Mar. 1942

A summary of man's experiences with graphic means of communication, and a review of some of the findings from research studies on the contribution of the silent and the sound motion picture.

The importance of this modern communication device is demonstrated in terms of its use by various state-controlled governments: The Italians drafted the head of the International Institute of Educational Cinematography at the very beginning of the world's difficulties, at the time of the Ethiopian incident. The various government departments in Italy employ films freely in their work and each high school is supposed to have its own film library.

The Japanese produced a large number of theatrical features that showed the history and culture of Japan. Such films have perpetuated ancient Japanese ideologies, including their attitude toward the Mikado and their form of ancestor worship. The idea of satisfying Japan's role in the new Asiatic order also has been woven into the films. An All Japan Association of Cinema Education, which includes the educational film library of the Tokyo newspaper, *Osaka Mainichi,* the School Film Circuit League, the Factory Film Circuit League and the Women's Motion Picture Society, controls the promotion of films for propaganda.

In the U.S.S.R. the government has used the cinema industry in its program of education for 160 million people, mostly illiterate. The government supervised the production of the films, the manufacture of projectors, the provision of theaters and road shows, as well as technical and psychological research. . . Today the estimate is that there are 60,000 locations (projection locations). Under the first Five Year Plan every town under 2,000 had to have a cinema hall. About one-third of the typical theater program consists of documentary and political films.

The author then lists seven weak spots in our present American audio-visual program. Some of the major objectives for attack of these inadequacies are:

1. Set up an adequate agency under educational auspices to promote generally the use of modern learning aids in schools and colleges.

2. Select and train local enthusiasts to serve as directors of local, county and state programs, and dignify the job as one of importance.

3. Put teachers in service to work finding out what aids can be brought to bear on their teaching problems.

4. Make use of visual-audio aids as an integral part of methods courses in all teachers colleges.

5. Revise and expand the curriculum in keeping with the possibilities of the motion picture, radio, etc.

6. Devise means of acquiring necessary equipment and materials out of the regular school budget.

7. Establish the necessary mechanical services for making the use of visual aids practical and convenient for teachers.

Motion Pictures and the Modern School—Alice R. Smith, Maine Congress of Parents and Teachers—*Maine Teachers' Digest,* 2:129 Mar. 1942.

Suggested sources of materials for parent-teacher groups who want to help promote the use of visual aids in schools.

PHOTOGRAPHY

Photography in the Curriculum—Leon Stroud, Woodland High School—*Washington Ed. Journal* 21:153 Mar. 1942.

An illustrated article describing how a well-equipped photographic laboratory was built from limited resources. Among the advantages of such a program in this rural high school are; valuable public relations work; compiling of departmental scrapbooks; help in publishing the yearbook; creative experiences as a hobby.

UTILIZATION

Visual Education in Glenville—Teachers from Grades 1-6 and Principal, Glenville Elementary School—*West Virginia School Journal,* 70:24 Feb. 1942.

This is a cooperative report based on three years of observation of the effectiveness of visual aids in the school program. The school has estimated that it owns in full $648.45 worth of equipment, including a sound film projector, a screen, a microphone, a slide projector, an Argus (filmstrip) projector, slides of West Virginia and other materials bought through contributions of the community and teachers.

Reports are briefly summarized by the teacher of each grade. Picture study was stressed in the first grade for ability to see and interpret pictures, to stimulate interest in reading, development of vocabulary and of the ability to listen. The second grade have a table for displaying interesting objects, such as autumn leaves and flowers, a grasshopper, a toad, an Indian arrow head, a thermometer. In the third grade the teacher used carefully selected art prints for art appreciation and oral expression. The fourth grade class used the new bulletin board for arranging interesting displays. The fifth grade class used colored slides of scenic spots in their study of geography, history and science. Scrapbooks on West Virginia scenery were made. The sixth grade class prepared scrap books on modes of transportation then and now. Motion pictures, free and rental ones, were used with all classes.

GRAPHS

A Project in Graphing—Lawrence C. Thompson, Instructor of Mathematics, Fairbault High School—*Minnesota Journal of Ed. 22*: 176 Jan. 1942.

A ninth grade algebra class learned the principles of graphing by making a study of the freshman class as to: the favorite sections of the newspaper, the favorite sports, the favorite types of movies, the number of movies seen each week, etc. All the students were then divided into committees to interview the freshmen. They then tabulated the data, and plans for graphing the information were formulated. Some made circle graphs, some made pictographs, etc. The graphs were constructed in colors on paper cut to the right size for the opaque projector.

The teacher recommends this procedure as a worthwhile classroom activity, using many kinds of experiences.

RADIO AND RECORDINGS

Radio in the Classroom: Best Current Practices and Theories—Carroll Atkinson, Nelson Memorial Library, Detroit, Mich.—*Clearing House,* 16:291 Jan. 1942.

After describing two extreme theories on how radio should be used in the classroom, the author recommends the following:

A simplified statement of this viewpoint is that the broadcast's main value is its power to stir the pupil emotionally and intellectually, to bring before him educational problems to be solved in his own mind. Thus the individual's thinking is stimulated to react at the same time that he is receiving accurate and unbiased information.

Following this theory any type or degree of preparation for the broadcast lesson may be made, but it is a minor factor. The announcer of the program sets the stage within the minds of the listeners, the actors play the parts, the pupils listen apperceptively (that is, they tie up new information . . . with what they already know), and it is left to the

judgment of the teacher or the initiative of the pupils to decide whether a class discussion will follow the broadcast.

A Centralized Radio-Sound System—R. E. Oldis, Science instructor, Garden City Public Schools, Long Is.—*School Executive* 61:37 Mar. 1942.

Practical suggestions for the school administrator.

Scientific Gadgets Come to the Aid of Learning—Harry A. Carpenter, Rochester, N. Y.—*Education,* 62:296-300 Jan. 1942.

Among the "gadgets" at the service of teachers are the phonograph, the stereopticon lantern, color pictures and in the future, television and three-dimensional color motion pictures. The radio has been a great aid. But, regardless of the material used, these gadgets do not and cannot take the place of the teacher.

Radio can reach into the homes of even the most remote pupils. There are dramatic broadcasts; master artists or specialists; and the directed learning broadcast by a master teacher. Sources of information on the use of radio and visual aids are then given.

Sound Records in Modern Language Instruction—Lt. F. Sidney Walls, Assistant Professor, The Citadel, Military College of South Carolina—*South Carolina Education,* 23:103 Feb. 1942.

Linguaphone records for pronunciation, in which master teachers demonstrate, were found effective in the teaching of French, Spanish and German.

BOOK REVIEWS

Visual "Education"? The Serious Student's Guide to Social Misinformation. *The Movies and Public Opinion,* No. 2—Winifred Johnston—Cooperative Books, Series I, No. 12, 55 pp. 1941 Norman, Oklahoma.

This is a provocative book. It cannot leave its reader unimpressed. It will be welcome to the many people who have been looking with alarm for years at the lack of discrimination on the part of educators who are charged with the selection of materials to be used in school. We have expressed our feelings through speeches and articles, but the faulty practices have continued. Winifred Johnston, as a "non-educator," has provided a perspective that is fresh and stimulating. Her statements are well-documented and all based on fact. The truth should not alarm us, nor certainly should it antagonize us. We should take this bulletin, read it, discuss its contents at meetings and with the persons most directly concerned, we should take note of the constructive advice it offers and thus will new practices grow.

The author, we are informed, is a student of photography, a historian and critic of the movies and one who has had intimate knowledge of the aesthetic and social restrictions binding one of the great mediums of modern communication. Miss Johnston's previous volume, *Memo on the Movies; War Propaganda,* 1914-1939, revealed many important facts, based on her experiences in the Signal Corps during the last World War. That study was based on the films designed for theaters.

In *Visual "Education"?* Miss Johnston criticizes the fact that schools, armed with many of the nation's 350,000 non-theatrical projectors, are bringing into their classrooms films that are false mirrors of life. She speaks as one who is inspired with the fine possibilities of this medium for education, but who cannot continue to see it misused, albeit without malice aforethought. She has examined lists of available educational films and concedes that there are many good ones for teaching scientific phenomena, processes and the like. But, it is in the social sciences that she finds them most wanting. Good films on man's relations with his fellow man are few, and she has enumerated the reasons for this: "1) the use of the movies in the teaching of the social sciences is still new. 2) that use does not escape the subjective difficulties inherent in all teaching in the complex subjects dealing with man and his motivations and behavior. 3) Because of their 'controversial' character, and the powerful psychological effect of luminous projection, movies in the social studies run peculiar dangers of censorship by this or that political or religious organization. 4) By the very nature of their subject matter (human behavior and problems), the non-theatrical films that might be made for use in the social sciences tend to compete more or less directly with regular entertainment films."

The illustrations that the author furnishes as evidence that certain films are barred from school film libraries are, unfortunately, those intended for adult movie-goers and not for education. It is a known fact that modest productions in the social sciences, even though they may be good and well-planned, stand little chance of survival when competing with the more glamorous titles that are either wholly or adapted Hollywood products. Most of the volume, therefore, deals with evidences of distortion of historical or sociological accuracy in certain commercial productions.

The final suggestions offered by Miss Johnston are worth noting and *acting upon*:

". . . The public at large and educators in particular must learn to exercise intellectual discrimination, they must become informed enough to choose among the movies available those that advance the public's best ends.

" . . . that it is not enough for educators merely to encourage 'appreciation' of movies, radio and the press. . . . It is not enough for any institution to establish film libraries, from which the uninitiated and non-discriminating can choose his own poison according to monetary whim. . . . What is needed now is leaders in these fields who can exercise an alert, informed and objective supervision. This does not mean censorship. . . . It does mean that there must be scholars in every field of learning who are interested in the methods opened up by new mediums, who can bring the sharp evaluation of the specialist to bear upon the offerings in that field."

Trash Craft—C. Rosenberg Foster, DuSable High School, Chicago, Ill.—W. M. Welch Manufacturing Co., Chicago, 174 pp. 1940.

An excellent source book for teachers with creative and imaginative youngsters. The volume is the result of many years of working with students, and of exhibiting the results before audiences in all parts of the nation. There is no doubt about the desirability of developing in us an awareness for using discarded materials for art purposes. The greater the artistic ability of the worker, the greater the promise of the products. But, for all of us, the gifted and the appreciative, there is much satisfaction to be derived from decorative pieces made with our own hands, using our own ideas, from waste materials.

SOURCES OF INFORMATION

The Other Americas Through Films and Records—prepared by the Motion Picture Project of the American Council on Education, 744 Jackson Place, Washington, D. C., with the assistance of the Pan American Union. January, 1942. 37 pages (printed).

More and more emphasis is being placed on the study of the other Americas in today's classrooms as educators become increasingly aware of the interpendence of the countries of the Western Hemisphere, and the need for a better understanding of our Latin American neighbors. This publication has been prepared to assist in this study and to promote the better use of films and recordings, important instructional aids to the communication of ideas, attitudes, and emotions.

The pamphlet describes forty-seven 16mm films (silent and sound) which have been approved by educators or specialists in inter-American affairs. Sources, including rental libraries, are indicated. The films are also grouped by countries in an Appendix. The selected Music Recordings are classified into four groups—traditional, popular, concert, and primitive. Four pages are devoted to concise suggestions on effective use of films and recordings, based on experience and research.

Health Education—A tentative survey of visual and teaching aids compiled by Ethel M. Booth, R. N. New Jersey State Teachers College, Visual Aids Service, Upper Montclair, N. J. 14 pp. mimeo.

Particular attention is called to materials that are free or inexpensive. Part I names organizations and periodicals specializing in health education. Part II lists publications, charts, films, slides, filmslides, pictures, exhibits, with prices and sources from which available. This is a very useful compilation to teachers and others interested in health instruction.

Summer Courses in Visual and Audio-Visual Instruction, 1942

(This list supplements that which appeared in the April issue)

Alabama

Alabama Polytechnic Institute, Auburn — June 8-July 18
Audio-Visual Education (5 qr.) — M. L. Beck

Arkansas

Henderson State Teachers College, Arkadelphia — June 1-July 4
Visual Education (2) — H. V. Matthew

California

Claremont College, Claremont — June 29-Aug. 7
Problems with Reading (Visual Aids a subdivision of seminar on reading (6) — Spencer-Genung
University of California, Berkeley — June 29-Aug. 7
Visual Education (2) — Gardner L. Hart

Colorado

Colorado State College, Fort Collins — July 6-24
Visual Education (2) — Lloyd E. Aspinwall
Colorado State College of Education, Greeley — June 15-Aug. 7
Visual Aids in Education; The Radio and Auditory Aids in Education; Workshop in Production of Visual Materials; Workshop in Radio Production; Administration of an Audio-Visual Program (3-4 each) — James D. Finn
University of Denver, Denver — July 20-Aug. 21
Visual and Audio Aids in Classroom Instruction (2½ qr.) — E. H. Herrington

Georgia

State College for Women, Milledgeville — June 8-July 14
Audio-Visual Aids to Instruction (5 qr.) — Harry A. Little
University of Georgia, Athens — June 8-July 15
Audio-Visual Aids — H. B. Ritchie

Illinois

University of Illinois, Urbana — June 8-Aug. 29
Technics of Teaching (Includes Visual Instruction technics) (3) — Williams-McHarry
Wheaton College, Wheaton — June 27-July 24
Visual Aids (2) — Robert L. Cooke

Indiana

Ball State Teachers College, Muncie — June 10-Aug. 7
Audio-Visual Education (4) — Evelyn Hoke

Iowa

Drake University, Des Moines — June 8-July 17
Visual Aids in Education (3) — Victor Mastin

Kansas

Kansas State Teachers College, Emporia — June 1-July 29
Visual Education (2) — S. W. Cram

Kentucky

University of Kentucky, Lexington — June 11-July 22
Visual Teaching (4 qr.) — Louis Clifton

Louisiana

La. State Normal College, Natchitoches — June 8-Aug. 8
Visual Education (3) — John Keyser
Louisiana State University, Baton Rouge — July 18-Aug. 29
Audio-Visual Aids in Education (3) — Mary Clint Irion

Maine

State Normal School, Gorham — June 29-Aug. 7
Visual Education (2) — H. L. Anderson

Massachusetts

Springfield College, Springfield — June 29-Aug. 1
Audio-Visual Aids in Education (2) — M. J. Joslow

Mississippi

Mississippi College, Clinton — May 26-July 4
Audio-Visual Aids in Instruction (3) — I. F. Simmons

Missouri

State Teachers College, Springfield
Visual Education (2½) — H. A. Wise
University of Missouri, Columbia — June 15-Aug. 7
Problems in Visual Education (2) — W. C. Bicknell
Washington University, St. Louis — June 15-July 24
Visual Instruction (3) — Alma B. Rogers

Montana

State Normal College, Dillon — June 8-Aug. 7
Visual Education (1) — Paul Anderson
(Offered during second half of term)

Nebraska

University of Nebraska, Lincoln — June 8-July 31
Organization and Administration of Audio Visual Aids (3) — J. W. Taylor
Colorado State College of Education, Greeley — June 15-Aug. 6-7

New Hampshire

University of New Hampshire, Durham — June 29-Aug. 7
Visual Education (3) — Donald W. Smith

New Jersey

State Teachers College, Glassboro — July 6-Aug. 15
Visual Education (2) — George W. Wright
State Teachers College, Newark — June 29-Sept. 19
Visual Education (3) — Fred M. Richmond
State Teachers College, Paterson — June 29-Aug. 9
Visual Aids in Elem. Education (3) — S. P. Unzicker

New York

Columbia University, New York City — July 7-Aug. 14
(Additional courses to those announced in April)
Photography for Teachers (2) — H. M. Evans
How to Use Radio in the Classroom (2-3) — R. G. Reynolds
Production of Educational Motion Pictures (2) — Irving Hartley
Radio Writing and Program Production (4) — Erik Barnouw

North Carolina

East Carolina Teachers College, Greenville — July 16-Aug. 22
Audio-Visual Aids in Education (3 qr.) — Annie C. Newell

Ohio

Kent State University, Kent — June 15-July 24
Use of Visual Aids in Instruction (3) — Argra Ruffer
University of Cincinnati, Cincinnati — June 20-July 28
Visual Education in Elementary and Secondary Schools; Laboratory Workshop in Visual Education (2 each) — Victor Coles

Oregon

Eastern Ore. College of Educ. LaGrande — June 20-July 25
Construction and Use of Visual Aids (3) — Badgley
Oregon State College, Corvallis — June 20-July 25
Construction and Use of Visual Aids; Educational Cinematography; Correlation of Radio Recordings with Visual Aids (3 each) — George Eby
Second Session July 25-Aug. 29
Seminar: Visual Education Problems (2 or 3) George Eby
Southern Ore. College of Education, Ashland — June 8-July 11
Construction and Use of Visual Aids (3) — Messenger-Wells
University of Oregon, Eugene — June 13-July 17
Laboratory in Audio-Visual Aids (1); Audio-Visual Aids in Education (3) — Lester F. Beck

Pennsylvania

Marywood College, Scranton — June 27-Aug. 5
Audio-Visual Aids to Teaching (2); Motion Picture Appreciation (1) — Sr. M. Sylvia
State Teachers College, Millersville — June 29-Aug. 7
Visual Education (1)
Temple University, Philadelphia — June 29-Aug. 7
Audio-Visual Education I, II (2 each) — John T. Garman
University of Pittsburgh, Pittsburgh — June 29-Aug. 7
Visual Education (2) — Herbert Olander

Texas

Abilene Christian College, Abilene — June 4-July 11; July 14-Aug. 21
Audio-Visual Instruction Methods and Materials (3) — G. C. Morlan
Baylor University, Waco — June 2-Aug. 21
Audio-Visual Education (3-1/3) — M. L. Goetting
Hardin-Simmons University, Abilene — July 13-Aug. 21
Workshop in Visual Aids (3) — R. A. Collins
S. F. Austin State Teachers College, Nacogdoches
Visual Aids (3) June 3-July 15; July 16-Aug. 26 — A. L. Long
University of Houston — June-Aug.
Methods in Audio-Visual Education (3) — Paul McRoy

Vermont

University of Vermont, Burlington — July 8-Aug. 18
Visual Education (no credit) — Horace Eldred

Virginia

Madison College, Harrisonburg — June 15-July 24
Audio-Visual Materials; Auditory and Visual Instruction (3 qr. each) — Mrs. E. N. Windle

(*Concluded on page* 190)

A Basic Reading List for Students of Audio-Visual Education

Compiled by MARY E. TOWNES, Teachers College, Columbia University, N. Y. and ETTA SCHNEIDER

THE following list is intended for basic and reference reading. It does not include mention of source lists, compilations or periodicals in the field, since these items are included constantly in EDUCATIONAL SCREEN and elsewhere.

I. Audio-Visual Materials in the Curriculum

CLARK, ELLA CALLISTA. *The Use of Visual Aids in Teaching.* Educational Screen, Chicago. 1938. 24p. 25c

DENT, E. C. *Audio-Visual Handbook.* Society for Visual Education, Chicago. 180p. 1939 rev. ed. $1.25

DORRIS, ANNA V. *Visual Instruction in the Public Schools.* Ginn. 1928

HEISS, E. D., OBOURN, E. S. and HOFFMAN, C. W. *Modern Methods and Materials for Teaching Science.* Macmillan. 351p. 1940 $2.50

HOBAN, C. F., HOBAN, C. F. JR. and ZISMAN, S. B. *Visualizing the Curriculum.* Dryden Press. 1937. 300p. $2.75

MCKOWN, HARRY C. and ROBERTS, ALVIN B. *Audio-Visual Aids to Instruction.* McGraw-Hill, 1940. 385p. $3.00

NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF ELEMENTARY SCHOOL PRINCIPALS. *Aids to Teaching in the Elementary School.* 13th Yearbook, 1934. $2.00
Enriching the Curriculum for the Elementary School Child. 18th Yearbook, 1939. $2.00

NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERVISORS AND DIRECTORS OF INSTRUCTION. *Materials of Instruction.* 8th Yearbook, 1935. 242p. $2.00

NEW YORK STATE ASSOCIATION OF ELEMENTARY SCHOOL PRINCIPALS. *Visual Aids in the Schools.* The Association, R. W. Thompson, Proctor High School, Utica, N. Y. 1935 50c

PENNSYLVANIA DEPARTMENT OF PUBLIC INSTRUCTION. *Techniques of Visual-Sensory Aids.* Bulletin 509 Harrisburg, Pa. 1939 62p.

SHANE, M. L. *The Audio-Visual Library: An Acquisition Plan.* Nashville, Tenn. Peabody Library School, 1940 11p.

UNITED STATES OFFICE OF EDUCATION. *School Use of Visual Aids.* Bulletin No. 4, 1938. 10c

II. The Use of Motion Pictures in Education

ADAM, T. R. *Motion Pictures in Adult Education.* American Association for Adult Education, N. Y. 1940 94p. 75c

AMERICAN COUNCIL ON EDUCATION, Washington, D. C. *Motion Pictures in a Modern Curriculum,* by Bell, Cain, Lamoreaux et al 179p. 1941 $1.00
A School Uses Motion Pictures, by the staff of the Tower Hill School, Delaware. 1940 118p. $1.00
Projecting Motion Pictures in the Classroom, by Francis W. Noel. 53p. 1940 50c
Teaching with Motion Pictures: A Handbook of Administrative Practice. 59p. 1937 40c
Motion Pictures in Education: Status and Needs 24p. 1937 10c

ARNSPIGER, V. C. *Measuring the Effectiveness of Sound Pictures as Teaching Aids.* Bureau of Publications, Teachers College Columbia University. 156p. 1933 $2.10

BATHURST, E. G. *Conservation Films in Elementary Schools.* (Bulletin 1941 no. 4) 38p. 10c 1941 U. S. Office of Education, Washington, D. C.

BRUNSTETTER, M. R. *How to Use the Educational Sound Film.* 174p. University of Chicago Press, 1937. $2.00

DALE, E., DUNN, F. W., HOBAN, C. F. JR. and SCHNEIDER, E. *Motion Pictures in Education: A Summary of the Literature.* 472p. H. W. Wilson Co., 1937 $2.50

DEVEREUX, F. L. *The Educational Talking Picture.* 2nd ed. 222p. University of Chicago Press, 1935 $2.00

ELLIOTT, GODFREY. *The County Film Library: A Handbook on Organization, Administration and Maintenance.* Barr, Morgantown, W. Va. 1941 mimeo. 50c

HARTLEY, W. H. *Selected Films for American History and Problems.* Bureau of Publications, Teachers College, Columbia University. 275p. 1940 $2.25.

LAINE, E. *Motion Pictures and Radio: Report of the Regents' Inquiry.* 165p. McGraw-Hill, 1938 $1.75

MCDONALD, G. D. *Educational Motion Pictures and Libraries.* American Library Association, Chicago. 183p. 1942 $2.75

MICHIGAN EDUCATION ASSOCIATION, DEPARTMENT OF ELEMENTARY SCHOOL PRINCIPALS. *Implications of the Motion Picture In Education.* 13th Yearbook, 1941 The Association, Lansing, Michigan. 66p. $1.00

RULON, P. J. *Sound Motion Pictures in Science Instruction.* 236p. Harvard University, 1933 $2.50

SOCIETY OF MOTION PICTURE ENGINEERS. *Recommended Procedure and Equipment Specifications for Educational 16mm. Projection.* The Society, 1941

TOWNES, MARY E. *Teaching with Motion Pictures: A Guide to Sources of Information and Materials.* Bureau of Publications, Teachers College, Columbia University. rev. ed. 29p. 1940 35c

WISE, HARRY A. *Motion Pictures in Teaching American History.* 187p. Yale University Press. 1939 $3.00

III. School Production of Motion Pictures

ADAMS, THURSTON. *Motion Pictures in Physical Education: Techniques for Production.* Teachers College, Columbia University. 57p. 1939 90c

BROOKER, F. E. and HERRINGTON, E. H. *Students Make Motion Pictures.* 142p. American Council on Education, Washington, D. C. 1941 $1.00

CHILD, ELEANOR and FINCH, HARDY. *Producing School Movies.* 151p. National Council of Teachers of English, Chicago. 1941 $1.50

CONFERENCE ON EDUCATIONAL PRODUCTION OF MOTION PICTURES. *Proceedings of the First and Second Conferences,* 1939, 1940 Bureau of Educational Research, Ohio State University, Columbus. mimeo $1.25 each

FIELDSTON SCHOOL. *Cinema Handbook.* Fieldston School, N. Y. mimeo. 1940 $1.50

FINCH, HARDY, et al. *The Motion Picture Goes to School.* Committee on Standards for Motion Pictures and Newspapers. 46p. 1940 20c

GIBBONY, HAZEL L. *Some References on Amateur Motion Picture Production: A Bibliography.* Bureau of Educational Research, Ohio State University, Columbus. 1938

IV. Other Visual Aids

ATYEO, H. C. *The Excursion as a Teaching Technique.* Bureau of Publications, Teachers College, Columbia University. 225p. 1939, $2.35.

BATHURST, E. G. *Conservation Excursions. Bulletin* 1939, no. 13 1940 15c U. S. Office of Education, Washington, D. C.

CASEY, E. J. *American History on Parade.* Keystone View Co., Meadville, Pa. 1941 $1.25.

EXPLORING YOUR COMMUNITY. Gladys L. Potter, comp. Association for Childhood Education, Washington, D. C. 1940 35c

HAMILTON, G. E. *How to Make Hand-Made Lantern Slides.* 24p. 1940 10c, Educational Screen, Chicago.
The Stereograph and Lantern Slide in Education. 47p. 1939 15c Educational Screen, Chicago

MODLEY, R. *How to Use Pictorial Statistics.* Harper. 170p. 1937 $3.00

MOORE, E. M. *Youth in Museums.* University of Pennsylvania, Philadelphia. 1941 115p. $2.00

RAMSEY, GRACE F. *Educational Work in Museums of the U. S.* H. W. Wilson Co., New York City. 1938 289p. $2.50

RENNER, GEORGE T. *The Map in Modern Education.* Reprint from the Teachers College Record. 1939 28p. 25c

TROLINGER, LELIA. *Evaluation of Still Pictures for Instructional Use.* Educational Screen, Chicago. 1939 48p. 50c

VISUAL REVIEW. Published annually, with emphasis on filmstrips. Society for Visual Education, Chicago, Ill. Free.

WEBER, JOSEPH J. *Picture Values in Education.* Educational Screen, Chicago. 1928 156p. $1.00

Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

Conference Program

Although plans are by no means complete for the June meeting of the DVI in Denver, we were able to persuade Miss Lelia Trolinger of the University of Colorado, who is program chairman, to release a very tentative program.

Miss Trolinger who is also President of Zone VIII wants to emphasize that the program as listed here is subject to several changes, additions, and corrections.

Monday, June 29

First Session (Afternoon) Short meeting with the department of secondary teachers

Second half of the first session at 3:15:

General Topic: *Radio and Recordings as Classroom Aids*

Radio and Recordings in the Classroom (speaker to be announced)

Demonstration Lesson — "Using a Recording in Teaching". Douglas Ward, Assistant Professor of Secondary Social Studies and Supervising Teacher at College High School, Colorado State College of Education, Greeley.

Tuesday, June 30

Second Session Luncheon—"Pictures of Early Denver"—Joseph Emerson Smith, well-known retired newspaper man in Denver.

Third Session 2:15—General Theme: *How Can We Overcome a Slow-down of the Audio-Visual Program Due to the Difficulty of Securing Equipment?*

"Trends In the Production of Motion Pictures"—Dr. J. E. Hansen, Chief of the Bureau of Visual Instruction, University of Wisconsin, Madison.

"Prints, Photographs and Photographic Aids"—Dr. Ella Callista Clark, Winona State College, Winona, Minn.

3:30—Annual Business Meeting.

3:45—Panel Discussion on the "All-Out Utilization of Available Audio-Visual Aids".

ZONE II

The two-day conference of Zone II, held in New York City on April 17 and 18, was well attended by a representative group of Zonal members from various states included in the Zone in addition to many visitors from the city. Audio-Visual Education under War Conditions was the general theme of the meeting, the classroom demonstrations centering around the study of South America, "Winning the Peace," vocational training for defense, and citizenship training of adults. Motion pictures, lantern slides, filmslides, murals, charts, posters and a puppet show were employed in these demonstrations.

A talk on Inter-American Relations through Audio Education in New York City Schools was given in the final session by Mr. James F. MacAndrew, Director of Radio Station WNYE of the New York Board of Education. This was followed by a reproduction of the recording of bird songs produced by Dr. Albert Brand of Cornell University, with Kodachrome slides, and a reproduction of the recording of Churchill's talk before the American Congress. Miss Dorothy Gordon then gave a recital in costume on songs and stories of Our American Neighbors.

Miss E. Winifred Crawford was re-elected President of the Zone for the ensuing year, Mr. James W. Brown, Supervisor of Audio-Visual Education of the State Board of Education, Richmond, Virginia, was elected First Vice-President, and Dr. F. Dean McClusky, Director of the Scarborough School, Second Vice-President. Mr. Harold G. Antrim of Point Pleasant, New Jersey, and Miss Elizabeth J. Dyer, Director of Visual Instruction of the District of Columbia, were elected members of the executive committee for terms of three years.

ZONE VI

W. G. Gnaedinger, President of Zone VI, sent in an excellent report of the annual meeting held in Spokane, Washington on April 7. The following is a summary of the minutes of the meeting and the resolutions that were passed.

The morning session opened with previews of recent film releases. Topics for discussion at the morning meeting included film shipping problems, distribution of government films, and insurance against film damage. Representatives of the Railway Express Agency presented an outline of their services, answered questions, and entertained suggestions from the group.

The afternoon meeting opened with further previews of new films, followed by a report on the mid-year D. V. I. meeting at San Francisco by W. G. Gnaedinger and Amo DeBernardis. During the business session, presided over by U. S. Burt, the constitution and bylaws were read and adopted, and a membership report presented by J. V. LeClair, Secretary-Treasurer. Fifty-six members were reported with memberships cleared through the Zone Secretary. About thirty others have sent applications through the national office.

After the nominating committee (J. Wesley Crum, Louis Hill, and J. V. LeClair) had reported, the following officers were elected: President, W. G. Gnaedinger, Pullman, Wash.—First Vice-President, Allan Finstad, Fife, Wash.— Second Vice-Presidents: (Oregon) Amo DeBernardis, Portland; (Idaho) Helen Price, Lewiston; (Washington) Henry Durr, Aberdeen.

After the business meeting, a further discussion fol-

(*Concluded on page* 190)

40% PRICE REDUCTION
KODACHROME Classroom Films now fit limited budgets...

TWO Eastman Classroom Films on Nature Study subjects are now available in vivid full-color Kodachrome—and at a cost 40 per cent lower than formerly.

The new film on *The Black-Necked Stilt* presents an absorbing action picture of this bird during the breeding season. Telephoto close-ups clearly reveal the character of the nest, eggs, and young. Incubation and brooding habits are shown in detail. An interesting example of bird behavior is illustrated in the efforts of male and female to lure roving sheep and goats from the nest by feigning injury. When a new-born kid approaches, the mother bird stands her ground. ⅝ Reel, $30.

How Birds Feed Their Young, the original teaching film in Kodachrome, includes the indigo bunting, towhee, thrush, bluebird, cedar waxwing (illustrated below), goldfinch, hummingbird, heron, snakebird, least bittern, quail, and grouse. ½ Reel, $24. . . . Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

"THE BLACK-NECKED STILT"
Photographed by
KARL MASLOWSKI
⅝ Reel—$30

"HOW BIRDS FEED THEIR YOUNG"
Photographed by
ARTHUR A. ALLEN
½ Reel—formerly $40—*NOW* $24

EASTMAN *Classroom Films*

lowed, centered around the choice and effectiveness of teacher training devices. Following adjournment of the regular meeting, the new Executive Committee orgainzed, and appointed Miss K. S. Klise, Sunnyside, to be Secretary-Treasurer. General plans for the year were laid, and the Oregon and Washington-North Idaho Branch organization approved as Zone VI affiliates. The membership will shortly be apprised of the program for the year by the Executive Committee.

The resolutions committee returned three resolutions which were passed unanimously. One, addressed to Mr. Lowell Mellett, Coordinator of Government Films, recommended that not only the Y.M.C.A. Motion Picture Bureau be used as the distributing agent for the government films but that the fifty state college film libraries, as well as many city and county film libraries, be utilized also, as they "reach every school in the United States using visual materials.

"Coupled with this is the fact that these school libraries not only distribute films but maintain a program of in-service training of teachers in the use of equipment and materials.

"We understand the difficulties your office faces in determining the best method of distribution. However these films are so well constructed and correlate so closely with the school curriculum, that we feel that every agency should be used to make the distribtuion of these films as effective and widespread as possible."

Recommended for action of the Executive Committee *Second Resolution,* concerning the proposal that all memberships be entered for the school year, from September through June:

"Whereas, Zone VI of the National Education Association's Department of D. V. I. holds it annual meeting in late spring of each year, gaining the greater share of its new members at that time, and

"Whereas, new members enroll and pay dues at that time and would thus be entitled to only three months membership, if the proposed resolution setting the end of the fiscal membership year as of June 30 were to be enacted,

"Therefore, be it resolved, by Zone VI D. V. I. that we go on record as opposing the proposed legislation."

Third Resolution, requesting special express rates for classroom films:

"Whereas, Zone VI of the National Education Association's Department of Visual Instruction has been considering various problems in relation to the distribution of Audio-Visual materials for educational usage, and

"Whereas, the distribution of this material by the Railway Express Agency has increased in volume to such an extent, and express expenses have increased to the point that express shipments to and from schools using this material has levied a financial hardship,

"Be it resolved by this section (Zone VI D. V. I. that special consideration be given by your company relative to a scale of special rates in the shipment of these materials."

Connecticut Association Meeting

Reinhardt Sabel, recording secretary of the Connecticut Audio-Visual Education Association sent in an interesting report of their annual meeting held March 21 at the University of Connecticut. The program was directed by David Strom, Director of the new University of Connecticut Audio-Visual Aid Center. H. A. Gray of Erpi was the speaker for the morning session, discussing the topic "The Contribution of Audio-Visual Aids to the War Effort."

Among officers elected at the business meeting were Donald A. Eldridge of the New Haven Public Schools, President, Harris C. Palmer of Jewett City, Secretary-Treasurer, and Reinhardt Sabel, Bristol, Recording-Secretary.

Probably the most significant action of the meeting was the vote to have a committee prepare standards in Audio-Visual Education for use in secondary school evaluation.

Summer Courses in Audio-Visual Instruction

(*Concluded from page* 186)

Washington

College of Puget Sound, Tacoma — June 15-July 14
Audio-Visual Aids for the Classroom; Production of Audio-Visual Aids (2 each) — Frank Gorow

Eastern Wash. College of Education, Cheney — June 17-July 17
Elementary School Workshop (9 qr.) — C. M. Frasier

University of Washington, Seattle — June 23-Aug. 21
Individual Research in Production of Radio Recordings and Picture Aids (Arranged) — Jacobsen

Western College of Education, Bellingham — July 23-Aug. 21
Visual Education; Construction and Use of Visual Aids (3 each) — Brewer-Ruckmick

Wisconsin

State Teachers College, Eau Claire — June 15-July 24
Audio-Visual Education (3 qr.) — Hazel Ramharter

State Teachers College, LaCrosse — June 15-July 24
Audio-Visual Education (2) — John Darling

State Teachers College, Platteville — June 15-July 24
Radio-Visual Instruction (2) — Harold J. Schantz

Wyoming

University of Wyoming, Laramie — June 13-Aug. 21
The Visualized Curriculum; Visual-Radio Teaching; Workshop in Visual and Radio Aids (2 each) — W. A. Bonwell

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

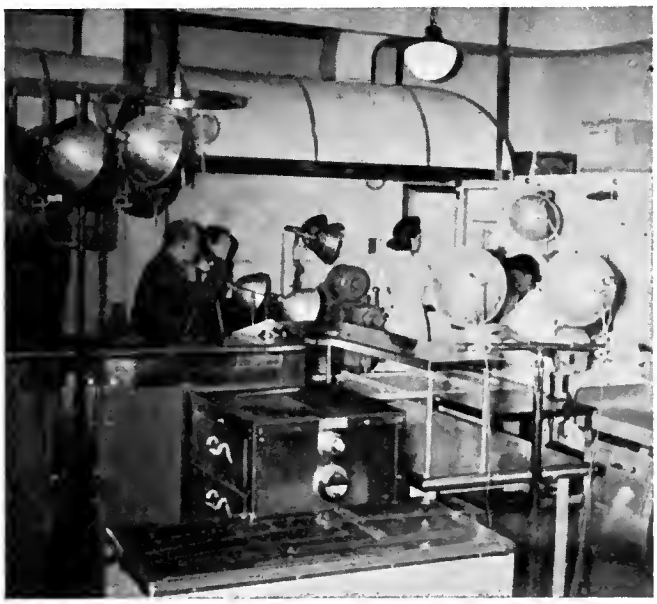
With a question box on the making of school film productions, conducted by
GODFREY ELLIOTT, Oakvale, W. Va.
Readers are invited to submit questions.

AN interesting account of the development of a public relations film has been forwarded to me by Miss Blanche M. Penn, assistant supervisor of girls' trades, State Department of Education of Connecticut. The account, written by Miss Ethel Spear, food trades instructor, New Britian State Trade School, New Britain, Conn., follows.

Connecticut Trade Schools Make a Moving Picture

In September, 1941 it was decided that the food trades department of the state trade schools needed to be brought to the attention of parents, teachers and pupils in Connecticut. A meeting was called of the directors and instructors of the two schools offering this course of study, and a plan was outlined. All were of the opinion that it would be advisable to take a color moving picture, using the school kitchens and dining rooms, showing the pupils at work learning the performance of definite payroll jobs which might be offered to them in the food industry.

An outline of the moving picture sequences was made by the food trades instructors. It was decided to make the movie on 16 mm. silent, color film, as the majority of the schools in the area where the picture will be distributed have equipment for showing 16 mm. film. J. H. Bovee and S. T. Dean were released from their duties for a month to work on the job of taking the picture.



Shooting a scene for the Conn. Food Trades Film

The first shots were taken in the kitchen of the food trades department in Hartford. This department had an enrollment of approximately 21 pupils. These boys and girls were busy getting ready for a luncheon business of 135-150 customers attracted to the school dining room by the good food and service offered by the department. It was quite a task for the photographers to set up their battery of a dozen standards of flood lights to insure enough light in the kitchen for picture taking. A light meter had to be used to test the brilliance of the light before each shot was taken. Pupils had to work under the heat of all these flood lights, and step over endless yards of electric cords which were connected with all available electric outlets. A pupil in a closeup had to be subjected to a light test to find out the amount of light her skin reflected. All details were worked out beforehand by the photographers. In the meantime, business was going on as usual, and that meant hustle and bustle to get ready for the noonday rush. Pupils got rather nervous, dropped dishes, stumbled over cords. Operations on jobs were sometimes finished before the photographers could get around to taking the shots. The pupil often walked out of focus of the camera to complete an operation being shot. As the available number of flood lights was limited, the actual space that could be photographed was also limited, and so our problems developed. Fifty feet of film were taken and sent off to be developed.

The first fifty feet were not successful, as many of the errors just mentioned showed up in the picture. Another meeting took place, and it was decided that, as the Hardford school's kitchen was too busy for our photographers to work in, they would try out fifty feet of film at the New Britain school and study the result.

A turkey was being stuffed and prepared by one of the pupils in this new department in New Britain, where the student enrollment was smaller and the restaurant business limited. The men set up the camera and lights, and tested their distances for best picture taking. There was no confusion in this small department. The pupils were rather hesitant about being in a "movie", but after some encouragement agreed to take part. Fifty feet were shot, and the results were unquestionably better.

It was apparent then that time, plenty of room, and a minimum amount of excitement were necessary for painstaking picture making. On the other hand, there were other phases of the picture taking to consider. Could we portray enough action to show the activities of an actual working department with the small class in the new department in New Britain? Hartford's department had been organized for ten years, and they were doing a fine job of large scale production. The photographers and instructors again conferred to outline day by day "shots" and decided that, with the help

of some of the Hartford pupils, who were available when needed, we could accomplish results. Some of the scenes outside the department, such as the pupils reporting in to school, were taken in Hartford. Also the "graduates at work" scenes were taken in the Y. W. C. A. and Aetna Life Insurance Company cafeterias, in Hartford.

Shots were taken of meat and vegetable preparation, salad and sandwich preparation and service, bakery work—which showed the girls making various types of rolls, pies and cakes. The Autosan electric dishwasher was shown to good advantage, with the girls at work on the dish table. A meal was prepared and served to guests in the dining room, who were most patient in sitting under hot flood lights while the apparatus was correctly placed and light tests made. Here we could have used many more flood lights, as the area to be photographed was greater than that photographed in the kitchen.

As each roll of processed film came back from Rochester, we would try it out on a projector and decide where we might be able to improve on our next shots. It was fun for all to see the film progress.

The food produced for the picture had to be utilized to minimize expenses, and so very often the department invited customers in for lunch. This often meant working under the pressure of time in the morning, as luncheon had to be ready by noon.

Finally, about the middle of January, slightly over our time limit, the last shots were taken. The work of titling by this time was under way. One of the trade school instructors, who has had considerable commercial art experience, was asked to help us on this work. He used the department mascot, a little gnome in a chef's outfit, to open booklets showing titles. They made a very happy addition to the picture, and the pupils loved them. At the end of the picture a little chef came forth and presented the diploma, which represented 3600 hours, or 2½ years work in the food trades department.

It is planned to distribute this 500-foot film to PTA groups and other adult organizations, as well as to students of junior and senior high school age. It is hoped that as a result of this film, the general public will become conscious of the objectives of vocational

(*Concluded on page* 199)

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS
Assistant in Audio-Visual Aids
Extension Division
Indiana University, Bloomington

Simple Machines (Erpi Classroom Films, Inc., 1841 Broadway, New York City), 1 reel, 16mm. sound. Sale price $50.00. Guide furnished.

This film shows demonstrations of simple machines—the lever and the inclined plane; in such adaptations as the pulley, gear, windlass, ramp, wedge, axe, and screw.

By picturing practical situations—moving a rock with a crowbar, moving a five hundred pound pile of sand to a platform, splitting a log, and raising a water bucket in a well—and explaining the action by means of animated diagrams, the simple definition of work as expressed in foot-pounds is evolved, and the law of conservation of energy, i.e.: force x distance=resistance x distance (disregarding friction) is demonstrated.

How these simple machines have been endlessly adapted by man in controlling and directing energy to lighten his labor and adapt his environment to his needs is pictured in an informative survey, ranging from the building of the Inca's temples to the assembly of a modern automobile. In every instance, the relation of the adaptation to the principle of the simple machine from which it is derived is made clear.

COMMITTEE APPRAISAL: "Simple Machines" is a useful film for demonstrating the principles of mechanics in general science classes and in high school physics classes. In addition, this film is uniquely adapted to the illustration of man's socio-economic dependence upon the machine to control his environment. In the social studies, from the beginning to very advanced levels, teachers and pupils will find in it thought-provoking material for discussions of both the sheer physical necessity for machines, and the socio-economic implications of the use of machines.

Harvests for Tomorrow (United States Department of Agriculture, Extension Service, Washington, D. C.) 3 reels, 16mm. sound. Sale price $12.35. Apply to producer for a list of depositories.

The film tells the story of the growth, decline, and rebirth of the soil. "The scene is laid in New England," says the prologue, "but the story is the same wherever man has cleared forests and built homes."

The opening sequence shows ordinary farm and village people at work on the land, basketing potatoes, picking apples, shucking corn, building fences with stones picked from the fields. The commentator explains that this has gone on for more than 300 years, planting the seed and harvesting the goodness from the soil.

Not only crops but also lumbering and grazing are shown to have removed the minerals from the soil. As an end result desolate and worn-out farms are pictured. Farmers must supplement sparse summer pasturing with fodder that will be needed later for winter feeding. Deserted farms and land no longer fertile enough to support anything but the wild juniper tell the story of an impoverished soil and people.

At a meeting of farmers in the town hall, scientific procedure in soil conservation is discussed and illustrated by flashbacks to the laboratory.

Informed farmers are seen putting powdered limestone and phosphates on the soil. As a result, increasingly rich harvesting scenes are pictured.

COMMITTEE APPRAISAL: A superior documentary film of rural life in New England. It would be particularly useful for a discussion of the need for soil conservation and of the relationship between the productivity of the soil and the living standards of the community. The film could also be used in a study of the characteristics of the New England farmer.

A Letter to Grandmother (Coronet Productions, Inc., Glenview, Illinois), 2 reels, black and white or Kodachrome, 16mm. sound. Sale prices; black and white $70.00, Kodachrome $100.

What happens to a letter? "A Letter to Grandmother" answers this question by following a letter written by a ten-year old girl, Mary, through the United States Post Office system to her grandmother's rural mail box, and, by following the grandmother's reply in the form of a letter and a package until both reach Mary.

Mary's letter is followed from the corner mail box to the post office, through sorting, cancellation, and dispatching to the railway mail coach.

Actual scenes filmed in a moving railway mail coach show the letter again sorted and dispatched for delivery to the post office in the town near its destination. There the letter is shown going through the post office to the rural mail carrier and to grandmother's mail box on the farm.

Grandmother reads Mary's letter and sends both a letter and a package to Mary in reply. The package and letter are followed from pickup by the rural mail carrier through delivery to Mary's home, with emphasis on the parcel post service in this instance.

COMMITTEE APPRAISAL: Teachers will find this film an excellent aid in developing concepts involving communication, the public service provided by the Federal Government, and the operation of the Post Office in detail. The use of this film will provide for pupils and teachers a more comprehensive view of the operation of the postal system than is usually obtainable from a school trip to the local post office.

An error in one sequence showing the rural mail carrier crossing to the wrong side of the road to deliver mail should be corrected by the teacher when the film is shown.

A Guidance Problem for School and Home (Bureau of Publications, Teachers College, Columbia University, New York.) 2 reels, 16mm. sound. Sale price, $75.00. Teacher's guide furnished.

This film is a case study of a second-grade child, Danny, who is failing in both social adjustment and his studies and who lacks interest in his work.

The contrast in attitude of Danny's parents is illustrated by flashbacks as Danny's mother tells his father of incidents which disclose his maladjustment to home and school life. The mother's over-protective attitude toward his relations with his schoolmates and her interference with his selection of playmates is in direct contrast with his father's desire to make him self-reliant. Danny is not interested in the activities of the classroom and is not accepted by other children as a member of the group. Both parents feel that the school is responsible for his lack of progress.

The mother's anxiety concerning her son causes her to visit the school. During the visit, the teacher expresses her interest in Danny and her desire to secure the mother's aid in helping him make better adjustment to life. On her second visit to the school, Danny's mother is pleased to see that the teacher is partially successful in assisting Danny to become an accepted member of his group. His father, however, believes that the teacher should try to help Danny in his academic work rather than in personality adjustment.

The teacher is concerned about Danny and wonders if she is doing all she can for him. With his school record before her, she confers with the school principal who gives several helpful suggestions as to the next steps to take in helping Danny.

COMMITTEE APPRAISAL: Teachers, guidance workers, and parents who view this film will agree that it is now possible through the use of the sound motion picture medium to obtain a record of relevant factors in a behavorial situation which could not be described adequately in a written case history. The film can be used as a basis for the discussion of the possible meanings of certain behavior and of ways in which it may be influenced; the relationship between a child's behavior and the attitude of his mother, father, teacher and playmates; and what kinds of information about a child are desirable in planning how best to help him. The apparent reality of the situations depicted could have been greatly increased by more skilful direction, and by more careful casting for voice and acting ability.

New York Calling (New York Central System, Motion Picture Bureau, 466 Lexington Ave., New York City) 2 reels, kodachrome, 16mm. sound. Apply to producer for free sources and purchase price.

Beautiful scenes and points of interest in natural color are seen as the train speeds down the historic Hudson Valley toward New York along the New York Central route. From Grand Central Station, a tour is taken by boat around Manhattan Island to see the skyline, famous bridges, and shipping in the world's greatest harbor. A bus trip up Fifth Avenue begins, and many famous buildings, including Rockefeller Center with its Radio City Music Hall, are seen. A few scenes are given of Central Park and then interesting historical and natural objects are viewed at the Metropolitan Museum of Art and the American Museum of Natural History. The Hayden Observatory, Grant's Tomb, Columbia University and the New York Botanical Gardens complete the tour.

A visit to the Bronx Zoo, with its auxiliary Children's Zoo, gives a glimpse of many wild and domesticated animals in their natural habitats. A few of the recreational facilities of New York City are illustrated by scenes at the Coney Island amusement park and Yankee Stadium. Brief views of Times Square at night are given and then Grand Central Terminal is again visited for the return trip up the Hudson Valley. On the train, the facilities of the pullman, dining and observation cars are shown while the commentary stresses the safety and comfort of travel by the New York Central.

COMMITTEE APPRAISAL: A good film for use in school assemblies or with adult groups where the colorful scenery and the historic places of the Hudson Valley and the highlights of the entertainment, cultural, and educational facilities of New York City would be of general interest. The film would have been more generally useful if material had been selected which presented New York City as a subject for social and economic study rather than a place to visit on a sight-seeing tour.

News and

Spring Conference of California Group

Harry H. Haworth, Supervisor of Library and Visual Service for the Pasadena City Schools, was elected president of the Audio-Visual Aids Association of Southern California at the annual business meeting and conference held April 18 at the University of Southern California. Frank Gulick, Director of Curriculum of the Glendale City Schools, was named vice-president and will be in charge of extension work. Mrs. Grace W. Jones, Librarian and Director of Audio-Visual Education, Santa Monica City Schools, was named secretary-treasurer. Mrs. Elizabeth Goudy, Director of Radio and Visual Education, Los Angeles County Schools, was appointed Program Chairman.

A panel discussion of "Recent Curriculum Changes and Their Implications" was presented by Frank Gulick, Chairman, William Brown, Curriculum Director Los Angeles City Schools, Dr. Evan Morgan, Curriculum Director Santa Monica City Schools and Jay Dresser, Director of Audio-Visual Aids, Santa Barbara County Schools. Mr. Brown and Dr. Morgan both plead for "a retooling of education, just as industry is retooling for a new type of war production." They declared that now, as never before, there is a great need for streamlining the educational system. Mr. Gulick pointed to the successful use by the Army, Navy, and Air Corps as well as industry, of moving pictures to speed up the training of large numbers of men. Mr. Dresser pointed out that the Army is using exhibits, charts, models, pictures, and movies to teach soldiering to soldiers. "Never before have the services of visual education been rated so highly by a government," he said. So why not use these tested and proven methods in retooling and revitalizing our school procedures. If the army can in a few weeks make successful teachers for their specialized courses in a mechanized unit out of grease monkeys and ordinary mechanics, then there is no limit to what skilled teachers could do in preparing youth for the complex life of the next decade, if they only had enough of these new tools to work with.

To help the executive committee carry out this theme of "Retooling Education," Mr. Haworth and Mrs. Goudy, as program chairman for the ensuing year, plan to hold several regional conferences in the early fall.

Bruce A. Findlay, Supervisor of the Visual Aids Section, Los Angeles City Schools, gave an inspiring address emphasizing that the successful use of visual aids in the military training program is based upon the fact that their motion pictures and film strips are designed to meet their needs. Correspondingly, educators must "find out the bayous and swamps in education and build visual bridges over them." By such means it will be possible to add interest and speed, as well as more permanent learning, to the school program.

As an example of what the Los Angeles City Schools are doing to assist the Defense Training work, he

Notes

showed the excellent film *The Micrometer,* produced by the United States Office of Education. Also, the Los Angeles Department is making colored film strips with commentary recorded on transcriptions for training elementary school children in proper procedures during air raids. They have also cooperated with various commercial companies in preparing teaching film strips with recorded commentary on such topics as, "Home Planning," "Personal Appearance," "Vocational Guidance" and many other subjects. These film strips received much commendation from the delegates present.

The afternoon session was devoted to a preview of some of the newer training films, morale building and civilian defense subjects. HARRY H. HAWORTH

First Southwest Audio-Visual Conference

Nearly three hundred teachers, principals, supervisors, superintendents and others concerned with the educational use of radio and audiovisual aids attended the first Southwest Audiovisual Conference in Shreveport, Louisiana, April 3rd and 4th. The Louisiana State Department of Education and the General Extension Division of Louisiana State University, cosponsors of the conference, are highly gratified by the response given by the educational personnel of this area.

Proceedings of the conference will be available in the future while some of the high spots of the two-day conference are reported here.

R. R. Ewerz, Director of Supervision and Instruction, Louisiana State Department of Education, presiding at the opening session, indicated the scope of the conference and emphasized the importance of the utilization of audiovisual materials. E. Weldon Jones, Superintendent of Schools, Caddo Parish, welcomed the conference participants in a fashion that implemented the informal nature of the proceedings, based on the exchange of ideas and techniques by all present. Mary-Clint Irion, Director of Audiovisual Education, Louisiana State Department of Education, presented the basic philosophy underlying the use of visual materials. She stressed the necessity of utilizing such aids within the classroom as opposed to indiscriminate auditorium usage. I. Keith Tyler, Director of the Evaluation of School Broadcasts, Ohio State University, presented the case for classroom use of radio programs. Discussion based on those two addresses clarified questions posed by panel members and other participants, and provided a frame of reference for the ensuing sessions.

At the second session films, film strips, slides, and recordings were presented to the group for evaluation and discussion, under the guidance of J. W. Brouillette, Director of Teacher Education, Mississippi State College.

The Dinner Meeting over which Miss Irion presided, presented a most interesting program. James E. Smitherman, Chairman of the Board of Supervisors of Louisiana State University read a message from General Campbell B. Hodges, president of the Univer-

sity. President Hodges' address expressed his conviction that the universities have a real obligation in the presentation of educational and informational radio programs for school and adult use. John E. Coxe, Louisiana State Superintendent of Education, reviewed the development of audiovisual education in the State, and predicted a steady advancement in the future.

With Joseph E. Gibson, Director of Higher Education, Louisiana State Department of Education, presiding, the fourth session opened with a classroom film lesson demonstration in developing a unit of work in Inter-American Friendship on the seventh-grade level, conducted by Mary Emile Windle, Elementary School Supervisor from Danville, Virginia. H. B. McCarty, Director of Radio Station WHA, University of Wisconsin, spoke vividly of the work being done in the Wisconsin "Let's Draw" series. T. A. Hanchey, Superintendent of Schools, Claiborne Parish, led the discussion that followed.

In the concluding session of the conference, Marion B. Smith, Director of the General Extension Division of Louisiana State University, presided. Major Harold W. Kent, U. S. Army, Bureau of Public Relations, War Department, explained to the conference the role of radio in war. A. L. Chapman, Director of Research, Education by Radio, University of Texas, provided his listeners with practical suggestions for the utilization of radio programs in the classroom. Mr. McCarty of WHA urged educators to realize their obligation to present radio programs of superior quality, as commercial broadcasters cannot always be relied upon to present programs of educational value. I. Keith Tyler posed the problems involved in teaching discrimination to school children, and suggested criteria for evaluating radio programs.

Ralph W. Steetle, Radio Program Director, Louisiana State University, suggested that in order to make the most effective use of the ideas and techniques brought forth in the conference, co-operative effort on the part of the schools, colleges, universities, teachers, and administrators of the area must be secured.

Plans were formulated to establish the Southwest Audiovisual Conference on a permanent basis. Temporary officers were empowered to frame a permanent organization, with Mary-Clint Irion and Ralph W. Steetle serving jointly as president.

This two day conference in Shreveport has indicated that educators of this region are progressive in their approach to the use of audiovisual materials, and that teachers and administrators are actively interested in furthering the intelligent use of these essential aids to educational progress.

School-Made Motion Pictures

(*Concluded from page* 192)

education in Connecticut; and will become aware of the opportunities for training and placement in the food trades field.

Question Box on School Film Production

1. Where can we find tables of hyperfocal distances, lens fields, etc., for our camera?

Probably the best single source of such technical information is the *American Cinematographer Handbook and Reference Guide*. It is published by the American Cinematographer, 1165 North Berendo Street, Hollywood, Calif., and sells at $3.50 per copy. A revised edition was published just this winter. Although much of the information in the handbook is compiled for 35mm, it contains a very comprehensive and useful section of 16mm data.

2. What information should go into the script clerk's records?

The data collected for the production crew by the script clerk should be such that it would permit the cameraman to duplicate the scene at a later date. Basic data to be collected may include such things as scene number, scene location, scene action, characters and dress, properties, film stock, meter reading, lens used, stop, distance, footage consumed, and a rough sketch of the set. This latter item is especially important for interior shooting. If the scene is improperly exposed or if the lighting turns out to have been poorly arranged, it is a fairly simple matter to use the script clerk's original records as a means of reconstructing and then correcting the scene on the second trial. The information called for on the script clerk's record will vary according to the variety of equipment used and according to the nature of the film being produced. After all is said, any production crew will benefit by constructing its own system of records, rather than borrow too literally from someone else.

3. We want a copy made of our one-reel film. How much will it cost, and where can we have such work done?

Assuming that your film is black-and-white 16mm reversal stock, the cost of a good quality reversal dupe will be five cents per foot. Eastman, Agfa, or any reputable commercial laboratory can make the copy for you at this price. If your film is in Kodachrome, the cost will be ten cents per foot. It is always a good policy to have a copy made of a valuable film, so that the copy takes the wear and tear of projection while the original is stored for future printing.

4. Is a tripod an essential part of the school's camera equipment?

A tripod is very essential to good movie work, unless you are going to be content with pictures that weave about on the screen and give the audience the jitters. A tripod provides a steady base for the camera; it is this base which must prevent extraneous motion from entering into the audience's reaction to the screen. If a regulation cine tripod is not available, a still camera tripod (if sufficiently heavy) will provide just as good screen results although it may be a bit inconvenient in certain situations. Such features as tilting and panning are of secondary importance; the steady support is the most important consideration.

5. How much waste should one plan for in producing a one-reel film?

Such a question cannot be answered in terms of a definite and unalterable figure; too many factors help determine the amount of waste in production: experience of the cameraman and his crew, standards of performance, last-minute changes in the script, and so on right down to luck itself sometimes. Usually, however, it will be found that not less than twenty per cent of the original footage is lost in the process of cutting and editing. Most school crews will be fortunate if they turn out an acceptable film with less than thirty per cent waste footage. Doubtless there will be many who will say, "Why, we have produced films with far less waste than this figure!", but close examination of such films is certain to reveal foot after foot of film that should have gone into the waste basket.

Films for Defense on the Home Front

This list has been compiled for the information of those who, in increasing numbers, are seeking effective instructional films dealing with various phases of our War Emergency. It is not intended as a complete list of films useful in this connection, but it does include those especially applicable, and new subjects made available since the publication last fall of the 17th edition of "1000 and One" The Blue Book of Non-Theatrical Films. For a broader list of subject-matter we recommend the current edition of "1000 and One."

Air Raid Precautions and Fire Fighting

AIR RAID WARDEN (1 reel, sound)
Functions of a local air raid warden before and during a blackout. (B&H, Brandon, Ideal, P&S)

ALERT (1 reel, sound)
Basic air raid precautions and procedures. (Brandon)

FIGHTING THE FIRE BOMB (2 reels, sound)
Vital information on methods and equipment to be employed in fighting fire bombs and preventing spread of fire. (B&H, Ideal, P&S, Transfilm, VES, YMCA)

FIREMAN, THE (1 reel, sound)
Organization and operation of a metropolitan fire-fighting force; modern fire apparatus. (Erpi)

FIRE PROTECTION (1 reel, silent)
Correct procedure of turning in alarm; training of firemen; dealing with fires; demonstration of artificial respiration; pupils illustrate correct methods of leaving burning building. (Eastman)

GOOFER TROUBLE (1 reel, sound)
Advice to citizens on conduct during air raids and aerial dogfights. (B&H, BL, Gutlohn, Ideal, VES)

LONDON FIRE RAIDS (1 reel, sound)
Women of Auxiliary Fire Service on duty in Control Room; a fire brigade at work. (B&H, BL, Gutlohn, Ideal, P&S, VES)

MODERN MAGIC IN FIRE PROTECTION (3 reels, sound)
Function of various types of sprinkling systems; how modern automatic apparatus fights fire. (Rockwood)

MR. PROUDFOOT SHOWS A LIGHT (1 reel, sound)
A short comedy showing what happens in a blackout when proper precautions are ignored. (BL, Ideal, VES)

NEIGHBORS UNDER FIRE (1 reel, sound)
How voluntary workers aid the homeless after an air raid. (B&H, Brandon, BL, CFC, VES)

SHUNTER BLACK'S NIGHT OFF (1 reel, sound)
Shows need for dealing with incendiary bombs as quickly as possible. (BL, Ideal, VES)

SIXTY SECONDS TO SAFETY (1 reel, sound)
Safety film on fire hazards in schools and fire drill training. (PFC)

SPOTTING THE BOMBERS (1 reel, sound and silent)
Diagrams aid airplane spotters, air raid wardens and others. (Gutlohn, P&S)

STOP THAT FIRE (1 reel, sound)
Various ways of dealing with incendiary bombs and the fires caused by them. (B&H, CFC, Gutlohn, VES, YMCA)

WALK, DO NOT RUN (1 reel, silent)
Fire drill procedure for school children. (Harmon)

WAR AND ORDER (1 reel, sound)
Emergency police services in wartime Britain; reporting bomb damage, fire fighting, first aid, etc. (B&H, BL, CFC, Gutlohn, Ideal, VES)

WARNING, THE (3 reels, sound)
Depicts an air raid from first warning signal to rescue and clean-up work; what civilians should do for protection. (B&H, Brandon, Gutlohn, Ideal, P&S, VES, YMCA)

Civilian Mobilization

BRITAIN ON GUARD (1 reel, sound)
How population has mobilized to defend country. (B&H, BL, CFC)

CALL FOR VOLUNTEERS (1 reel, sound)
Volunteer work which women can perform in wartime. (NFB)

CITIZEN ARMY (1 reel, sound)
Role of Home Guard in Britain. (BL, Ideal, VES)

FOR HONOR, FREEDOM AND COUNTRY (1 reel, sound)
Russia's "scorched earth" policy in operation; civilian brigades dig tank traps and fortifications. (Brandon, Ideal)

FRONT LINE WOMEN (5 min., sound)
Work of British women: air raid work, nursing, replacement of men; how American women are following in their footsteps. (Gutlohn, Ideal)

HOME FRONT (1 reel, sound)
Essential war tasks performed by women. (NFB)

RUSSIA'S MILLIONS MOBILIZE (1 reel, sound)
Civilian reaction to invasion; industrial and farming mobilization; bomb shelter preparation; guerilla groups. (Brandon, Ideal, P&S)

SAFEGUARDING MILITARY INFORMATION (1 reel, sound)
Importance of secrecy on the part of military personnel and civilians in defense activities; results of careless talk. (OEM, YMCA)

SOVIET WOMEN (1 reel, sound)
Russian women in various types of civilian defense work. (Brandon, Ideal)

TOMORROW IS THEIRS (1 reel, sound)
Readjustment of school life to wartime conditions, and protection of schools against air attacks; use of shelters. (BL, CFC, VES)

VILLAGE SCHOOL (1 reel, sound)
How children, including evacuees from a large city, are educated in a village school in wartime. (B&H, BL, CFC, VES)

WHAT OF THE CHILDREN (1 reel, sound)
Evacuation of children from cities; how problems were solved. (BL, CFC, VES)

WOMEN AT WAR (1 reel, sound)
Activities of women in the Armed and Volunteer Services of Britain. (BL, Gutlohn, VES)

WOMEN IN DEFENSE (1 reel, sound)
Various roles women are assuming in the war effort. (Ideal, OEM, P&S, YMCA)

Conservation

CHECK WELL BEFORE USING (1 reel, sound)
The important parts of truck which should be checked frequently. (Vision)

DRIVE FOR VICTORY (1 reel, sound)
Shows drivers the parts of a car that get the most wear, and way to check that wear. (Vision)

A FEW OUNCES A DAY (1 reel, sound)
Explains in diagrams the need for collecting salvage of all kinds, and how prevention of waste helps reduce wartime shortages. (BL)

IT'S UP TO US (1 reel, sound)
Tells how to conserve gas, oil and rubber. (GM)

First Aid and Nursing

BEFORE THE DOCTOR COMES (4 reels, sound)
Control of bleeding and care of shock; artificial respiration and care for burns; how to apply splints on leg and arm fractures. (Red Cross, P&S)

EMERGENCY FIRST AID (Series of 5, 1 reel each, sound & silent)
Bleeding, Resuscitation and Shock; Bandaging for Wounds and Burns; Improvised Splints for Treatment of Fractures; Application of Fixed Traction in Splinting Fractures; Methods of Transporting the Injured. (B&H, Brandon)

FIRST AID (Series of 4, silent)
Life Saving and Resuscitation (1 reel); Care of Minor Wounds (¼ reel); Carrying the Injured (¼ reel); Control of Bleeding (¼ reel.) (Eastman)

FIRST AID FOR WOUNDS AND FRACTURES (1 reel, sound)
Proper procedures in caring for an injured person from time of injury until medical help arrives. (Erpi)

HEALTH IN WAR (2 reels, sound)
Effect on Health Services; how new problems are solved; London's emergency hospital system. (BL, CFC, VES)

HOME NURSING (Series of 3, silent)
Routine Procedures (1 reel); Special Procedures (¾ reel); The Bed Bath (¼ reel). (Eastman)

MARCHING WITH OLD GLORY (1 reel, sound and silent)
Services of Red Cross; Blood Donor stations, training nurses, establishing First Aid Stations; assistance rendered in London air raids. (Ganz, VES)

MOBILIZED FOR MERCY (1 reel, sound and silent)
Work of Red Cross in war and peace times. (Ganz)

NURSING (1 reel, sound)
Qualifications required, training, opportunities. (Vocational)

NURSES IN THE MAKING (2 reels, silent)
Modern nursing education; fields of service. (Harmon)

WHITE BATTLE FRONT (1 reel, sound)
Available medical services in England for war casualties. (BL, CFC, VES)

Nutrition

FOODS AND NUTRITION (1 reel, sound)
Dietary requirements of carbohydrates, fats, proteins, minerals, vitamins and water. (Erpi)

FUN IN FOOD (1 reel, sound)
Work of food constituents in the body; sources of vitamins. (Films)

GARDEN FOR VICTORY (1 reel, black and white, sound; 2 reels color, silent) Practical steps in the planting and care of a backyard vegetable garden. (B&H)

GOOD FOODS (½ reel each, silent)
A Drink of Water; Bread and Cereals; Fruit and Vegetables; Milk (¼ reel) Importance of these foods. (Eastman)

MORE LIFE IN LIVING (1 reel, sound)
Shows need for balanced diet—milk and protective foods. (Nat'l Dairy)

MEAT AND ROMANCE (4 reels, sound)
Correct procedures in buying, cooking meat; nutritional values of various meats. (Castle)

VANISHING VITAMINS (1 reel, sound)
Recently discovered facts about food preservation. (GE)

VITAMIN B_1 (1 reel, silent)
Natural sources; effect of vitamin B_1 deficiency; need for a balanced diet for health. (Eastman)

WELL BALANCED DIET, THE (1 reel, silent)
Need for variety of foods to supply necessary vitamins and minerals; importance of proper cooking and eating. (NMP)

NAMES AND ADDRESSES OF FILM DISTRIBUTORS

B&H BELL & HOWELL CO., 1817 Larchmont Ave., Chicago
Brandon BRANDON FILMS, 1600 Broadway, New York
BL BRITISH LIBRARY OF INFORMATION, 45 Rockefeller Plaza, New York
Castle CASTLE FILMS, RCA Bldg., New York
CFC COLLEGE FILM CENTER, 59 E. Van Buren St., Chicago
Eastman EASTMAN KODAK, Teaching Films Division, Rochester, N. Y.
Erpi ERPI CLASSROOM FILMS, 1841 Broadway, New York
Films FILMS, INCORPORATED, 330 W. 42nd St., New York
Ganz WILLIAM J. GANZ CO., 19 E. 47th St., New York
GE GENERAL ELECTRIC CO., % W. D. Galpin, Bridgeport, Conn.
GM GENERAL MOTORS CORP., 1775 Broadway, New York
Gutlohn WALTER O. GUTLOHN, INC., 25 W. 45th St., New York
Harmon HARMON FOUNDATION, INC., 140 Nassau St., New York
Ideal IDEAL PICTURES CORP., 28 E. Eighth St., Chicago
Nat'l Dairy NATIONAL DAIRY COUNCIL, 111 N. Canal St., Chicago
NFB NATIONAL FILM BOARD OF CANADA, Ottawa, Canada
NMP NATIONAL MOTION PICTURE CO., Mooresville, Ind.
OEM OFFICE OF EMERGENCY MANAGEMENT Film Unit, Wash., D. C.
P&S PHOTO & SOUND, INC., 153 Kearney St., San Francisco
Red Cross HAROLD ENLOWS, 19 E. 47th St., New York
Rockwood ROCKWOOD SPRINKLER CO., 38 Harlow St., Worchester, Mass.
Transfilm TRANSFILM, INC., 9 Rockefeller Plaza, New York
VES VISUAL EDUCATION SERVICE, 131 Clarendon St., Boston
Vision VISION EDUCATIONAL PRODUCTIONS, 509 Fifth Ave., New York
Vocational VOCATIONAL GUIDANCE FILMS, Old Colony Bldg., Des Moines
YMCA YMCA MOTION PICTURE BUREAU, 347 Madison Ave., New York

(Additional list of films pertinent to the war program will appear in the June issue)

Religious Film Association Organized

WHAT is believed to be the most important result thus far in the seventeen year effort of the Harmon Foundation to organize motion picture uses in the churches of America, took form March 25, 1942, with the incorporation of the Religious Film Association and establishment of its offices at 297 Fourth Avenue, New York. The new Association represents the getting-together of sixteen leading Protestant church agencies to distribute suitable church films through their respective publishing houses, a decidedly different approach, from which it is estimated that approximately 122,000 churches will benefit.

This pooling of resources takes advantage not only of the common objectives, simplifying service and saving duplicating expenses, but it utilizes the experience and equipment which has been so long and so successfully employed in reaching the church congregations by regular publication means. Precedents for such concerted operation have existed, of course, in special groups such as the Missionary Education Movement, that supplies study books and other materials to the wide missionary field.

The purpose of the new organization is to help churches make their programs more effective through the use of visual aids. It will provide information to members regarding the value and availability of existing religious motion pictures, film strips and slides, and will aid its members in promoting the use of these materials for educational purposes in the church field. Toward this end the Association will issue a catalogue listing and evaluating more than two hundred and fifty motion pictures suitable for church use in addition to filmstrips and Kodachrome slides.

The Harmon Foundation based its specific recommendations to the church field on its own picture experiments beginning in 1925. Its stand was then, as now, that organization of the religious films service should grow out of the churches themselves as a self-supporting venture, and not be developed or maintained by any outside, allegedly philanthropic organization. The Foundation was willing and anxious, however, to bring the necessary factors together and to make the findings upon which a healthy enterprise of the kind might be erected. Its attention to this end was first directed toward the Federal Council of Churches of Christ in America; but experience presently indicated that the International Council of Religious Education was better qualified to solve the problem. Out of all of these approaches and conferences over the seventeen year period has emerged the present Religious Films Association, Inc.

It is the expressed sentiment of Miss Mary Beatty Brady, executive director of the Harmon Foundation, that the motion picture has become an instrument of high importance to the church and that, to obtain its full benefits of spiritual help, it must be especially adapted to that high purpose by informed producers and distributors.

"In the theatre," she says, "the appeal is to an essentially passive spectator; in the church is added the ministry of faith and the active worship which makes such visual communication—not 'visual education'—a part of the corporate soul of the community."

The executive secretary of the new Religious Film Association is William L. Rogers, who has produced a number of interesting films in the missionary field under auspices of the Harmon Foundation. Lovick Pierce, of the Methodist Publishing House at Dallas, Texas, is chairman; George W. Card, of the Baptist Sunday School Board at Nashville, Tennessee, is vice-chairman; and John Ribble, secretary of the Presbyterian Board of Christian Education, at Philadelphia, is secretary-treasurer.

"Youth Takes to Wings"

Dedicated to the Air-minded Youth of Today. An official National Aeronautical Association film produced by Bray Pictures Corporation with the cooperation of the Franklin Institute of the State of Pennsylvania.

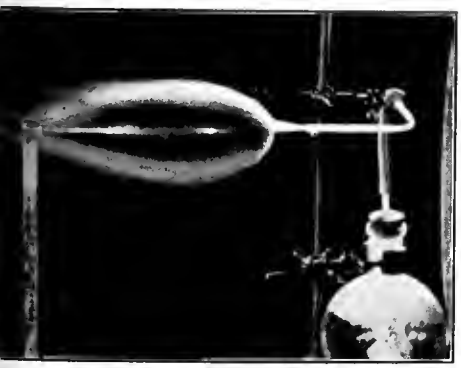
AN OUTSTANDING achievement, this, in educational motion pictures! A film notable teaching quality, yet teeming h sheer entertainment values—a motion ture that fascinates, absorbs, and irre-tibly instructs at the same time.

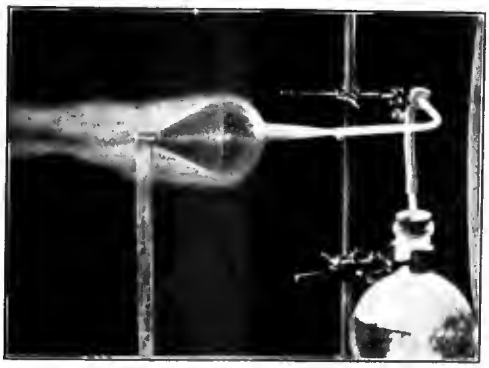
"Youth Takes to Wings" offers, in one ort hour, an excellent demonstration of e foundation principles of aero-dynamics, d their translation into the finished prod-t, the modern airplane. By expert and ginal techniques, the film clarifies the otle actualities of bird flight, unseen and known until the motion picture could bring e revelation, and the transitional adapta-ns and modifications required for me-ancial flight by man. It presents, visibly d vividly, the phenomena of air flow, rce, mass, density, thermals—the basic vs of flight—by means and methods of gh ingenuity yet thrilling simplicity. Then, m principles to practice! Full demonstra-n of gliders and helicopters in action. odel airplanes of deft designs, showing ried skills and precision workmanship of ys, fly across the screen. Then on to the lendid embodiment of all these established ws and constructional procedures in the tual monsters of the airways.

Here is a potent instrument for our na-nal education in schools, theaters and mmunity halls. It appeals to any audience ung or old, amateur or professional, scho-tic or theatrical. It not merely deserves tion-wide recognition and use, it is getting them. The Aviation Education Research Project, established under the C. A. A. in cooperation with the United States Office of Education, headed by three Columbia University professors, is using this film in all its club meetings. The Project is preparing new courses in Junior Aviation for national school use—from the Fifth Grade up!—to correlate widely with curricular courses in Mathematics, Physical Sciences, Geography, English, Fine Arts, Social Sciences, even with Health Education. The film will integrate with them all.

The present surge of interest in aviation demands such film material, not only for the critical emergency of war but for the peace years to follow. The tremendous development of the automobile in the past generation will inevitably be paralleled, if not surpassed, by the development of the airplane in the present generation. It is the subject of our day *par excellence*. The youth of today vitally needs to know its aviation. Such a film as "Youth Takes to Wings," shown to the millions, will immeasurably promote knowledge and understanding, stimulate to further study and achievement, and aid mightily in bringing about that ultimate, greatly-to-be-desired culmination of the national effort—America's final world-mastery of the air.

The film is available in 16 mm sound, from Bray Pictures Corporation, 729 Seventh Avenue, New York City, and Ideal Pictures Corporation, 28 E. Eighth Street, Chicago.





Current Film News

■ Castle Films Inc., 30 Rockefeller Plaza, New York City, announce that the first 8mm. and 16mm. motion pictures showing Americans actually in battle action against the Japanese are now available.

U. S. Navy Blasts Marshall Islands —the film record of America's surprise descent upon the Jap-mandated group of islands, depicts Uncle Sam giving back his first instalment for Nippon's treachery at Pearl Harbor. Preparations for the assault are shown as the Eastern fleet ploughs the Pacific toward

The attack on the Marshall Islands.

battle. Planes, bombs, guns, munitions, everything is made ready for instant use as soon as position is reached within firing range. Salvo after salvo blazes from many batteries, and the deadly accurate gunmanship of Yankee sailors is seen as great explosions occur on shore. An enemy cruiser and aircraft carrier are seen hit and sinking, and the filming of aerial combat has never been equalled. One Jap pilot, his plane damaged, attempts to land on an American carrier, but he is met with a barrage of fire, and, a mass of flames, the plane swerves into the ocean. The precision, speed and coolness of American gunners in the thick of the fight is an inspiring sight. Some of the slight damage that was done to American vessels is shown, but the picture leaves no doubt that the bases from which Japan attacked Wake Island, and a great many Jap ships and planes were utterly destroyed. The film is procurable at photographic dealers in five sizes and lengths.

MacArthur—America's First Soldier, and Manila Bombed! is the latest timely movie on important current events to come from Castle Films. Combining two closely related subjects in one reel, this film presents a screen symposium of General MacArthur's career right up to scenes showing him in Manila after the planes of Japan had blasted futilely at his stalwart troops and before his sensational trek to Australia.

On the same reel are scenes shot as Manila burned, film only recently released by the U.S. Army. Oil tanks are shown exploding, buildings in the business section aflame, public structures and dwellings reduced to shambles by the terrific onslaught of Jap bombers.

A short motion picture trailer, long enough to accommodate the singing of the National Anthem, has been produced by Castle Films in both sound and silent versions. Super-imposed words of the song appear on all editions which include three; two in 16mm, sound and silent, and one in 8mm.

The Star Spangled Banner is in demand for cutting into existent film for use in homes, schools and in other places where community singing is in order. A stirring pictorial procession, symbolic of patriotism, occupies the screen during the singing.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, is now distributing on an exclusive basis the widely acclaimed motion picture entitled:

The Eternal Gift—10 reels, 16mm. sound — produced under the supervision of the Perpetual Novena in honor of our Sorrowful Mother. This picture, two years in the making, records for the first time, a solemn Catholic High Mass, which is portrayed with great clarity and impressiveness. The Right Rev. Monsignor Fulton J. Sheen interprets the Latin prayers and the symbolism

Celebration of a solemn High Mass.

of the Mass, and the Rev. James R. Keane, O.S.M. acts as celebrant of the Mass. The hymns and prayers of the Mass are sung by the Schola Cantorium and a choir of about fifty Gregorian Chanters, with the Chicago Symphony Orchestra performing the musical score. The film is suitable for showing to both Catholics and non-Catholics.

Moonlight Sonata—7 reels—featuring the only screen appearance of the great pianist, Ignace Jan Paderewski, is another new Gutlohn release in 16mm. Music, such as is seldom heard on the screen, provides a memorable thrill as the maestro plays several immortal classics including Beethoven's "Moonlight Sonata" and his own "Minuet in G Major." The story blends music and romance into delightful entertainment. The cast includes Charles Farrell, Marie Tempest and Barbara Greene.

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, report the availability of an instructive reel of current significance, presenting the story of the Hawaiian Islands of today.

Sugar Flumes in Hawaii.

The Real Hawaii—1 reel, 16mm sound, in color or black and white—deals with the island's defenses, and industries in detail. It portrays battleships and soldiers, then sugar and pineapples. The film also covers population composition and inter-relationships, food supply, natural wonders, and life of original native people.

■ Brandon Films, Inc., 1600 Broadway, New York City, has the following new full length documentary film on Russia ready for daily rentals and special long time leases:

One Day in Soviet Russia—running time 55 minutes—written and narrated by Quentin Reynolds, American ace reporter and Official Press Attache at the historic Moscow Three Power Conference. The film was edited in England by Sidney Cole from dramatic documentary material filmed simultaneously by ninety-seven cameramen throughout the vast areas of Russia, and presents a complete picture of life in Soviet Russia. It is said to be a stirring report of the heroic people of the nation that has smashed the myth of Nazi invincibility.

Brandon Films is also releasing the defense and war films issued by the Netherlands Government, in addition to those they handle for China and the USSR. The first from Holland is:

High Stakes in the East—a 1-reel 16mm sound film in Kodachrome filmed in Java, edited by John Ferno and commentary written by Irving Jacoby. The film presents a concrete analysis of the economy of this island, its importance to the United Nations, reasons for Japanese invasion, and offers the hope that it will be retrieved by the United Nations.

(*Concluded on page* 206)

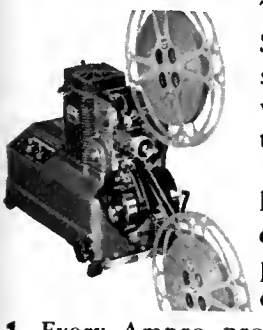
How to get *Longer Service* from your Ampro Projector

A battery of Ampro Projectors in one of a series of tests and inspections that assure smooth running and efficient operation.

Experienced Inspectors

Adjusting Mechanism

Ask your Dealer About AMPRO SERVICE



Today—every Ampro 16mm. Sound and Silent Projector should play a vital part in the vast U.S. war-time program of training and education.

Today—every Ampro owner has the serious responsibility of making certain that his projector is ready to render efficient service because:

1. Every Ampro projector that is serviced and put back into first class condition relieves just that much of the load of producing new machines for the war effort.
2. There is ample opportunity for using every Ampro for projecting 16mm. films for Civilian Defense, War-time training and the circulation of important information.

For industrial training classes, civilian defense meetings, conservation meetings, for vocational schools, church clubs, fraternal organizations and service groups — you can swing your projector into "front line" service for the duration — and help in an important phase of AMERICA'S DEFENSE.

The Ampro corporation maintains complete service departments, manned by men who are experts in reconditioning and rebuilding used projectors. Users report that Ampro maintenance costs are extremely low. You will be surprised at how much can be done at reasonable rates to make your projector as good as new. A routine check-up of your projector will insure long and satisfactory performance, so visit your nearest Ampro dealer today for projector inspection, cleaning, and adjustment.

Write for name of local Ampro dealer.

AMPRO Precision Cine Equipment

2851 N. WESTERN AVE., (DEPT. ES 542) CHICAGO

(*Concluded from page* 204)

The Dean of Canterbury's Address to America (tentative title), the motion picture record of the recent radio address to the United States by the Very Reverend Hewlett Johnson, has been acquired for 16mm distribution in the United States and Canada by Brandon Films. The address was delivered by the Dean to the Te Deum for Russia, held in Carnegie Hall, New York City, on April 13th. The film will be featured on one of the special programs in the Brandon Plan for Allied Film Festivals which are being organized throughout the nation during May, June, and July, for Allied Relief.

■ Ideal Pictures Corporation, 28 E. Eighth St., Chicago, has issued a new "Victory Catalog" of 52 pages, listing their 16mm sound and silent films, and 8mm silent pictures. The catalog has been designed to aid film users in selecting appropriate motion pictures on topics of especial current significance, such as "Home Front Subjects," "Aviation," "Machine Shop Work," "Fighting Front Subjects," "History in the Making," "The Culture of the United States," "Safety and Health," "Our Allies," "Other Countries Before the Public Eye," etc.

■ Hoffberg Productions, 1600 Broadway, New York City, is releasing a series of short films designed to teach American history in the 4th and 5th grade. They are 1-reel 16 mm silent subjects, the first one of which, now available, is:

Columbus and the Discovery of America—produced by Malcolm Morrison of Canada, co-author of "Films in the Classroom", and producer of several documentary films. Mr. Morrison uses children to enact his story, and photographs the action in silhouette. Thus the series is known as "Shadowgraph Teaching Films". Additional subjects planned in the series include reels dealing with Champlain, Balboa, Cortez, DeSoto, Henry Hudson, La-Salle, Sir Walter Raleigh, The Pilgrims and the American Revolution.

■ Frith Films, P. O. Box 565, Hollywood, Calif., are selling prints of two recently completed films on horses. Each is 400 feet, 16mm. sound, color or black-and-white.

Today's Horse Farm: Sun-up to Sundown follows a beautiful, champion draft horse and her baby colt through a typical day on a horse farm. The film not only depicts the actual procedure on a farm, but the charm of life in the country. Many different points in the care of horses are brought out, such as balanced feeding, care of colts, grooming, shoeing, sanitary housing. This subject was designed for children in the elementary grades.

Horse Raising, planned for the secondary age level, is devoted to the breeding and raising of fine horses. The importance of proper treatment and training is stressed. Horses shown include Percherons, Standard Bred Trotters, Belgian Tennessee Walking Horses and Arabians. The points of a fine horse are noted. Proper saddling of a horse is demonstrated, as well as the preparation of an eight-horse wagon hitch for shows by expert handlers.

■ The Princeton Film Center, 410 Nassau St., Princton, New Jersey, has released this month the first of a series of films dealing with the allies and enemies of the United States, namely:

Know Your Enemy—Japan!, a 1-reel sound film available in both 16mm and 35mm sound. Produced by the Princeton Film Center with the cooperation of the Institute of Pacific Relations, recognized authorities on Japan and other Far Eastern countries, the picture answers these and other vital questions: How large is the Japanese Empire? What is Japan's naval and military strength? Is Japan self-sufficient in raw materials? Can Japan win the war?

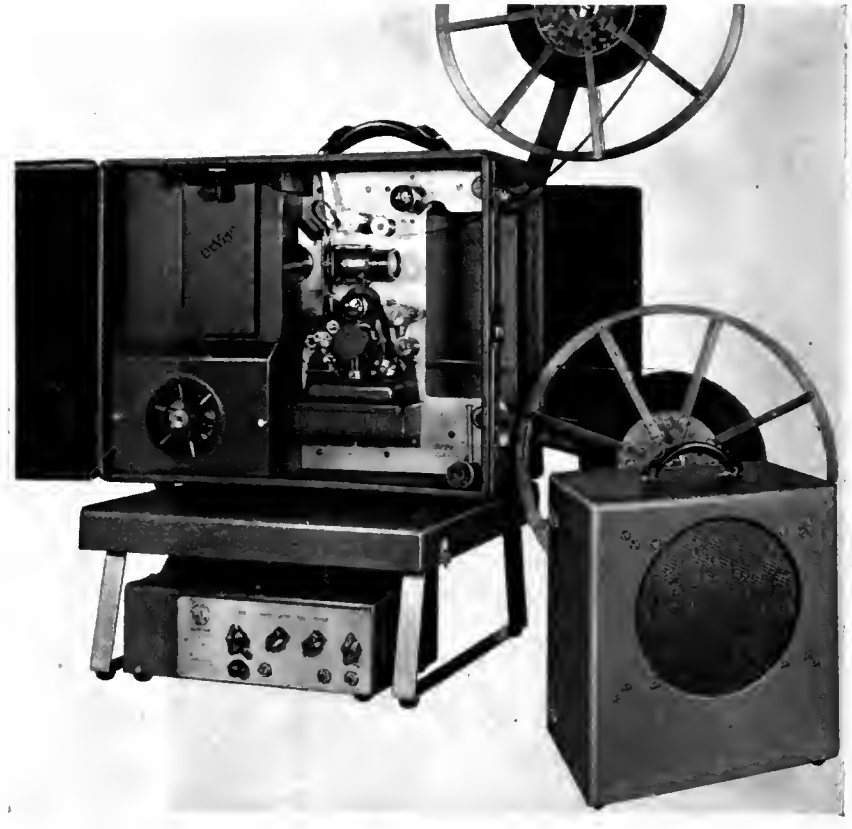
National-Ideal Opens Office

National-Ideal Pictures, Inc., announces the opening of an office at 2024 Main Street, Dallas. This is a combination of Ideal Pictures Corporation and the National 16mm. Film Libraries Company of Texas. The new organization is equipped to provide maximum film service to schools, clubs, churches and homes, carrying a very large library of entertainment and instructional films—16mm. sound features and short subjects, as well as 16mm and 8mm silent features and shorts. William E. Mick heads the new office.

New DeVry Sound Projectors

W. C. DeVry, President of the DeVry Corporation, Chicago, manufacturers of 16mm and 35mm motion picture equipment, announces two new sound projectors—the 16mm model "Freedom", and the 35mm (Portable) model "Liberty". Of particular interest is the information from DeVry that both models conserve vital war materials without sacrificing, and in many respects improving, the high standards of quality, durability, dependability and performance provided in pre-war DeVry projectors, and with no appreciable difference in weight. No delay in delivery is contemplated due to conversion, but proper priority rating is required to purchase either projector. Complete descriptive literature on both new models may be had by writing to the DeVry Corporation, 1111 Armitage Avenue, Chicago, Ill.

Although previously announced as the "Victory" model, DeVry has decided to change the name of the new 16mm projector to "Freedom" in order to avoid any confusion with the trade names of other motion picture equipment manufacturers serving the same market as DeVry.



The new DeVry 16mm "Freedom" Sound Projector.

Additional Valuable Literature —

"1000 AND ONE"—The Blue Book of Films

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The current (17th) edition lists and describes over 5,000 films, classified into 162 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film title in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

128 pp. Paper. Price 75c. (25c to E. S. subscribers)

FILM EVALUATION SUPPLEMENTS to "1000 and ONE" under The National Film Evaluation Project

A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 500 teachers after actual use of the films with classes.

Each Supplement consists of 50 standard-size library cards carrying detailed evaluations of 50 films, based on combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid if cash with order).

VISUALIZING THE CURRICULUM
By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK (4th Edition)
By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."

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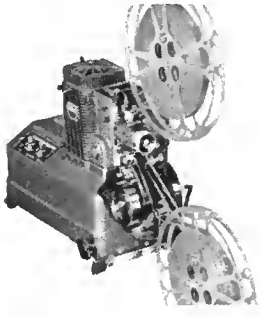

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Left—"The Shaper"; Below—Showing the use of "Fixed Gages," from the series on "Precision Measuring." (U. S. Office of Education films, distributed by Castle Films.)

Motion Pictures and the War

Summarizing the diverse ways in which films can serve in the victory program.

EDGAR DALE

Office of the Coordinator of Government Films, Washington, D. C.

NOT long after the Nazi Party seized power in Germany, Dr. Joseph Goebbels, Minister of Propaganda and Public Enlightenment (so-called), spoke to the German film industry. He emphasized the importance of the motion picture as an agency of communication and pointed out the effectiveness with which Soviet Russia had used motion pictures. He mentioned particularly Sergei Eisenstein's film. *The Battleship Potemkin.* This film had met its first success not in Moscow but in Berlin in the days of the Weimar Republic. Goebbels asked the German film industry to imitate and surpass *The Battleship Potemkin.* One result of this request was the production of the motion picture, *The Triumph of the Will,* directed and edited by Leni Riefenstahl.

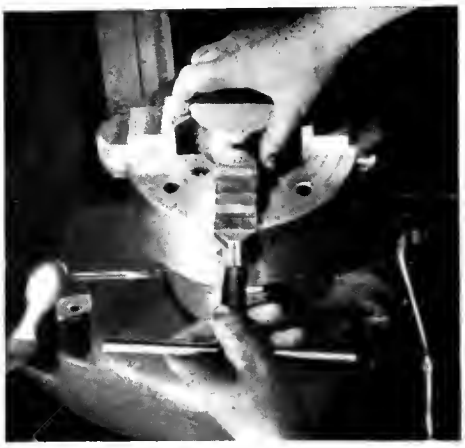
I saw this film just the other day, and I realized again what I had first realized in visiting the German Film Institute in 1936; namely, that the Nazis had already learned how to use the motion picture as an agency of propaganda and information, something we still are learning today.

This photographic production of the Nazi Party Conference at Nuremberg in 1934 was literally a spectacle and had clearly been set up with the movie as an important outcome. Thirty-nine camera men and assistants were on the job. The sets rivaled and surpassed those in David Wark Griffith's film, *Intolerance.* Angle, truck and boom shots were common. And for what purpose? To acquaint the greater German public with the then little-known Nazi leaders, to dramatize for the German people the man Hitler in his many and varied roles—the war veteran, the mystic, the political leader, the alleged saviour of Germany. I realized, again, how slow the democracies have been to put to work the instruments of mass communication. I say to put them to work. We have already used them for play. Radio, movie and press, and movies especially, have been in a large measure entertainment devices.

That President Roosevelt has clearly realized that the motion picture must be given a job in war work is demonstrated in his setting up of the Office of the Coordinator of Government Films. Mr. Lowell Mellett is the Coordinator of the office, and Mr. Arch Mercey, formerly Special Assistant for the Office of Government Reports, is Deputy Coordinator.

The letter of President Roosevelt's, which established this office, emphasized, first of all, that this unit should act as a liaison officer with non-Governmental motion picture agencies. To that end the Coordinator's Office works with the War Activities Committee of the motion picture industry in planning theatrical releases of Government subjects. Furthermore, there is a member of the Coordinator's staff whose job is to make all newsreel contacts relating to the Government, including those of the Army and Navy. A third, and equally important function, is to "plan so far as necessary, such Government motion picture production and distribution as is deemed necessary to inform and instruct the public during the wartime crisis". That planning is now going forward.

I believe that there is beginning to be a feeling on the part of the public also that entertainment-as-usual is out of the picture, that there is work to be done, that we must harness not only all our energies but all the tools that we have at hand. And we are realizing today as never before, that the motion picture and visual



Left—Using the Eastman Classroom Film, "Elementary Operations on the Engine Lathe," in the classroom.

Above—Another scene from the film, adjusting the stock in chuck.

materials are weapons of war as well as weapons of peace. We are seeing that in this modern method of mass production it is possible to use the motion picture print—thousands of prints—to tell the story of the war and of the peace to come, to tell it dramatically, forcefully, honestly and intelligently. And the story can be told in both theaters and schools, thus reaching the national field as completely as possible.

In using the motion picture as a weapon of warfare, we must distinguish sharply the different kinds of jobs which the motion picture can do. Speaking generally and broadly, there are three basic jobs which can be performed by a motion picture.

1. Attitude Films

First of all, the motion picture can build attitudes, sensitivities, general outlooks, predispositions, morale. During wartimes we need such attitudes as confidence in our chosen leaders. We need courage and loyalty. We need to be reticent about war information. We need certain general traits. The motion picture has the power to develop moods, spirit, attitudes and sensitivities. Through its story-telling power, it can evoke sympathy or antipathy. It can change attitudes as Thurston and Peterson so well demonstrated. Films of this type are exceedingly important in time of war.

We need to thrill to the courage of the British, the Chinese, the Russians and our other allies. And so in the theatre we have available such motion pictures as *Our Russian Front, Defense of Moscow,* and *Soviet Women at War.* We have numerous British films, many of which are available from the British Library of Information. We also have the Chinese film, *Kukan,* and we shall have many more.

Our war films will deal with attitudes toward conservation of time and energy, raw materials and manufactured materials, the need for cooperation in sharing durable goods, such as washing machines, ironing equipment, sewing machines and the like. We need to learn to keep our mouths shut about war information. And the motion picture, *Safeguarding Military Information,* now running in theatres and also available in 16mm, builds the proper mood for it. So does the Metro Goldwyn Mayer short, *Don't Talk.*

An extensive list of "Americanization Films," for building patriotism, morale, and national unity, are available from many sources, also, in 16mm size which makes them usable for all community purposes.

2. Training Films

There's a second class of film which is most appropriately labeled a training film. This film shows the viewer how to do something. It demonstrates visually and this demonstration is to be repeated as exactly as possible by the viewer. No general mood as such is emphasized, although it may be included in part, but instead a skill of one sort or another is demonstrated to be later reproduced by the trainee.

There are two excellent examples of these types of films in the Government. The first are the films of the United States Signal Corps. The Signal Corps has a list of some 230 films. Most of these are training films in the narrow sense of the word. They demonstrate how to do something. Here are some titles which indicate clearly what they are all about: *Map Reading, First Aid, Conduct of Physical Training, Safeguarding and Proper Handling of Classified Material.* The work of producing the Signal Corps films is under the direction of Colonel R. T. Schlosberg. Lieutenant Colonel Melvin E. Gillette directs the Film Training Section of the Signal Corps at Astoria, Long Island. Lieutenant Colonel Frederick W. Hoorn is in charge of the Air Corps production program at Wright Field in Dayton, Ohio, concerned with making films for the Air Corps. Some notion of the training program involved in the Air Corps is shown by the fact that President Roosevelt's plan calls for production of 185,000 planes in 1942 and 1943. For these planes there are needed pilots, navigators, ground crews, bombardiers. The films will be used to train them.

The United States Office of Education, now located at the Federal Security Agency, has produced 50 vocational training films in 16mm sound, which are distributed through Castle Films. These films deal with machine shop skills vital to war ends. Subjects covered

include: *The Engine Lathe, The Milling Machine, The Vertical Boring Mill, Precision Measuring, The Shaper, The Radial Drill, Shipbuilding, Bench Work, The Lathe, The Sensitive Drill, The Vertical Drill,* and *Single Point Cutting Tools.* At the present time 100 or more such films are in planning.

The extraordinary thing about these Government training films is that they are issued at reproduction cost, plus a small profit for distribution. This means that it is possible to sell a 400 foot sound film for $8.47. This extensive sale of low-cost Government films will prove to be one of the most important film outcomes of the war. For the first time, at the cost of only an excellent reference book or an encyclopedia, we are getting motion pictures which we can afford to keep permanently within our own school systems.

A further outcome of the use of these films will be the securing of significant data concerning techniques of developing training films of various sorts. At the present time our research data on the use of films in the teaching of skills is very meager. Further, our teaching lore, the kind of information that teachers talk and write about of a practical nature, is almost non-existent so far as training films are concerned. Not only, therefore, do we need careful research study in reference to the effectiveness of these films, but we must also begin the gathering of information from excellent teachers and skillful observers who have been using these films. It is too much, of course, to expect that vocational teachers suddenly confronted with these films are all going to do an excellent job with them. Some will not. But the quality of these films is such that most teachers will be able to use them to great advantage.

From "Hitler's Threat to America," a Gutlohn release.

From "Soviet Woman," released by Brandon.

There are also a number of non-governmental films used in industrial training, among them, *Elementary Operations on the Engine Lathe* (Eastman) and *Machine Maker* (Erpi).

For civilian training in First Aid and Air Raid Precautions, there are numerous 16mm subjects in circulation, such as *Air Raid Warden, Fighting the Fire Bomb, Spotting the Bomber, The Warning,* obtainable from many libraries.

3. Information Films

There is a third type of film which lies somewhere between the training film and the attitude film. It is the information film. It may be a film such as *Tanks* or *Bomber* which gives us information on the progress of the building of these instruments of warfare. Or it may be a film like *Women in Defense* which not only informs us concerning the role of women in defense industries but helps build a significant kind of attitude toward the role of women in war work. These films, produced by the Office for Emergency Management, are being shown in theatres and are also being circulated in 16mm.

The newsreel is an information type film. It tells us what is happening. It is sometimes, though rarely, hortatory, urging us to do certain things. It is often expository in terms of geography or economics.

Obviously, both attitude films and training films contain information. In the attitude film, the purpose of the information is to document the particular point that one is trying to get across. In the training film, certain supporting information is necessary to understand the operations that are being demonstrated. Further, the training film may also carry a certain amount of attitude material, such as suggestions regarding carefulness with tools, neatness and the like.

The Signal Corps is producing a series of orientation films which will inform the soldier of some of the history leading up to the present conflict and also give him some indication of the meaning of democracy. Major Frank Capra of the Signal Corps is in charge of this program. Much of the material for these orientation films will be secured from extant material, especially newsreels.

A history of the war is being produced under the direction of the Coordinator of Government Films. Mr. Sam Spewack, noted playwright and scenario writer, has been at work for two months on this particular subject. Extant material, much of which has not yet been shown in the theater, is being used for the footage of this film.

The United States Department of the Treasury has produced a number of one-minute films which are used as trailers in the theaters for the sale of bonds. They also have produced *The New Spirit,* a Disney short in which the character, Donald Duck, is used not only to

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Making the Most of Miniature Slides

Effective filing methods are supremely important when slide libraries handle slides by thousands.

GEORGE F. JOHNSON
Specialist in Visual Instruction
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Above—Arranging 2x2 slides in cardboard panels, which are placed in standard letter file.

Below — Using 100 - capacity boxes for filing slides.

EDUCATORS concerned with the dollar-and-cents streamlining of their visual aid programs, are giving increasing attention to the miniature (2"x2") lantern slides.

We are now completing our fourth year of intensive use of these slides in the extension teaching of agriculture and home economics in Pennsylvania. The results are astonishing: our workers have produced over 20,000 of these small slides and are using them in a larger percentage of the 10,000 indoor subject matter meetings held this year than all forms of visual aids were used only six years ago. Furthermore, we have put into use more than four times as many miniature slides (mostly color) in four years (1937-1941) as standard size black and white slides in 20 years (1915-1935.) During the past two years the percentage of meetings at which motion pictures are shown has decreased, while the percentage at which the new color slides are used has greatly increased.

Much more could be written about the growing popularity of these slides and their relatively low cost when produced by the workers themselves. However, the purpose of this article is to discuss in some detail: (1) Satisfactory filing systems for these small slides, and (2) Using the slides for other purposes than projecting onto a screen in darkened rooms.

Efficient Files Save Time

Since many of our county agricultural agents and our subject matter specialists have from 100 to as many as 800 slides, efficient filing has become essential to the best utilization of these vast visual aid resources. The result of this effort has brought about several systems each of which has enthusiastic supporters but no one of which has been generally adopted.

Several methods are illustrated by the accompanying pictures. Generally, each slide is labeled as to where and when taken and what it shows. They are then grouped as to project subjects such as agronomy, dairying, nutrition, etc., and filed by projects alphabetically. In only a few cases are slides numbered individually, and then a small card numbered to correspond with the number on the slide is filled out and additional information about the slide is placed on the card. These cards are then filed directly among the slides, each card next to its slide, standing in the proper place among the project subjects. This plan requires more clerical work, but permits recording more information than can be placed on the slide itself. It also marks the definite place for each slide in the file so that clerical help can easily return the slides to the file after being used.

Some offices use a 300-capacity flat box for filing and a 100-capacity case for carrying slides to meetings. The capacity is based upon glass-covered slides. Without the glass covers, the capacity can be doubled. When loaded, the 300-capacity box which measures 16½"x10¼"x3", weighs slightly over eleven pounds. Without glass covers the box will hold 600 slides, weighing about six pounds. The cost of this file is $4.50. The 100-capacity box measures 10"x6"x2½", weighs about four pounds when filled with glass covered slides, and costs $2.00.

Another type is a 200-capacity file or carrying case which is twice the depth of the 100-capacity file with both top and bottom opening. The file is

Above—Inserting slides in cardboard strips and use of strips in projector.
Right—Sliding trays in metal cabinet make a convenient file for slides.

similar to what one would secure if he nailed or glued the bottoms of two 100-capacity boxes together.

Still another box which serves quite well for shipping, filing, or carrying slides is the 50-capacity size which measures approximately 10"x3½"x2½", weighs 2¼ pounds when filled with glass mounts, and costs $1.00. Slide boxes with an illuminated compartment for viewing each slide as taken from the box, are also on the market. A suit-case type of file and carrying case holding 500 slides, 250 on each side, is available for about $10.00. This file measures 14"x10¼"x5", and weighs about 20 pounds when filled. A 300-capacity size opening at one end, is available for about $6.00.

Cardboard Panels and Metal Trays

A less common system but one which has some advantages is filing in the 12-capacity cardboard panels which are then placed in the standard letter file. The panels are made commercially and cost 45 cents each for glass-mount thickness and 35 cents each for cardboard mount thickness. Quantity prices are less. Special file boxes are available for these panels, but our workers prefer to use an unused section of a standard letter file. One 28-inch-deep letter file drawer will hold at least 50 of these panels filled with glass mounted slides, or a total filing capacity for 600 slides. In cardboard mounts without glass covers, the capacity is doubled. A panel filled with glass mounts weighs slightly more than half a pound. One advantage of this system is that 12 slides can be viewed at one time. Our workers usually take the slides from the cardboard panels and carry the lecture series to the meeting in a 100 or 50-capacity box. One of our workers is experimenting with the use of cardboard projector strips holding six slides each and costing about 13 cents each for filing purposes. This is the only filing system where the device which holds the slides in the file can be used in the projector to show them. How practical this will be is yet to be demonstrated.

Our subject matter departments often accumulate from 1000 to 1500 slides. Where it is impossible to make permanent sets and group them in shipping or carrying cases, the sliding tray in metal cabinet file has been found a very convenient system. These cabinets are made in two sizes, one holding 1170 and the other 3600 miniature slides. The slides can be either glass covered or cardboard mounts. When filled to capacity, the cost of this equipment is about 6½ cents per slide for the smaller cabinet and about five cents per slide for the larger size. The time saved in viewing, selecting and refiling slides is one of the distinct advantages of this system. This system eliminates the need for a separate card file unless such is necessary for recording more information than can be placed on the slide itself.

In general, a satisfactory file has the following characteristics: 1) It is convenient to get slides into and out of so that a minimum of time is required; 2) It is not so complicated that great effort is required in keeping the file up-to-date; 3) It is so flexible in compartment spacing that new slides can be added without continual handling of old slides. Reducing slide handling and effort in filing to a minimum and yet making it possible to organize an illustrated talk quickly with all material at hand is the object of an efficient slide filing system. We have found that extension workers who make the most of color slides in teaching are likely to accumulate at least 300 slides and, to be most useful, these must be in an efficient file. The cost of equipment for filing varies from two to seven cents per glass covered slide, depending upon the system used.

The Illuminator in Use

In addition to a well-kept file of slides, we are finding a relatively new piece of visual aid equipment called the "illuminator," very useful in organizing a series of these slides for lecture purposes. In simple terms, the illuminator is a ventilated box-like structure with white interior containing a 60-watt ordinary light bulb. The surface to be used

for illuminating slides is opal glass or ground glass. The slides are assembled on this surface. While metal illuminators have been on the market for some time, they are becoming increasingly difficult to purchase due to war demands. However, the wooden type can be made at home or in the school work shop with an expenditure of a few dollars for glass, light cord, socket and switch, and thin boards or plywood. Cardboard illuminators can be purchased for less than $2.00 but they are less versatile and durable than those made of metal or plywood.

With a 25-capacity illuminator available, it is an easy matter to organize a series of slides for a lecture. It eliminates the need of a preliminary showing of the slides on the screen, and it has the advantage of all slides being in view at one time. A magnifying glass can be used to enlarge the picture, if desired. In addition to this use, we are finding the illuminator filled with color slides useful as the central feature of simple, inexpensive exhibits. In this, we recognize the natural color slide as something more than a lantern slide to project onto a screen.

In our work, we find the advantages of the illuminator over projected pictures are: 1) The pictures can be viewed clearly in average indoor light without darkening the room; 2) The need of carrying projection equipment and the difficulty of set-up in small quarters filled with people are eliminated; 3) A series of slides can be viewed and studied individually or as a sequence with all slides continually in view. Disadvantages include: 1) Use is limited to situations where only a few persons look at the slides at one time, and 2) It is impossible to show all types of views with equal effectiveness.

Above—Three types of illuminators; Below—Rear view.

Motion Pictures and the War

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build a favorable attitude toward the payment of taxes but also to present certain specific information concerning the simplified form which might be used in figuring out the amount of tax to be paid. More than a thousand prints of this film were necessary to service the theaters of America. There was a flurry of Congressional criticism over this expenditure by the Department of the Treasury. The popularity of the film and the character, however, suggests that this expenditure of the taxpayer's money was probably a wise investment. The United States Department of the Treasury has other films in production.

The United States Office of Inter-American Affairs has already released 13 films in 16mm dealing with Inter-American affairs. Some of these films deal with South America and are useful in acquainting us with that country, its resources, exports, imports, geography and the like. Among such titles are the following: *Americans All, Brazil, Our Neighbors Down the Road, Venezuela, The Hill Towns of Guatemala.* Others however, are prepared primarily for showing in South America and include informative materials concerning the United States.

Non-governmental sources offer many 16mm films usable in both "Attitude" and "Information" classifications, such as *Soviet Woman* and *Russia's Millions Mobilize* (Brandon), *Hitler's Threat to America* and *I Saw Russia* (Gutlohn), war newsreels on the British Commandos, bombing of Pearl Harbor and other battlefronts (Castle), and a series of very short subjects, *History in the Making,* distributed by several libraries.

The Meaning of the War Film Program

What does the war film program mean to visual education generally? It demonstrates first of all in the training field that the Government has considered it imperative that films be made which show the operation of machine tools and equipment. It is likely that by the time the war finishes there will be from 150 to 250 reels of training films available. It seems likely that such a program might well continue after the war, probably with some diminution in the amount of production.

Many of the war film activities, of course, relate primarily to the war itself and would have little relevance after the war. However, the work of the Office of Inter-American Affairs will loom even larger after the war is over.

Furthermore, we may well look forward to the development after the war of a genuine International Film Institute, having its headquarters either in Washington, D. C., or in New York City. Such an Institute would be in a thriving condition today had the League of Nations seen fit to place The International Institute of Cinematography in London instead of Rome.

One of the biggest jobs after the war is to bring information and enlightenment to all people everywhere. The program of public education so vigorously prosecuted by Horace Mann and others one hundred years ago must now be made global. Motion pictures and other visual materials are of basic importance in any such world-wide educational program.

Movies Versus Field Trips

A straightforward discussion of the limitations of field trips and the possibilities of the use of films.

ARTHUR G. HOFF
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Welders working on huge motor frame, shown in the General Electric film, "The Inside of Arc Welding."

PROGRESSIVE education attempts to make the experiences of pupils more functional at all levels and ages through various means. One common technique is to achieve more correlation between pupil activities within the classroom and their real life experiences outside.

The majority of real experiences outside the school have been effected through field trips of various types. These activities on the part of whole classes have been in use in institutions of higher learning for many years and, during the last few decades, have crept into the secondary and elementary school to a greater extent.

Field trips for pupils in the public schools unquestionably possess outstanding merit as a means for effecting vitalization of the experiences. A large city in the Middlewest employs a fleet of busses and a full time director to supervise such work for pupils in both the elementary and secondary schools and has found it to function very successfully.

Field Trips Have Their Disadvantages

Field trips in the public schools, however, as now organized, have many disadvantages which are practically impossible to overcome. These limitations may be listed as follows:

1. *The school program is disrupted.* The average secondary school employs periods which are from 40 to 60 minutes in length and because of the inadequacy of this time for a complete trip, the periods following are generally intruded upon. In the elementary and non-departmentalized schools, however, adjustments in the regular routine may be more easily made.

2. *The hazard of taking a class comprising 30 to 50 pupils is very great and this difficulty increases as age of pupils decreases.* Possibilities of accidents on the street, highway, and in the factory or establishment visited are very great. Even under the most careful supervision, busses have been hit by trains.

3. *A relatively small proportion of such a visiting group gets the full significance of the activity.* In the majority of cases, the guides are untrained, tending to speak to only those persons who are fortunate enough to be able to get close to them. Often the object under discussion is hidden from view for a large portion of the pupils due to crowding and lack of room, hence they miss out both on the visual and auditory end of the supposed learning experience.

4. *The rental of busses or the purchasing of the transportation equipment involves a great deal of expense to the public.* In the average city of 40,000 population the rental fee for a 40 passenger bus is $7.50 per hour. Transportation in private cars with pupil drivers is a distinct hazard which should be strongly discouraged if not prohibited. If pupils are reqiured to pay their own transportation expenses, it is difficult to make the experience mandatory.

5. *Many establishments are not equipped for handling large groups such as the average class.* This means that the classes need to be broken up into two, three or four groups with some inferior guides and without teacher supervision.

6. *Many establishments propagandize rather than educate.* Generally the establishments bring out sales stimulation propaganda, thereby using this opportunity for advertising their product. In many cases, the vital information is over-shadowed by the sales talks.

7. *The trips can not always be arranged at the psychological time during a unit.* Often the establishments find it inconvenient to permit a tour because of excessive production, unavailability of guides, and the like.

8. *The war emergency has limited the range of educational resources which can be tapped by field trips.* Restrictions which are attendant upon the war emergency make field trips to factories fulfilling defense contracts practically prohibitive. Other establishments, such as the city water department, sewage disposal plant, and power plant, which were formerly available for first hand study by the pupils are closed to them in the majority of communities.

9. *Time is a supreme consideration.* It may often

happen that the total experiential profit gained may not justify the hours, days or weeks spent in acquiring it.

Other disadvantages may be cited, but the abovementioned constitute some of the more important limitations of this type of instructional procedure.

Overcoming These Limitations by Visual Aids

How may these disadvantages be overcome? Is there a means of imparting these valuable experiences to the pupils which is less associated with hazards, ineffectiveness and limitations? The writer believes that there is a vastly superior means of effecting this learning, namely the moving picture, both silent and sound, always provided that quality films of exactly the right content are available.

The moving picture eliminates all the disadvantages presented against the field trips and possesses additional advantages. (1) These experiences can be brought to the pupils instead of making it necessary to attempt the hazard of taking pupils outside the school building. (2) The films can be more perfectly integrated with the unit at hand and can be presented during the regular school period on any day, in the classroom or in a nearby projection room. (3) All pupils have an equal opportunity of getting the full benefit of the experiences. (4) Purely educational films contain no advertising propaganda, and the projection room is the only limitation on the size of the group or class. (5) A single reel can often convey in 15 minutes an experience requiring half a day or more by field journey.

In many instances the films are actually superior to the most careful, first-hand individual study of a subject. Time lapse photography affords a means of clearly divulging secrets which are hidden from the most skillful observer without this aid. For instance, the growth process in plants, flowers, insects and the like, and the behavior of rapid action chemicals, machines and forces, can be instantly clarified by the quickened or retarded eye of the camera. Further,

e from "The Electrician," Produced by Vocational Guidance Films.

A close-up of the Eastman Classroom Film, "Vegetative Plant Propagation."

animated moving pictures can often illustrate important theories, principles and processes entirely hidden from even the eye of the camera, which can record only overt action of the object or subject.

The instructional moving picture possesses nearly all the advantages of the field trip: (1) The learning experience is made real because it is a reproduction of the actual machine, plant, animal, or process. However, it must be conceded that it cannot equal the perfection of seeing these things first hand—if they can be perfectly seen. (2) According to the writer's experience, the motivation and enthusiasm invoked by a movie is equal, if not more vigorous than that precipitated by a field trip.

Use of Films in Defense Training

With the unprecedented development of defense training which involves the education of young men and women, for more rapid adjustment and promotion in defense industries, there is an increased need for more efficient methods of effecting this training. A large proportion of this training is for the purpose of orientation and building a background which will give the prospective workers and inspectors a general understanding of industrial and production problems. Courses in engineering chemistry, industrial processes, elements of engineering and the like are employed to achieve these objectives.

Films, film strips, and other visual aids can be utilized to make these courses more effective. There is an abundant supply of visual aids available on industrial processes, chemistry, physics, and various phases of engineering which can be of inestimable value in giving these students an integrated and functional concept of the place of industry in the defense program and the details of industrial processes. Films can be just as effective in specialized training as for developing broad background.

A great deal of time can be conserved and expenses can be vastly reduced by bringing industry to the classroom in the form of films instead of transporting the students to industrial plants for

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The Matter of *FILM INSURANCE*

H. A. GRAY
Director of Field Studies,
Erpi Classroom Films

THE question of insurance against film loss or damage has for some time been a matter for discussion. There are those who believe that the cost of such insurance exceeds the protection value derived. Another group feel that protection against fire and theft is all that is required. Still others think that coverage against film damage during projection is needed. Following are descriptions of insurance plans now in effect, based upon information received from a number of insurance companies and film libraries.

Blanket Policies

While it is not possible at this time to secure insurance from commercial underwriters giving complete coverage on film loss or damage, there are so-called blanket policies which include films, cameras, exchange and projection equipment in their coverage against fire, theft, windstorm and the usual contingencies. These blanket policies are usually taken out by large organizations, and institutions desiring protection for their buildings, materials, and equipment all in one policy. Usually, however, such policies do not insure articles when off the premises of the insured. The policies are custom made, the rates varying with the fire hazards and the amount and nature of the property involved. Some states carry such insurance for all of their agencies and properties.

Floater Policies

A second type of policy offers protection against loss by fire, theft, and other specified causes regardless of the location of the property. This is called a floater policy, such as the Camera Form approved by the Inland Marine Association—an organization of insurance companies created to make decisions on insurance problems. This Camera Form insures films, cameras, projectors, and related accessories against all losses *except those caused by normal wear and tear, and actual operational use.* In other words, this type of policy provides protection against loss or damage to films except when they are being projected, inspected, rewound, repaired or processed. The annual premium rates vary from about one and one-quarter to two per cent of the valuation. The Camera Form may be obtained from most any insurance underwriter. An advantage of it is that it guards against losses while films are in transit.

One of the commercial underwriters recently has made a modification of the Camera Form as an experiment, which would enable an organization to insure films, reels, and containers against practically all risks of loss or damage within the United States and Canada, excluding war, ordinary depreciation, and loss or damage while being repaired or processed. However, the premium specifications for such a policy have not been definitely determined.

Carrier Insurance

A third type of insurance available to film libraries is that written by carriers—the postoffice department, railway express, and bus companies. This insurance, of course, applies only during the time the film is in the possession of the carrier. Parcel post rates are 5c for $5.00; 10c for $25.00; 15c for $50.00; 25c for $100.00; 30c for $150.00; and 35c for $200.00 valuations. Any shipment over $200.00 valuation must be sent first-class mail and registered. Where film shipments are made by railway express, insurance up to $50.00 is provided without charge. A charge of 10c is made for each $100.00 declared valuation up to the limit of $10,000.00. The Greyhound Bus Company charges 10c for each $100.00 valuation on shipments accepted for delivery within any one of its divisions, but has a $200.00 maximum. Other bus companies follow about the same procedure.

Individual Film Library Plans

Several libraries have set up their own film insurance plans. The Extension Division of the University of Kansas protects its film customers from transportation losses at a rate considerably lower than the usual parcel post insurance charges.

The Extension Division of the University of Georgia insures film users against loss in shipment, theft, or damage by fire or windstorm while in the user's possession, and damage by projection equipment while being shown. The charge for this is 10c per title, per day of use, payable at the time of ordering the film. If the insurance is not ordered and paid for in advance the user assumes full responsibility for the film. This plan is reported as functioning satisfactorily.

Another plan is sponsored by the Ohio State Film and Slide Exchange, and the Department of Visual Instruction at the University of Iowa. It protects film users *against projection damage only* up to $50.00 for the advance payment of $3.00 per year. At the end of the year any unexpended balance in the fund is prorated among the subscribers to the plan or applied to their next year's premium. The plan does not cover fire, theft, or transportation losses. During the relatively short time it has been functioning no definite decisions about its success have been reached.

What are the Chances?

From the testimony of film libraries and users, it seems that film losses due to fire, theft or transportation rarely occur; that the greatest hazard is the inexperienced or careless operator who does not exercise even ordinary care in threading and operating the projector. However, losses caused by the latter are decreasing due to better trained operators and more effective supervision.

With careful use, it is remarkable how well 16mm. films will stand up. The writer knows of prints which have been projected more than three thousand times within a period of nearly ten years. Keeping the projector clean and in proper adjustment and repair; careful threading; and due attention during projection seem to be the deciding factors on film longevity.

MOTION PICTURES—NOT FOR THEATRES

Part 38.—Mr. Harmon's soul goes marching on in fulfillment of his great plan to make the House of God as attractive to your community as the neighborhood movie.

By **ARTHUR EDWIN KROWS**

ANDREWS was frankly skeptical of professional motion picture men. He felt principally that their charges for film production were excessive, and, in his place, he was not going to be imposed upon by being obliged to pay what he thought of as absurd Hollywood prices. At the same time he expected first class professional quality in whatever might be made for the Foundation. He would spend money as required for what he conceived to be justifiable service, but not one cent more. He sounded us out on how we might approach his problems to obtain effective results, in writing continuities, building sets, engaging players and much additional, and we answered him frankly on all points. I never was able to make out whether he regarded us as rogues or fools. What we said may have been merely at variance with his own preconceptions, but, anyway, we never heard from him directly again.

When the time came for the first productions, it was found that Andrews, himself, had prepared the scripts, and was ready to supervise their filming. He took on Victor Echevarria, an artist of considerable ability but admittedly without much motion picture experience, to design sets and costumes, and, to direct the action and oversee the camera, a better known and better proved artist, Major Herbert M. Dawley. It was not long since Dawley had produced his Metropolitan Museum of Art pictures. This preliminary work for Andrews then was done mainly in Major Dawley's studio at Chatham, New Jersey.

The first production, completed about July, 1926, was "Jesus Confounds His Critics," based on the account of the stoning of the woman who had sinned (*John, VIII,* 3, 11). By September there were two more, and shortly thereafter a fourth. These later productions were a single-reeler, "The Unwelcome Guest," on the episode of Simon anointing the feet of Jesus, and two two-reelers, "Forgive Us Our Debts," in which the Savior illustrates that point to his disciples, and "The Rich Young Ruler," who finds happiness through Christ's teachings. The four subjects were to be test items for use in picked churches to see if their particular techniques would stimulate attendance there.

It was the intention of those directing the Foundation to try various approaches, so story production was now set aside in favor of "special article" pictures on the work of foreign missions, Sunday School conventions and the like, save that a few special subjects adapted to the needs of church entertainment programs, such as "lives" of Martin Luther and David Livingstone, were acquired from outside. For the laboratory work, circumstances had turned the Foundation's notices to John Holbrook and James H. ("Hal") Smith. Discovering the versatility of these men, more and more duties were entrusted to them until virtually all technical film matters connected with the undertaking had been placed in their hands. They held the responsibility very well. In the summer of 1932 Holbrook visited South America to film church subjects in Brazil, with the Munson Line donating the transportation, and later, as told earlier in these pages, Smith produced ten reels on the American Indian. Although sound pictures had arrived by this time, it had been decided that inasmuch as comparatively few churches had been equipped to show talkies, silent productions would prevail.

The churchmen pressed even the chips from Cecil de Mille's workshop into their service after his production of "The King of Kings."

About 1927 the organized theatrical motion picture industry gave satisfaction to the church groups by producing in Hollywood, under the direction of Cecil B. De Mille, "The King of Kings," a pretentious visualization of the New Testament. It was financed largely, I believe, by the Wall Street banker and prominent Baptist, Jeremiah Milbank. As a good will gesture, as well as for the benefits of competent Biblical supervision, the producers felt it advisable to invite church coöperation. They did it through Will H. Hays, spokesman for their industry. Through obvious connections, the Rev. George Reid Andrews obtained the post of representing the clergy on De Mille's stages.

When the precious experience was over, Andrews returned East in rather disgruntled spirit. From the platform he discussed the Hollywood scene with various audiences, and showed himself especially critical of Will Hays and the Motion Picture Producers and Distributors of America. Hays, he charged in substance, was in his place not to clean up the screen by compelling Hollywood to produce worthier pictures as most clergymen had been led to believe, but to prevent others from doing it. So long as Hays was on a money retainer from the motion picture industry, the Andrews argument ran, his pose as a disinterested community leader working solely for public good, was untenable.

At first the motion picture leaders ignored the strictures. But, when they were reported extensively in the press and the film men found their previously friendly relations with the Federal Churches of Christ in America impaired thereby, a Hays staff officer neatly disposed of Dr. Andrews by pointing out that he also, as a disinterested leader working for public good, had taken money from the motion picture industry for supervising certain phases of the production of "The King of Kings." While Andrews retired to an uncomfortable state of self-defense as pastor of the Park Street Congregational Church of Bridgeport, Connecticut, Hays then organized a committee of thirty-three representative social, religious and educational leaders under the chairmanship of Professor Howard M. Le Soeurd, of the School of Religious Education and Social Service of Boston University, to investigate the entire subject of church pictures. Andrews was not the only churchman to suffer. In the dissension, growing out of the original situation, the Rev. Charles S. McFarland, for eighteen years general secretary of the Federal Council of Churches of Christ in America, who also had been employed by the Hays organization as a consultant in the production of religious films, went into retirement.

William E. Harmon died in July, 1928. He had lived long enough, however, to feel that there were many problems yet to be solved in the use of films in religious education, even when the service was offered, as his had been, at hare cost. In the year before his death he thought long and carefully about the situation, and wished for more definite knowledge upon which to proceed. Nearing the proverbial goal of three score years and ten, he was the more anxious for the durability of this particular monument which he was to leave behind.

He was convinced of the useful func-

tion to be performed by a small foundation. His benefactions all had taken that form. A large foundation, he believed (and history seemed to bear him out), was most valuable for testing purposes, and generally too expensive and unwieldy for that original investigation which the small foundation could undertake safely and effectively. The Harmon Foundation, which had many interests other than motion pictures, was running at that time in fairly smooth routine under Mary Beatty Brady, a faithful, intelligent and conscientious assistant. She was the daughter of a missionary who had become governor of Alaska. Her formal education had been conspicuously at Vassar and the Columbia University School of Journalism. She had begun with Harmon as his secretary. But routine, even in such generally able hands, was scarcely sufficient for an investigation program, and Miss Brady, with all her intelligence and willingness, could scarcely save the picture phase from becoming simple routine just then because she had had no especial film experience elsewhere, either. She could choose and follow worthwhile precedents, but, in the circumstances of the time, she could scarcely be expected to originate new departures.

Harmon realized this; so did she. Therefore, various persons who might be presumed to know were consulted on how to proceed with different phases of the project. Wellstood White was one who advised on distribution and exhibition. Miss Brady and Dr. Samuel McCune Lindsay called at the De Vry office in New York to examine projectors, and there met F. S. Wythe, who was working on De Vry's Neighborhood Motion Picture Service and the De Vry school program. Thus Harmon learned that churches were having encouraging results with the programs supplied by the De Vry Corporation to promote sales of its projectors. Presently he invited Wythe to visit him. Wythe came, and did not begrudge information and advice. Concerning production, on which point Harmon was then most anxious, Wythe advised the making of programs more stimulating to audience attention than the usual church reels which had so little imagination about them that they merely showed lilies, for instance, in driving home the hackneyed lesson of lilies of the field. In other words, he urged the production of films having some human attractiveness instead of curate cant. Harmon saw the point and was appreciative.

Wythe had been providing films for De Vry on these principles, not by production—which, as useful as that might be, was scarcely justified by the system in point of expense—but by editing existing material; and he told Harmon that the same sort of thing could be done for his intended testing purposes. Harmon commissioned Wythe,

No films made prior to Dawley's first Harmon production realized more fully a churchman's idea at that time of what the screen should do for him.

therefore, to make about twenty reels for the Foundation. For the required material it was arranged through Jeremiah Milbank to obtain the scenario and left-over negative of "The King of Kings." The Hollywood folk did not like this plan at all, being naturally suspicious; but eventually they shipped the film without identifying marks other than production "slate numbers" and camera reports, stating that the scenario, which would have given the key, had been lost. To have catalogued and arranged the mass would have been a labor of months, and the expense of making prints for examination would have been prohibitive. Nevertheless, using the camera reports and guessing at their sequence, Wythe made a tentative selection of the "cuts" and, ultimately, interpolating shots from some Holy Land scenics, worked out roughly those thirteen reels presenting the life of Jesus of Nazareth in twelve "chapters" which have since been used effectively by the Foundation under the general title, "I Am the Way."

The Presbyterians

In this same period Wythe heard, through the De Vry manager in Philadelphia, that an important religious project was taking shape there under the sponsorship of the Board of Christian Education of the Presbyterian Church of the U. S. A. His particular informant was Burke Harmon, son of William S., who was then employed as a salesman by Weil & Company, the Philadelphia De Vry distributor. Burke had found an apparent opportunity to dispose of many projectors at once, but, as the prospect wanted production also, Wythe went to the Quaker City to see what it was all about.

There he met a Mr. Robinson, the chief executive of the intended enterprise. The situation seems to have been that the gentleman who had so brilliantly developed the Presbyterian Church's book division, known as the Westminster Press—his own name was, I believe, Oscar Miller—had been permitted to take about $100,000 of his recent profits to experiment with religious films. The general supervision of the Board was to be chiefly through the Rev. H. Paul Janes, young assistant to Mr. Robinson, who had shown especial enthusiasm over the possibilities of visual education. The Presbyterian Board of publications, it will be remembered, had used Edison films and projectors in 1913.

Wythe was received by the Board and, when they found that he not only had had much practical motion picture experience—even recently with church films—and was especially well informed, besides, concerning religious objectives, they planned to have him produce programs which Miller, with his peculiar genius, might sell, and for which the physical distribution might be handled by Harmon's Religious Films Foundation. Wythe had proposed this amalgamation of interests. He introduced Janes to Miss Brady, and Janes took her to Robinson who found her familiar with church problems and otherwise a highly desirable affiliate. In the meantime, the Presbyterian board had formed a committee for the Sunday School development of their enterprise, and Janes, journeying to Cleveland, obtained a vote of approval from the delegates to an important Sunday School convention assembled there.

On the verge of starting actual work, Miller was taken ill. He went to a hospital for examination. The doctors found alarming symptoms—and Miller never came out. Accordingly, the project virtually ended there. Janes, however, continuing at least the spirit of the Presbyterian interest, prepared "settings" or "presentations" to guide ministers in fitting the individual pictures of the "I Am the Way" series into their programs, and wrote a small handbook of practical advice to the clergy entitled, *Screen and Projector in*

(*Concluded on page 242*)

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

EVALUATION

Evaluating the School's Use of Motion Pictures—Edgar M. Johnson, Director Audio-Visual Education Center, Farmsville State Teachers College, Farmsville—*Virginia Journal of Education,* 35:280 Mar. 1942.

The principles underlying qualities of a good film program are classified under six large headings: a) All factors and persons involved in the program should receive adequate consideration, including teachers, children, school authorities and community; b) The people involved in the program should have their social consciousness extended to wider areas; c) The program should be acceptable to the persons involved and in some sense serve their needs and interest; d) The use of the educational motion picture should help provide purposeful unity within the regular curriculum; e) Creative activity and thinking should result from the use of these films; and f) The program should provide opportunity for making intelligent decisions by all the people concerned.

If the use of films is not providing experiences with the qualities indicated above there is something wrong. The trouble may be in the way they are used, in the quality of the films themselves, in the selection of films, in the distribution system or in the mechanical equipments available.

Each school and each classroom will have to decide what methods and what devices contribute to providing desirable experiences for their own particular group. Some things will work well in one situation that will not work in another. However, there must be some basis on which one can determine which device and methods to use. There should be no haphazard selection.

Visual and Other Aids—Robert E. Jewett, Ohio State University—*The Social Studies,* 33:176 Apr. 1942

Report of a project being carried out at the Bureau of Educational Research, Ohio State University, under the direction of Roy Wenger. A selected group of films were shown to instructors of teacher-training. These instructors were asked to list important information to be gained from each of the films. The immediate purpose of this experiment was to aid the instructors in evolving a method of analysis of films which would help them to further their education objectives; the analysis of specific films would also serve as aids to their teaching.

Evaluation for each film was based on the following three points: 1) The assumptions underlying the film; 2) Generalizations significant for teacher education; 3) The larger social problems raised by the film.

Statements made by these instructors regarding two films, March of Time's *Sharecroppers* and the National Probation Association's *Boy In Court,* are quoted.

UTILIZATION

Effective Use of Filmstrips — E. I. Woodbury, Director, Poster Division, National Safety Council—*Safety Education.* Apr. 1942 p.350

The possibilities of the silent filmstrip in the classroom were noted by the author as the result of the production of five strips for the Education Division of the National Safety Council. Among the advantages are: a) the filmstrip is flexible, the equipment simple and inexpensive; b) the teacher can adjust the speed of projection to his own needs; c) the content of the filmstrip can be adjusted to local needs. The author points out the greater flexibility in the use of a silent filmstrip rather than a sound filmstrip. The filmstrip is not a substitute for a motion picture, but for some curriculum problems it is more suitable and much more economical.

SCHOOL-MADE VISUAL AIDS

Something New for Commencement—Roy V. Sullivan, Principal, Narrowsburg Central School, Narrowsburg, N. Y.—*School Executive,* 61:29 Apr. 1942

A description of a commencement program which describes the local school program to the community by means of 2"x2" slides, with commentary by graduating students and with especially prepared phonograph records. Scenes included the work of primary children, intermediate grades, upper grades; the trip to Washington of the senior class; one-room school activities; athletic activities; excerpts from guest speakers in the year's assembly programs.

The Production of a Slide File—Manning Edward Bleich—Metropolitan Vocational High School, New York City —*Social Studies,* Mar. 1942. p. 127.

A cooperative project in a large high school whereby transitory materials, such as cartoons, charts, pictures and the like are transferred to standard lantern slides and indexed as teaching aids for use by the social studies classes. The Commercial Photography Department cooperated with the social studies teachers in this instance, but the author believes that even where limited equipment is available a "live file" of teaching aids can be developed by a copying camera and glass slides. So long as the school does not intend to sell these materials there is no danger of infringing on copyright laws. Students will be found willing to do the laboratory work, so that teachers in any part of the school can send materials to be copied and get back finished slides.

Class-Made Visual Aids with Sound Effects—Timothy E. Smith, Leonia High School, Leonia, N. J.—*The Social Studies,* 33:175 Apr. 1942

Suggestions for making miniature slides (2"x2") from copies of pictures found in magazines, newspapers and books. Phonograph records of appropriate musical or sound accompaniments can greatly enhance the showing of these slides. Approximate cost for making the slides and the recordings are given.

Photography in a Junior High School Class—Helen M. Roberts, Horace Mann Junior High School, Denver, Colo.—*The High School Journal,* 25:26 Jan. 1942.

A unit on photography in a science class in which the pin-hole camera served as the point of departure.

RELIGIOUS EDUCATION

International Journal of Religious Education, vol. 18 No. 9 May, 1942. Special number on *Visual Education in the Church Program.*

This issue contains a number of articles which answer most questions about the values and uses of audio-visual aids in religious education. Theory is in each case implemented by practical suggestions. "But Is It Practical?" by William L. Rogers provides the answers that church school administrators usually want before they will invest in equipment and materials. He surveys the church school curriculum and makes specific recommendations, such as:

1. The primary department has a unit of study on worship in other lands. A bulletin board should be set up. On it each week should be pictures of a different country. The children would be asked to look at the pictures before class time. The interest thus aroused would be used to stimulate study and discussion for the lesson of the day.....

5. The young people's society topics for the year include some dealing with life problems and some on inter-faith and race relations. They are asked to consider the possibility of using appropriate motion pictures to stimulate discussion of these topics. They are also to consider exchanging visits with various religious and racial organizations. Later they may write and produce a play based on their study of minority groups.

The importance of selecting good art pictures is stressed in the article by

Hazel A. Lewis on "Using Flat Pictures." Teacher training for religious education can be improved through the use of especially-made motion pictures and slides. "Streamlining the Training Program" by Theodore C. Braun describes the use of films such as "Children Learn about Their Neighbors," "The New Curriculum in Action," "In Wisdom and in Stature" and the like.

The use of pictures, motion pictures, maps, objects and models, blackboard and class excursions in teaching the Bible is described by Professor Paul H. Vieth in a very concrete article entitled, "Visualizing Bible Teaching." "We Could Try That" is a symposium of accounts by teachers on the uses which they have made of various types of visual aids.

Sources of materials have been collected in two forms. The film list has been visualized, by means of a montage of stills from each film mentioned. Other information has been grouped in the article, "Resources for Visual Education," including bibliography as well as addresses of distributors.

Motion Pictures Build the Mid-Week Service—Russell T. Loesch, Minister, Lake Worth, Florida—*Church Management,* 18:16 Feb. 1942.

An evaluation of the films used in a series of Christian Life Forums during the mid-week church meetings. Attendance increased sixty per cent and the people obtained a better view of the work of the Christian church. The first year the series of pictures on the life of Jesus "I Am the Way" was shown and discussed. A new approach was tried in the second year, by using the shorts edited from Hollywood films and distributed by the Human Relations Commission. These films, though not always suitable for church showings, were found useful because they were brief and lent themselves to discussion. Films are valuable and worth the effort and expense, but better films are needed for a better type of program.

Accent on Purpose—William L. Rogers, Director of Visual Education for the International Council of Religious Education, N.Y.C.—*International Journal of Religious Ed.,* 18:10 Mar. 1942.

The report of a successful use of films in connection with Sunday evening services in a church in Brooklyn. But, in all the programs. . . the accent is on the purpose for which the films are presented. We cannot expect to obtain worthwhile results with any method unless we know in advance what results are desired. Perhaps our problem with visual education is that in a sense the strength of a visual aid is also its weakness—because it rouses interest we are tempted to use it for that reason alone without stopping to think of the purpose for which it was created. Sources of films for church use are available from the International Society of Christian Endeavor, 41 Mt. Vernon St., Boston, Mass. and from the Harmon Foundation, 140 Nassau St. N.Y.C. at 15c.

BOOK REVIEW

The Audio-Visual Handbook — Ellsworth C. Dent—Society for Visual Education, Chicago, Ill. 1942 rev. ed. 227 pp. $1.75.

This excellent source book is still further improved by its periodic revisions, bringing information up to date. Please note the new edition for correction in the May list of Basic Readings (EDUCATIONAL SCREEN, p. 187).

Titles of the six chapter-headings indicate the completeness of the contents: The Status of Audio-Visual Instruction; Types of Visual Aids and Their Uses; Types of Sound Aids for Schools; Types of Audio-Visual Aids to Instruction; Organizing the Audio-Visual Service; Sources of Information, Materials and Equipment. Those concerned with the administration and utilization of audio-visual aids will find this handbook invaluable.

PERIODICALS

Visual Review, 1942—Society for Visual Education, Chicago. Free.

The articles in the new *Visual Review* have been grouped to make reading easier. In keeping with the times, there are several articles on "Visual Aids for Defense." These include a report by Floyde E. Brooker on the very popular series of mechanical training films produced for the U. S. Office of Education; a description of the use of films for training foremen and supervisors in defense factories, as carried on by the War Production Board; the work of the Training Film Preparation Unit of Chanute Field, Illinois in the planning and use of films in the training of students at the Air Corps Technical School, an article reprinted from the January, 1942 issue of EDUCATIONAL SCREEN; and other interesting reports.

A valuable group of articles on "Trends in the Educational Field" indicate that there is no moratorium on the use of filmstrips and other visual aids by teachers who must continue to educate, war or no war. The use of filmstrips with children retarded in reading in a New York City school is a good complement to the article on the use of kodachrome slides in developing reading readiness in the Humboldt County, California schools—a coast-to-coast hook-up.

With respect to administration, there is a description of the new service in the state of Georgia, under the chairmanship of G. L. Hutcheson; the new service in Montana under the direction of Harry Norton, both representing state services. Then there is an article on the Humboldt County, California visual aids service; one on the visual aids library of the Cleveland Museum of Art; and a summary of activities of the Newark Department of Library and Visual Aids.

"Trends in the Religious Field" indicates the growth in interest and use among religious educators.

The entire issue of *Visual Review* points up the tremendous growth of the filmstrip and 2"x2" slide, especially during this emergency where materials and equipment are checked by the priorities regulations. There are several news items about films and other types of visual aids besides those distributed by the publisher.

SOURCES OF INFORMATION

An Index to Visual and Auditory Aids and Materials—Elizabeth Findly, U. of Oregon Library, and Lester F. Beck, Associate Professor of Psychology, U. of Oregon—*Curriculum Bulletin No.* 17, Revised. August 1, 1941 35c University Cooperative Store, U. of Oregon, Eugene, Oregon 40p. mimeo.

An annotated bibliography of bibliographies and sources of audio-visual aids for rent, purchase or free distribution. Classification is by subject matter area and by type of material. Excellent.

Free and Inexpensive Materials—Elizabeth Findly, Senior Assistant Reference Department, U. of Oregon Library *Curriculum Bulletin No* 4. Revised Sept. 1, 1940 25c 20p. mimeo.

References include source of pamphlets, flat pictures, maps and other types of aids. Excellent and up-to-date.

Films for Defense: Series I *Air Raid Precautions Films.* rev. ed. 1942. Compiled and edited by workers of the Writers' Program, New York City WPA, 70 Columbus Ave., N. Y. Free.

An excellent compilation, with annotations and local distributors for every state; also includes quotations from printed reviews.

Series II *Fire Protection Films.* Dec. 1941 Writers' Program, WPA.

A list of 45 fire prevention films, some of which have been made for wartime fire-fighting. Well organized.

Catalog of the Educational Museum of the St. Louis Public Schools—published by the Department of Instruction. 228p.

A new, impressive catalog, attractively printed, has just reached us from the Educational Museum of the St. Louis Public Schools. Since 1904 the Museum has been supplying St. Louis teachers with objects and pictures to supplement their work and enrich the experiences of children. This latest catalog affords telling evidence of the extensiveness of the visual aids maintained by the musuem for classroom use. These teaching materials have been carefully selected and prepared. They include objective material, pictorial material—films, filmstrips, slides, photographs and prints, stereographs, charts—records and transcriptions, reference books. A valuable feature of the catalog is the subject index in the back which enables teachers to discover readily available visual aids on a particular topic, as each listed aid is numbered.

St. Louis can be justly proud of its Educational Museum, headed by the capable veteran, Miss Amelia Meissner. The Museum is recognized nationally, as well as by the teachers in the St. Louis schools, as one of the excellent educational museums in the country.

Films on the War Program

THIS list has been compiled for the information of those who, in increasing numbers, are seeking effective instructional films dealing with various phases of our War Emergency. The May issue contained a list of films for Defense on the Home Front. These compilations are not intended as complete listings of films useful in this connection. They do include those 16mm films especially applicable, and new subjects made available since the publication last fall of the 17th edition of "1000 and One," The Blue Book of Non-Theatrical Films. For a broader list of subject-matter, we recommend obtaining copy of "1000 and One."

Aviation

AN AIRPLANE TRIP (1 reel, sound)
Servicing operations on plane; explanation of instruments; taking off and landing. (Erpi, Harvard)

ALL GOD'S CHILLUN NEED WINGS (5 min., sound)
Air Cadet League of Canada. (Brandon, Gutlohn, Ideal)

AMERICA'S NEW NOBILITY (5 min., sound)
Training of our air force; problems confronting building up of huge air army. (Brandon, Gutlohn, Ideal)

AUTOGIRO, THE (1 reel, sound) What keeps the plane aloft. (B&H, Gutlohn, Ideal, VES, YMCA)

BELL AIR COBRA, THE (3 reels, sound)
Test flights of the Bell Air Cobra interceptor; firing tests of its armament. (Bell)

FIGHTER PILOT (1 reel, sound)
Work of a pilot in the air and on the ground, combat shots. (CFC, BL, P&S, Princeton, VES)

HOW TO FLY (1 reel, sound)
Essentials of flying a plane; parts, instruments. (B&H, VES)

INTO THE BLUE (1 reel, sound)
Complete training in the Royal Air Force.
(B&H, BL, CFC, Gutlohn, VES)

OUR EMPIRE IS THE AIR (5 min., sound)
America's contribution to aviation; bomber-ferry service. (Brandon, Gutlohn, Ideal, VES)

PARACHUTES FOR SAFETY (4 reels, sound)
Uses, manufacture, and tested for use; correct method of packing; how to service and maintain a chute. (Bray, P&S)

PRINCIPLES OF FLIGHT (1 reel, silent)
Illustrated by kite, glider and airplane; effect of air-current velocity, angle of wings, streamlining. (Eastman)

PROBLEMS OF FLIGHT (1 reel, sound)
Use of plane's controls; practical instruction in aeronautics. (CFC, Erpi, Harvard, YMCA)

R. A. F. IN ACTION (1 reel, sound)
Highlights of R. A. F. activities; latest types of bombers and fighter planes. (BL, CFC, P&S, Princeton, VES)

SKY DEFENDERS (4 reels, sound)
Training of U.S. army air cadets; bombing formations, fighter planes. (B&H, Brandon, Ideal, VES)

SKY RIDERS (1 reel, sound and silent)
History of aviation from Wrights to Flying Fortresses; types and uses of planes. (B&H, Official, VES, YMCA)

THEORY OF FLIGHT (1 reel, sound)
Explains flight and control of a plane in terms of physical laws. (CFC, Erpi, Harvard, YMCA)

VENTURE ADVENTURE (1 reel, sound)
Britain's Air Training Corps which provides training for boys under the draft age. (BL, CFC, VES)

WINGS OF YOUTH (2 reels, sound)
Training of pilots for Royal Canadian Air Force.
(CFC, Ideal, NFB, VES)

YOUTH TAKES TO WINGS (4 and 5 reels, sound)
Science of aero-dynamics and development of aircraft design; elements of flight applied in the assembling and flying of small model planes. (B&H, Bray, Ideal, VES)

Industrial Training

AVIATION ENGINE (2 reels, sound and silent)
Study of airplane engine; assembly and inspection of parts. (B&H, Brandon, Ideal, VES)

AVIATION MECHANIC SERIES (4 subjects, 2 reels each, silent)
Airplane Welding; Airplane Riveting; Making of an Airplane Fitting, Sheet Metal Work. (Gutlohn, VES)

DOPING TECHNIQUES (1 reel, sound)
Basic rules of applying dope to fabric covered airplanes. (Handy, VES)

DRAFTSMAN, THE (1 reel, sound)
The part he plays in constructing bridges, buildings, highways and machinery. (Vocational)

ELECTRICIAN, THE (1 reel, sound)
Multitude of jobs in this field; wiring of buildings, servicing motors and train equipment; role in communication and radio. (Vocational)

ELEMENTARY OPERATIONS ON THE ENGINE LATHE
(2 reels, sound)
Alignment of lathe, facing, straight turning, etc.; procedure in simple boring; tools used. (Eastman)

ENGINEERING (1 reel, sound)
Basic branches and what work consists of in various jobs; qualifications for the work. (Vocational)

GIVING A SHOP DEMONSTRATION (2 reels, sound)
An example of good teaching practice in the School Shop. (Handy)

INSIDE OF ARC WELDING, THE (6 1-reel sound films in color)
A series designed to aid training of welding operators. (GE)

MACHINE MAKER, THE (1 reel, sound)
Manufacture and operation of lathes, millers, planers, etc.; discussion of technical problems. (CFC, Erpi)

MACHINE SHOP WORK (33 sound films—U. S. Office of Education)
5 on The Engine Lathe; 5 on the Milling Machine; 3 on The Vertical Boring Mill; 5 on Precision Measuring; 3 on The Shaper; 2 on the Radial Drill; 10 on Shipbuilding. (17 others to be released soon) (B&H, Castle, Ideal, P&S)

MACHINE SHOP PRACTICE SERIES (12 films, 1 reel each, sound)
Cover common processes in machine shops. (Film Prod.)

MACHINIST AND TOOLMAKER (1 reel, sound)
Five ways of machining metals; nature of knowledge and training needed. (Vocational)

MEN O'DEFENSE (1½ reels, sound)
Methods of instruction in training men in machine shop, welding and aviation work. (Delehanty)

METAL WORKING LATHE (2 reels, sound, B&W and color)
Introductory film for the apprentice. (Holmes)

PLAIN TURNING (2 reels, sound, B&W and color)
Operations in turning a cylindrical shaft. (Holmes)

RIB STITCHING (2 reels, sound)
The way fabric covering is sewed on airplanes. (Handy, VES)

RIVETING (2 reels, sound)
As applied to airplanes. (Handy, VES)

SHEET METAL WORKER (1 reel, sound)
Opportunities in aircraft manufacturing, and other fields; qualifications. (Vocational)

TURRET LATHES, THEIR OPERATION AND USE
(4 reels, sound, color)
Fundamental operations on the turret lathe. (Holmes)

WELDING OPERATOR (1 reel, sound)
Oxy-acetylene and arc welding; problems in use of equipment; necessary requirements. (Vocational)

WELDING (2 reels, sound)
The fundamentals of oxy-acetylene welding. (Handy)

WORKSHOPS OF DEFENSE (1 reel, sound)
NYA training classes in aircraft industry. (OEM, YMCA)

Industry's Production Program

AMERICA'S FACTORY FRONT (5 min., sound)
Need for concerted effort. (Brandon, Gutlohn, Ideal, P&S)

AMERICA BUILDS SHIPS (2 reels, sound)
Ship construction in relation to national defense. (YMCA)

AMERICA FIRST IN THE AIR (2 reels, sound)
Manufacturing processes of propellers for aircraft. (Curtiss)

BATTLE OF BRAINS (1 reel, sound)
Difference between this war and that of 1914; importance of mechanization; work in scientific research.
(B&H, CFC, Ideal, NFB, VES)

BEATING TIME (1 reel, sound)
Scenes of a large plant in action producing armaments; importance of time. (GE)

BERNARD BARUCH (5 min., sound)
How to win the war through industrial mobilization.
(Brandon, Ideal, Gutlohn)

BOMBER (1 reel, sound)
Manufacture of the Martin B-26 medium bomber; its speed and power as combat plane. (CFC, Ideal, OEM, VES, YMCA)

BUILDING A BOMBER (2 reels, sound)
Step-by-step manufacture and assembly in the Glenn Martin plant. (CFC, Ideal, OEM, VES, YMCA)

BUILDING A TANK (2 reels, sound)
Manufacturing processes. (CFC, OEM, YMCA)

BUILDING OF THE PBY RECORD BREAKERS (3 reels, sound)
Development and manufacture of the new PBY Navy Patrol Boats from the drafting baard to flight tests. (Consolidated)

DEFENSE FOR AMERICA (1 reel, sound)
Industry's output—combat cars, guns, aircraft, etc. (NAM)

HOMES FOR DEFENSE (1 reel, sound)
Types of housing provided for workers in defense areas by governmental agencies. (CFC, Ideal, OEM, P&S, YMCA)

NOW IS THE TIME (3 reels, sound)
Scenes in plants engaged in defense work. (GM, YMCA)

POWER FOR DEFENSE (1 reel, sound)
Use of power resources for defense production in the Tennessee Valley. (CFC, OEM, Ideal, YMCA)

PRODUCTION SOLDIERS (5 min., sound)
Labor's role in defense. (Brandon, Gutlohn, Ideal)

SUB-CONTRACTING FOR DEFENSE (1 reel, sound)
What government is doing to speed up program. (YMCA)

TANKS (1 reel, sound)
Production of the M-3 medium tank, filmed at the Chrysler tank arsenal and Ft. Knox. (CFC, OEM, P&S, Princeton, YMCA)

TOOLS OF WAR (2 reels, sound)
How Canada has mobilized industry.
(CFC, Gutlohn, Ideal, NFB)

WARTIME FACTORY (1 reel, sound)
Organization of work and leisure in a wartime aircraft factory. (B&H, BL, CFC, Gutlohn, Ideal, Princeton, VES)

WELFARE OF WORKERS (1 reel, sound)
Working conditions before the war, and adjustment of conditians to meet the emergency in Britain.
(BL, CFC, Gutlohn, P&S, VES)

WINGS FOR DEFENSE (1 reel, sound)
Manufacture and testing of Allison engine; bomber and fighter planes. (GM, YMCA)

Our Armed Forces

AMERICAN SEA POWER (1 reel, sound)
U. S. Navy activities—drills, anti-aircraft fire, guns in action, planes. (Hubbard)

AMERICA'S CALL TO ARMS (1 reel, sound and silent)
Defense preparatians on sea, land, and in the air.
(B&H, Castle, Ideal, P&S, Princeton, VES)

ARMY IN OVERALLS (1 reel, sound)
Contribution of the CCC in clearing military reservations; rifle practice, parachute troops, tanks. (OEM, Ideal, YMCA)

ARMY ON WHEELS (3 reels, sound)
Review of U. S. army maneuvers; equipment on wheels. (Wilding)

DEMONSTRATION OF ORDNANCE MATERIAL (1 reel, sound)
Factual presentation of the Army's big guns. (YMCA)

IRON WARRIORS (1 reel, sound)
Our mechanized forces in operation and training. (Hubbard)

MARINES HAVE LANDED, THE (1 reel, sound and silent)
Landing and vigorous training operations. (B&H, Ideal, VES)

OUR FIRST LINE OF DEFENSE (1 reel, sound and silent)
U. S. Navy; training of men, fleet maneuvers, battle practice. (B&H, Official, VES)

OUR FIRST LINE OF DEFENSE (5 min., sound)
America's defenses in the air; how factories and homes are being protected. (Brandon, Gutlahn, Ideal)

SOLDIERS OF THE SKY (1 reel, sound)
How U. S. Army parachute troops operate. (Hubbard)

WAR DEPARTMENT RADIO NETWORK (2 reels, sound)
Way in which the best radio and telegraph net of the Army is operated. (YMCA)

WHEELS FOR DEFENSE (1 reel, sound)
Wide variety of vehicles aad uses in modern mechanized army. (GM, YMCA)

War Front Subjects

ANZACS IN ACTION (1 reel, sound)
Australian soldiers preparing for action in the jungles of Malaya. (Hubbard)

ATLANTIC PATROL (1 reel, sound)
Canada's part in keeping North Atlantic open.
(B&H, CFC, Ideal, NFB, Princeton, VES)

BATTLE OF THE ATLANTIC (5 min., sound)
Struggle to maintain Britain's life-line against U-boats, raiders and Stukas; need for convoys. (Brandon, Gutlohn, Ideal)

BATTLE OF THE MEDITERRANEAN (5 min., saund)
War in the Near East; meaning of the loss of Crete.
(Brandon, Gutlohn, Ideal)

BOMBING OF PEARL HARBOR; BURNING OF S. S. NORMANDIE (1 reel, sound and silent)
Fighting craft of U. S. attacked.
(B&H, Castle, Ideal, P&S, Princeton, VES, Visual)

BRITAIN'S COMMANDOS IN ACTION (1reel, sound and silent)
Raid on Nazi-held Norwegian islands.
(B&H, Castle, Ideal, P&S, Princeton, VES, Visual)

FIGHT FOR LIBERTY (4 reels, sound)
Course of events since August 1940; air war over Europe; Balkan and Airican campaigns. (CFC, Ideal, NFB, VES)

GUARDS OF THE NORTH (1 reel, sound)
Role of Canadian troops in building up defense of Iceland. (CFC, Ideal, NFB)

GUNG HO! (5 min., sound)
China's battle and appeal to America for aid.
(Brandon, Gutlohn, Ideal)

HEROES OF THE ATLANTIC (1 reel, sound)
Work of Merchant Navy; training of recruits for Atlantic Front Line; precautions of convoys. (B&H, CFC, Ideal, NFB)

HITLER'S THREAT TO AMERICA (1 reel, sound)
Analysis of the battlefronts by Ralph Ingersoll.
(Gutlohn, Ideal)

I SAW RUSSIA (1 reel, sound)
Ingersoll tells why Russia cannot be beaten and how U. S. production can help. (Gutlohn, Ideal)

JAPS BOMB U. S. A. (1 reel, sound and silent)
Occurrences near both shores of the Pacific, and on the islands that dot its surface.
(B&H, Castle, Ideal, P&S, Princeton, VES, Visual)

KNOW YOUR ENEMY—JAPAN! (1 reel, sound)
Answers such vital questions as: what is Japan's naval and military strength; Can Japan be defeated? (P&S, Princeton)

MACARTHUR — AMERICA'S FIRST SOLDIER, AND MANILA BOMBED! (1 reel, sound and silent)
Review of MacArthur's career up to scenes showing him in Manila. (B&H, Castle, Ideal, P&S, Princeton, Visual)

MASTER OF TIMING (5 min., sound)
Hitler's technique; importance of mechanical production to meet the challenge. (Brandon, Gutlohn, Ideal)

NEW DISORDER, THE (5 min., sound)
Nazi rise to power and reactions now taking place in conquered lands. (Brandon, Gutlohn, Ideal)

NIGHT HAWKS (5 min., sound)
Methods and problems of locating and destroying enemy bombers at night. (Brandon, Gutlohn, Ideal)

ON THE LINE OF FIRE (1 reel, sound)
Russian air and artillery forces in action: German war prisoners; captured trophies. (Brandon)

OUR WAR — ROUND ONE (5 min., sound)
The fight against Japan—probable lines of strategy.
(Brandon, Gutlohn, Ideal)

RED ARMY, THE (1 reel, sound)
Soviet Army, Navy and Air Force in maneuvers and action.
(Brandon)

RUSSIA STOPS HITLER (1 reel, sound and silent)
Actual battle scenes filmed in Russia during winter of 1941-2.
(B&H, Castle, Ideal, P&S, Princeton, Visual)

SEA POWER VS. AIR POWER (5 min., sound)
How changing methods of warfare have shifted the balance of power in Europe. (Brandon, Gutlohn, Ideal)

SECRET OF THE BLITZ (5 min., sound)
Necessity for coordination for mechanized war.
(Brandon, Gutlohn, Ideal)

SLUGGERS, THE (5 min., sound)
Importance of tanks in modern warfare.
(Brandon, Gutlohn, Ideal)

THAT TATTERED LACKEY (5 min., sound)
Mussolini's career; Italy's part in World War II and what she has gotten out of it. (Brandon, Gutlohn, Ideal)

U. S. NAVY BLASTS MARSHALL ISLANDS
(1 reel, sound and silent)
Preparations for the assault; American guns in action; aerial fights. (B&H, Castle, Ideal, P&S, Visual)

WAR IN THE DESERT (1 reel, sound)
British Army in action against Axis forces in North Africa; battle scenes at Tobruk. (Hubbard)

WAR WITHOUT WARNING
(Assembly programs, 40 min. each, sound)
I. War in the Atlantic; II. War in the Pacific; III. British Home Front. (B&H)

NAMES AND ADDRESSES OF FILM DISTRIBUTORS

Bell BELL AIRCRAFT CO., Film Unit, Buffalo
B&H BELL & HOWELL CO., 1817 Larchmont Ave., Chicago
Brandon BRANDON FILMS, 1600 Broadway, New York
Bray BRAY PICTURES CORP., 729 7th Ave., New York City
BL BRITISH LIBRARY OF INFORMATION, Rockefeller Plaza, New York
Castle CASTLE FILMS, RCA Bldg., New York
CFC COLLEGE FILM CENTER, 59 E. Van Buren St., Chicago
Curtiss CURTISS-WRIGHT CORP., Rockefeller Plaza, New York
Consolidated CONSOLIDATED AIRCRAFT, Lindbergh Field, San Diego
Delehanty DELEHANTY INSTITUTE, 115 E. 15th St., New York
Eastman EASTMAN KODAK, Teaching Films Division, Rochester, N. Y.
Erpi ERPI CLASSROOM FILMS, 1841 Broadway, New York
Film Prod. FILM PRODUCTIONS CO., 3650 Fremont, Minneapolis
GE GENERAL ELECTRIC CO., Visual Instruction Dept., Schenectady
GM GENERAL MOTORS CORP., 1775 Broadway, New York
Gutlohn WALTER O. GUTLOHN, INC., 25 W. 45th St., New York
Handy JAM HANDY ORGANIZATION, 2821 E. Grand, Detroit
Harvard HARVARD FILM SERVICE, Biological Laboratories, Cambridge
Holmes BURTON HOLMES FILMS, INC., 7510 N. Ashland Ave., Chicago
Hubbard FATHER HUBBARD EDUCATIONAL FILMS, University of Santa Clara, Santa Clara, Cal.
Ideal IDEAL PICTURES CORP., 28 E. Eighth St., Chicago
NAM NATIONAL ASS'N OF MANUFACTURERS, 14 W. 49th St., N. Y. C.
NFB NATIONAL FILM BOARD OF CANADA, Ottawa, Canada
OEM OFFICE OF EMERGENCY MANAGEMENT, Film Unit, Wash., D.C.
Official OFFICIAL FILMS, INC., 425 Fourth Ave., New York
P&S PHOTO & SOUND, INC., 153 Kearney St., San Francisco
Princeton PRINCETON FILM CENTER, 410 Nassau, Princeton, N. J.
VES VISUAL EDUCATION SERVICE, 131 Clarendon St., Boston
Vocational VOCATIONAL GUIDANCE FILMS, Old Colony Bldg., Des Moines
Visual VISUAL ART FILMS, 204 Empire Bldg., Pittsburgh, Pa.
Wilding WILDING PICTURES, INC., 7635 Grand River, Detroit
YMCA YMCA MOTION PICTURE BUREAU, 347 Madison Ave., New York

Movies versus Field Trips

(*Concluded from page 220*)

observation. Visitation to the industrial plants is a necessary part of this type of defense training but the number and length of field trips can be materially reduced by the use of visual aids. And there still remains the important advantage in the use of visual aids in defense training, that very large groups may be given the experiences at one time.

Real experiences involving worth-while knowledge in our part of the world is available for the pupils right in the classroom. Experiences need not be confined to those available locally.

The motion picture makes it possible to bring all of nature, human progress, history, in fact, the whole world in all its phases, sociological, biological, and physical, as it really is, to every pupil. A living replica of all the universe, as far as we know it, can be brought into the schoolroom for intensive study. Certainly the motion picture should be used to its maximum as an effective complement to the costly, prolonged, and often less efficient procedures of field trips and excursions.

Experimental Research in Audio-Visual Education

By DAVID GOODMAN

Title: RESEARCH IN EDUCATIONAL FILM

Investigator: ADOLF F. STURMTHAL

The study was conducted at the Institute for Economic Education, Bard College, Columbia University, Annandale-on-Hudson, New York. (Completed July, 1941).

Purpose of Study

To present the research aspects of the film problem on the basis of published records. It will discuss the material from two major points of view:

1. A Survey of techniques used in film research, together with illustrative examples
2. A Survey of the kinds of problems that have been studied in the past or may usefully be investigated in the future.

I Research Techniques

The research techniques listed are not exhaustive, but they cover all the techniques which have been used to date, either in the field of educational motion pictures or in closely allied fields. These techniques involve securing of data either directly or by inferential methods.

A. *Direct measures*
1. free answer; 2. questionnaire; 3. rating scale.
4. program analyzer; 5. observation; 6. physiological.
B. *Inferential measures*
1. item analysis; 2 attendance and distribution records.

A. Direct Measures

1. FREE ANSWER

The simplest (and crudest) method of obtaining information as to what is contained in a given film, how it may best be utilized, who are the ones that see it, and what is its effect on the audience, is to ask either the "expert" or test audience as to what they believe the answer is in each of these instances; or they may be asked to write an essay on their attitudes. In either case they follow their own fancies concerning the aspects to be stressed. This is the identifying characteristic of the method. Within a rather general topic, no limitations are placed upon the person who gives the answers as to what or how he is to criticize or analyze.

This technique is very widely applicable. It can be used for investigating problems in every field. The main purpose of this technique is to obtain general ideas concerning the field studied or to investigate problems which are so complex that they cannot be otherwise approached.

That the free answer type of analysis has shortcomings is, of course, obvious. Strictly quantitative evaluations of the replies are difficult, since the replies are, of necessity, diversified. On the other hand, this technique has its advantages in exploring complicated concepts and it avoids the frequent fault of other techniques which all too often predetermine the answers to a problem by the types of questions which are asked.

2. QUESTIONNAIRE

The questionnaire method is a standardized version of the free answer approach. It is applicable in the same types of situations. However, it carefully delimits the aspects of each problem which are important in a particular investigation. Instead of giving free rein to the respondent in stressing whatever aspect of a test situation appeals most to him, the questionnaire pins him down to the task of giving a specific answer to a specific question.

Questions may be asked for the purpose of finding out 1) what *information* audiences derive from films; 2) how their *attitudes* are affected as a result of seeing the film; 3) what *appeals* the film has for audiences; and 4) what is judged to be the most effective *use* of film.

The most direct method of finding out what facts a group of students have gleaned from a film is to give them a test after seeing that film. A comparison of what an audience knows before it sees a given film and what it knows after

that film has been seen, supplies an objective index as to how instrumental that film has been in imparting knowledge to those who see it. The obviousness of this method has made it the most widely used.

As in the case of the information test, the attitude test, may be used to determine what changes have been made in the mental repertoire of the audience as a result of witnessing a given film. However, what is sought here is a determination of the changes, not in facts known, but rather in attitudes to any of the aspects, either dealt with directly or touched upon indirectly in the film. That the validity of the test will depend upon the accuracy with which each specific question measures the attitude which it purports to measure, is self-evident.

The appealing characteristics of a film or films may be determined by asking audiences to make specific judgments of films with regard to these characteristics. These judgments may deal with a film as a whole or with any or all aspects.

The opinions of a lay audience or of experts on the utilization of films can be obtained by having that audience or group of experts express their feelings in response to specific questions.

It should be pointed out that the questionnaire method obtains what are essentially the subjective evaluations of those giving the answers. If we ask a group of teachers to indicate which of a given number of film applications they consider the best, we will obtain data for a consensus of opinion as to such applications. The validity of this consensus will depend upon the accurateness with which those teachers originally observed the method of film application, the thoughtfulness with which they evaluated those methods, the care they exercised in reporting their attitudes, and how representative this group of teachers was of teachers as a whole. In addition, the value of the results obtained through the use of a questionnaire is very largely dependent upon the adequacy of the questionnaire itself.

3. Rating Scale

The questions in a questionnaire can be aimed at obtaining data in terms of answers that are either open (as in the case of "write in" replies) or answers which are provided for. In the latter case one can ask for an either-or, yes-no reply, or one can give a number of choices (usually called a checklist). These choices can be asked in terms of differences in kind or degree. These last are rating scales.

The rating scale is a method of asking a specific question which forces the person answering that question to give his answer in terms of one of a group of carefully graded replies. Essentially it is a somewhat refined version of the questionnaire method. The refinement consists in that instead of asking whether a given item is liked or disliked; effective or ineffective, the rating scale sees to determine which of a group of items is most liked, next most liked or least liked; or whether a given picture is to be considered excellent, good, fair, poor, or useless with regard to its effectiveness in teaching.

The end results of any rating scale investigation are always in terms of the judgment of those who filled out the scales. The data obtained are primarily subjective. And also, since all possible answers are necessarily predetermined, it usually follows that the results obtained are rather crude: shades and nuances of opinion, which are frequently obtainable by the free answer and questionnaire methods, are well nigh impossible here. The chief advantage of the rating scale is that the findings are characteristically easier to manipulate statistically since they are given in quantitative terms and can be thus quantitatively treated.

4. Program Analyzer

For purposes of evaluation it is necessary to know how audiences react not only to a film as a whole but also to each and every feature of that film. The usual method of obtaining this kind of data is to have the audience fill out detailed questionnaires in which they are asked to indicate their reactions to specific aspects of the film. This has the drawback that the answers obtained depend on what aspects are covered by the questionnaire, the subjects' abilities to recall their earlier reactions, and the extent to which the latter portions of the film have influenced the judgment of the earlier parts. Yet the investigator cannot interrupt the projection of the film after each scene and ask the audience what they think of it.

This method in interviewing eliminates the undesirable necessity of interrupting the picture to ask questions (in which case, the initial stimulus experienced is no longer "normal"), and yet permits the obtaining of the reasons for the subject's reactions to the film nor does it run the danger that the subject has forgotten the parts liked or disliked, and the reasons for such reactions, since an objective record of the parts reacted to is made on the tape and the subject gives his reasons for his reactions in response to an exact repetition of the original stimulus. This technique furnishes:

(a) Quantitative data on the percentage of a given sample that like or dislike any given point of a program,

(b) The identity and location of the liked and the disliked parts of a program, and

(c) Why those parts were liked or disliked.

5. Observation

This method determines how people react to a film without the necessity of asking them either to make any decisions or to state those decisions. The reactions are measured directly. In other words, the attention holding power of the motion picture is measured in terms of the behavior of the audience.

6. Physiological Measures

Some investigators have attempted to find out some of the effects of specific types of film upon the physiological processes of the audience. What they wanted to know here was the extent to which motion pictures affected the basic emotionality of people or particular types of people; how those pictures might be instrumental in upsetting normal bodily functions; in what manner the actual physical condition of the audience was modified as a result of seeing that picture.

B. Inferential Measures

Information on appeals and effects need not necessarily be sought in specific test situations only. Much information can be obtained by inferential methods. Thus analysis of film content throws light on the appeals used and some of the effects sought in those films, and study of attendance figures under normal film showing conditions reveals whom the appeals may reach.

1. Item Analysis

The distinguishing characteristic of an item analysis is that it systematically breaks up the content of the material examined into some logical system of units. In order to find out what a specific film contains, it is examined, and the topics treated, items mentioned, scenes shown, and so on, are classified according to some typology which best fits the particular material dealt with and the purpose of the investigation. The final result of such an analysis gives a summary picture of what is actually included in the film and may thus be used for the interpretation of possible appeals and effects.

2. Attendance and Distribution Records

In some instances studies of film use can be made by the analysis of statistical data already in existence. Thus, box office receipts on different days of the week in themselves constitute an indication as to the relative frequency of movie attendance on those days. Comparison of gross receipts for specific types of pictures constitutes one of the most realistic measures of the audience "pulling" power of those types. If it were possible to get records of how many children's tickets are sold when certain types of pictures are shown, we could have a fairly objective indication as to what differences exist between the movie fare that reaches the children as compared with adults.

II Research Problems

All research which involves an item that goes from the hands of a producer to those of a consumer naturally divides itself into three types. These are:

1. Research of technical production aspects, which involves the means and manner of making that item;

2. Research of the distribution aspects which involves the means of getting the product from the producer to the consumer, and

3. Research of the consumer aspect which involves what happens to the product in the hands of the consumer and what the consumer's reactions are to the product.

The first of these three types of research which involves production means primarily is, by its very nature, restricted to the experts who do the producing. Information on technical problems must be gotten from the testing laboratory and the accumulated experience of the expert.

Research of the distribution aspects of any product involves the identification and characterization of the agencies that are used, and that are available for use, in getting the product to its ultimate consumer and the promotion and distribution methods used in doing so. Information here must be derived from the records of the distributor, from which may be obtained data on which agencies and methods best achieve the ends sought.

The third type of product research involves questions concerning the use made, and the effect, of the product upon the consumer. Our concern here is with this third type of research, as it applies to the field of educational film. The results of such research might, of course, well determine the objectives and methods of production and distribution.

Any research on the audience end of educational film use may be classified under one or more of the following headings:

A. Content
B. Audience Composition
C. Film Utilization
   1. Medium Comparison: a. Film versus other media, b. Types of film, c. Subject matter.
   2. Presentation Methods
D. Audience Reactions
   1. Effects: a. Information, b. Reasoning ability, c. Attitude formation, d. Interest, e. Behavior, f. Emotional reactions, g. Comparative studies.
   2. Appeals
E. Evaluation

This classification of research, it should be noted, provides for investigations of *what* is used, on *whom* it is used, *how* it is used, and, finally, with what *results*.

III Conclusions

One common characteristic of all the studies that were examined seems to be that they fail to form continuous pattern of research. Each investigator, depending upon his own experience, personal proclivities and the exigencies of the moment, has seen some one specific problem in the field of educational motion pictures, carried his investigation through, established (or failed to establish as the case may be) some particular fact concerning the use of educational film and then left it at that. It is no wonder, then, that no integrated pattern of findings has resulted from the quite considerable amount of research that has been done.

The problems which research workers in this field have typically set for themselves have dealt with fragmental aspects of the field. The informative value of a specific film in biology, the attitude forming value of a specific feature film, or the sleep disrupting of another particular film—these have been the standard problems which investigators have set up as their fields of investigation. In none of the individual studies encountered was there any attempt made to correlate the findings of that study with all the pertinent data that may have been gathered by other investigators. Even in the case of the most ambitious series of studies to date, where the effects of commercial motion pictures were studied from a variety of angles—even here no satisfactory effort was made to integrate the results obtained by the several investigators who were concerned with the separate aspects of the study.

Another factor which has been responsible for the limited value of most of the studies has been the fact that the research methods used were of a nature that did not permit establishing conclusions of more than strictly limited validity. The analyses which are typically made of data are not sufficiently intensive to reveal the essential factors that are operative in producing the results observed. To analyze a given educational film and to show that pupils with lower IQ's derive more benefit from its use than do those with higher IQ's is not sufficient. Analysis of film factors must dig deeper than has been generally done to date. For real application we must know what characteristics the motion picture technique possesses which, in the case of the duller pupils, for example, make it a more efficient transmitter of information. Only by knowing the nature of these essential characteristics can appropriate film teaching methods be formulated for groups of differing intelligence, special vocational interests, specific age or grade level, or specialization with regard to fields of subject matter. And only by identifying these basic attributes which are operative in making films what they are, can conclusions be reached that will be *generally valid* for all films.

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Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

All Roads Lead to Denver!

THERE are at least three strong reasons for attendance at the N. E. A. Meeting this June. One is Denver. Another is Colorado. Another is the DVI program and the unusually important annual Business Meeting of the Department included in the program.

Denver is one of the truly unique cities of the United States. It stands close to the geographical centre of the country, on a mile-high plateau, the metropolis of high altitudes and western hub of bus, rail and auto lines. It is "central" for the major wonders of the Rocky Mountain world. A circle of 1000-mile radius, with center at Denver, touches Chicago and the California line, and sweeps far into Canada and Mexico. Within a few hundred miles lie Nature's famous classics, such as the Continental Divide, Carlsbad Caverns, Glacier Park, the Yellowstone, Great Salt Lake, the Black Hills, Bryce and Zion Canyons, and still closer at hand are Mesa Verde and Rocky Mountain National Parks, Estes Park, Grand Lake, with unforgettable Pike's Peak, Mount Evans, and the rest, a daily vision of majesty from the city's streets and windows.

Denver is man-created, as few cities have ever been. At sight of its magnificent trees, its thirty-five city parks of lawns, lakes and leaves, it is hard to realize that only a couple of generations ago Denver's site was a treeless plain. Tireless planting, tireless irrigation alone have made the desert blossom like a rose. From the "first white man's" cabin among Indian tepees to a beautiful city of over three hundred thousand in eight decades is something of a record. Denver is known as the "second capital" of the nation, as only Washington has more Federal Buildings than Denver. Seven Colorado institutions of higher learning, in addition to the University of Denver, maintain summer courses for teachers in a full range of subjects.

Colorado itself is a country of endless delight in summer, for visit or revisit. Of sixty-two United States peaks over 14,000 feet, fifty are in Colorado. Mountain grandeur finds its acme here. Fishing, hunting, climbing, hiking—and above all horse-back riding—are at their best in the boundless wildernesses around the Continental Divide which splits the State. Height and depth, lake and stream, plain and precipice, dim distance and towering close-up, endless vistas of scenic glory make Colorado a life-long, thrilling memory.

Such is the setting for the forthcoming sessions of the DVI, meeting in conjunction with the NEA at Denver on June 27 to July 2 next. The interesting program prepared largely by Lelia Trolinger, pinchhitting for President Starnes who was claimed by war duty, was printed partially in May and appears below in more complete form. This year the Departmental Business Meeting will have particular importance. The war has thoroughly disrupted both personnel and operation of the Department. Election of Officers will be a more difficult procedure than usual, as the customary ballot by mail has not materialized. Widest possible representation from all ten zones is therefore most desirable. The Zone Plan—which had the misfortune to run into war conditions in its birth year—will require serious discussion, and modification in the light of what has been learned during this first hectic year of effort and experiment. The relations between the Department and the magazine now serving as official organ will come up for grave consideration. In short, maximum attendance at the Business Meeting is essential for laying a sure basis for further D V I progress the coming year. For mark you, fellow members of the D V I! Despite the handicaps of infancy and war, the Zone Plan has resulted in the largest Department membership ever attained! If it can function that effectively in such a year as 1941-42, we should be able to go on to bigger things under a Zone Plan with its kinks smoothed and crannies filled.

Let everybody plan to see everybody at Denver!

N. L. G.

DVI Program

Monday, June 29

FIRST SESSION—East High School

1:45 P. M. Joint Meeting with the Department of Secondary Teachers

3:15 P. M. *Radio and Recordings As Classroom Aids*
(Presiding, H. J. Dailey, Lexington, Ky.)
"Radio and Recordings in the Classroom"
I. Keith Tyler, Director, Evaluation of School Broadcasts, Ohio University, Columbus
"Demonstration Lesson Using a Recording"
Douglas Ward, College High School, State College of Education, Greeley, Colo.

4:30 P. M. Administration Building
"Demonstration of the Production of a Filmstrip"
(Denver Public School System)

Tuesday, June 30

SECOND SESSION—Luncheon 12:15
Albany Hotel Rose Room
(Presiding, Robert Collier, Jr., Denver Schools)
"Word Picture of Early Denver"—
Joseph Emerson Smith

THIRD SESSION—Ebert School Auditorium

2:15 P. M. *How Can We Overcome a Slow-down of the Audio-Visual Program Due to the Difficulty of Securing Equipment?*

(Presiding, U. S. Burt, Corvallis, Ore.)

"Trends in the Production of Motion Pictures"

J. E. Hansen, Chief, Bureau of Visual Instruction, University of Wisconsin, Madison

"Prints and Photographs in the Classroom"

Ella Callista Clark, Winona State College, Minn.

3:30 P. M. Annual Business Meeting

3:45 P. M. Panel Discussion—*All-Out Utilization of Available Audio-Visual Aids*

(Chairman, D. Arthur Bricker, Supervisor Visual Instruction, Cincinnati, Ohio, Public Schools)

Participants: R. R. Ford, British Library of Information, New York City; C. C. Lemmon, Visual Education Director, Salt Lake City; Alice Mullen, Public Schools, Ironwood, Mich; Arthur L. Payne, Director, Audio-Visual Education, City Schools, Greeley, Colo.; Kenneth C. Rugg, Principal, Natrona Co. High School, Midwest, Wyo.; W. M. Spackman, Director, Department of Public Information, University of Colorado, Boulder; H. L. Walton, Supervisor, Audio-Visual Aids, Public Schools, Garden City, Kan.; Don G. Williams, Public Schools, Berkeley, Cal.

ZONE VIII

The nominating committee of Zone VIII circularized the executive committee asking them to vote on the proposal that the present officers be held over until next year.

Radio Conference in Colorado

The Denver Public Schools held their second annual conference on radio and education in cooperation with the Rocky Mountain Radio Council at Morey Junior High School on April 10 and 11. Headlining the conference were I. Keith Tyler and Seerly Reid of Ohio University. The opening program included an address by Charles E. Greene, Superintendent of the Denver Public Schools, on "Radio in Education."

The Friday morning session also included a panel on "How Teachers Utilize the Radio" and two speeches, one by Lelia Trolinger, President of Zone VIII, who spoke on "Transcriptions Available to Colorado Schools" and Robert Hudson, Director of the Rocky Mountain Radio Council, who spoke on "Broadcasting in Time of War."

The luncheon meeting featured the key-note address by Dr. Tyler. The afternoon meetings included a series of panel discussions on the "Implication of Radio Listening Interests to Education." Group meetings were also held later in the afternoon on the "Utilization of Radio Programs" and the "Teaching of Radio Programs and the Teaching of Radio Program Discrimination."

Group meetings Saturday included such topics as "Children's Programs", "Evaluation Techniques", and "Dramatizing Democracy by Film and Radio".

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by GODFREY ELLIOTT, Oakvale, W. Va. **Readers are invited to submit questions.**

IN wartime also schools must be awake to the necessity of keeping the public informed on what they are doing. To assure present and future support of education, educators should continue to make significant films for their public relations program.

This department hopes that many such films will be made during the coming school year.

One of the recent public relations films, *Alert Minds —Alert Bodies,* was produced in the Oceanside elementary schools, Oceanside, New York. The 300-foot 16mm. production was filmed by two teachers, Miss Barry and Miss Marion Smith. Miss Smith describes the film as follows: "Our main idea in developing the film was to show the work of the schools to our community in a graphic manner. We selected three areas of the elementary school program for film treatment: 1. reading, from the first primer story-telling to the advanced silent reading in the upper grades; 2. an extra-curricular club, which was making greeting cards at the time the film was being made; and 3. a class trip to the local blacksmith shop. We felt that these three phases of elementary school work needed clarification in the minds of the school patrons."

Another recent public relations film has been made under the sponsorship of the New Haven Teachers' League, New Haven, Conn. *The Children* is a 400-foot sound production built about one theme: "The schools' prime purpose is to develop the potentialities of all the children so that they may become happier, healthier, more useful citizens of the community and of the nation."

In the film, scenes of children of all economic backgrounds, at school, at home, on the playgrounds and streets of a typical New England city (New Haven) indicates the wide range of individual differences of the children who must be prepared for life by the public schools. Classes for crippled and feeble-minded, industrial arts groups, health and physical education, nursery schools, Americanization work, guidance, home-making, and many other typical and atypical school situations are included. A running commentary throughout the film explains the scenes adequately.

Many persons contributed to the making of *The Children.* The New Haven High School Photoplay Club and the Department of Audio-Visual Education furnished the equipment and most of the technicians. Musical background for the opening and closing of the film was furnished by the high school orchestra. Research consultant for the film was Dr. Norma E. Cutts, psychologist. Camera work was done by a graduate of the photoplay club; editing, and other technical assistance by club members. Shooting script and direction were done by Donald Eldridge, audio-visual director.

Copies of the film are available from the New Haven Teachers' League at $1 per booking.

Movie Contest Winners

The two winning films in the "Make Your Own Movies" contest of the National Board of Review's 4-Star Clubs use the world crisis as their themes. First award went to the Cinemasters Club of Herbert Hoover High School in San Diego, Calif., for their film *Hoover High Prepares.* Using Kodachrome film, the club photographed the work of the school in preparing for defense. They show such activities as air-raid drills, first-aid classes, bandage rolling, and the full process of stretcher-making. Done with imagination and skill, the picture is an excellent example of school movie making.

The Photo Patrons Club of East Side High School in Newark, N. J. received Honorable Mention in the contest. Their film, entitled *Escape to Freedom,* tells a story of Nazi Germany in which a girl whose father has been imprisoned by the Nazis, is helped by a young man in the American Consulate. Upon the framework of this plot, life under a dictatorship is compared with the freedom in our country providing a powerful plea for the defense of our democracy. A spoken commentary and background music on synchronized records heighten the drama of the film.

Judges of the contest were members of the Amateur Cinema League. First prize was an engraved silver cup. This year's contest is the sixth held by the National Board of Review of Motion Pictures for its 4-Star Clubs, which it fosters in schools in various parts of the country for the study of the motion picture.

Summer Course in Film Production

A course in "The Production of Educational Films" is being offered during the summer session under the sponsorship of Teachers College, Columbia University. The course, Education s217MP, will be given by Mr. Irving Hartley at the Hartley Studios, 20 West 47th Street, New York City. Admission to the course is contingent upon the approval of the instructor. Two points of credit at Teachers College will be granted to those who complete the summer work.

According to the announcement, "The course is for those interested in school-made films as a device for producing local curriculum material, records of important school activities, and public relations materials." Textbook for the course is "Producing School Movies" (National Council of Teachers of English, 1941).

Question Box on School Film Production

1. What is the best way for us to go about selecting an idea for our first film?

The school can prevent a considerable waste in time and materials by approaching the production of its first film with intelligence and foresight. It is recommended that those in charge of the proposed project study such specialized references as *Students Make Movies, Making School Movies,* and *Producing School Movies.* In the latter reference, Child and Finch suggest a few simple ideas such as these to guide the beginning group: (1) Choose a simple idea if you are just beginning: (2) Select a story that may be produced without overtaxing your school facilities; (3) Be sure that your story will be of interest to the audience for which the film is intended; (4) Choose a subject that can be told by action.

2. What is the length of a fade-in and a fade-out?

The length of a fade may vary according to the tempo of the action, but the average fade probably will use about six inches of film (20 frames, or one and one-quarter seconds of screen time at 16 frames speed).

3. Why is it so useful to have "depth of focus" tables for your 16mm lens?

When working at close distances and at low apertures, the plane of focus must be fairly exact, in other words, the allowable tolerance is small. Under such conditions it is extremely useful to know which objects will be in focus and which objects will not be in focus. The function of the depth of focus table is to permit rapid calculation of the nearest and farthest limits of focus at stated distances and aperture openings. For example, if the 1-inch lens is being focused on an object at six feet, by reference to the depth of focus table, the cameraman learns that at f/2.8 the limits of focus are 5′-0″ to 7′-6″; at f/5.6, 5′-2″ to 10′-6″; at f/8, 3′-8″ to 15′-0″.

4. Where can we obtain program material for our film production club?

A great number of illustrated lectures and exhibits on photography are available on loan from the School Service Division of the Eastman Kodak Company, Rochester, N. Y. A series of teaching films for amateur cinematographers has been produced by Kenneth F. Space under the title of "You Can Make Good Movies". The series includes such film lessons as "Common Mistakes and Their Correction", "Exposure and Exposure Meters", "Film Editing", and "How To Use Filters". These films are available for rental from The Harmon Foundation, 140 Nassau Street, New York City. In addition to these suggestions, the richest sources of club programs are the films produced by other schools.

5. Would you recommend the use of film that is advertised to sell at a price considerably below the so-called standard?

It is extremely doubtful if any "off-brand" movie film ever brings satisfaction to its user. Such film stocks, often advertised at emulsion speeds far in excess of actual value, and sold at figures far below standard prices, would lead one to believe that some of the established manufacturers are making enormous profits on their products. In truth, the purchaser always gets just about what he pays for, which in the case of standard brand films is represented by such things as perfection in manufacture, standardization of performance, skill in processing the exposed product, and a number of other factors too numerous to list here.

(*Concluded on page 237*)

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS
Assistant in Audio-Visual Aids
Extension Division
Indiana University, Bloomington

Hidden Hunger (American Film Center, 630 Fifth Avenue, New York City) 21 minutes, 16 mm. sound. Apply to distributor for list of depositories.

Mr. Squire, a farmer, is shown looking over his crops at the close of day. A Little Man materializes out of a hay field. He tells Mr. Squire that he represents growing things which are being treated "unfairly." If food products are not used to build good bodies, he threatens to stop all things from growing at the end of one month.

Mr. Squire, with a crusader's zeal, starts out on a one-man, one-month campaign to reform the eating habits of the nation. He urges a truck driver to eat raw vegetables, tries to persuade women customers in a super food market to purchase different types of food, tells a housewife that she kills all vitamins by putting soda in peas to keep them green, and tries to persuade her to cook foods properly.

Mr. Squire ends up in court charged with being a public nuisance and disturbing the peace. The court is not impressed with his story until Dr. Downey overhears the proceedings and comes to Squire's aid with scientific data on nutrition and a description of the work of nutrition councils over the country. The butcher, Little Man, tries to persuade Mr. Squire that his idea was a dream, but the farmer insists that the threat of hidden hunger is real, and is always around us.

COMMITTEE APPRAISAL: Both public school teachers and adult leaders will find this film useful for motivating discussion of the effects of dietary deficiencies and the selection, preparation, and serving of foods. The information is authentic. It is unfortunate that even though "hidden hunger" is a very realistic problem confronting a startling proportion of our population, the script writer resorted to a preposterous story as a vehicle for the presentation of the excellent ideas submitted by the nutrition consultant.

Before the Doctor Comes (American Red Cross, 19 East 47th Street, New York City) 41 minutes, 16 mm. sound. Sale price $74.20.

While a montage of accident scenes and first aiders at work documents the 100,000 deaths and more than ten million injuries that occur annually through accidents at work, at home, and on the highways in the United States, the important role of the trained first-aider, who knows what to do "before the doctor comes" is explained.

The film then shows Dr. Thompson of the American Red Cross presenting lectures and demonstrations to teach correct procedures in the first aid treatment of accident victims.

Included in the first reel are techniques for digital, tourniquet, and direct compress control of bleeding, and the proper care of the patient to minimize the effects of shock. The second reel illustrates the physiology of breathing and applies the principles so evolved in a demonstration of the correct method in giving artificial respiration to accident victims. Following this, the treatment of minor and severe burns is explained and demonstrated. Reels three and four are concerned with first aid for fractures, the application of splints, and methods of transporting an injured person under emergency conditions. A short summary of the content of the Red Cross first aid course completes the film.

COMMITTEE APPRAISAL: "Before the Doctor Comes" illustrates the type of instruction given in the Red Cross first aid course in a manner designed to encourage enrollment in the courses. This film should be valuable to instructors in first aid courses using the Red Cross textbook for illustrating and demonstrating the specific lessons covered by its content. The film would have been more effective if the demonstrations had been presented under conditions approximating those existing at scenes of actual accidents.

A Child Went Forth (New York University Film Library, Washington Square, New York City) 20 minutes, 16 mm. sound. Produced by the National Association of Nursery Educators. Sale price $60.00.

An exposition of some of the principles of progressive education is integrated by the commentator with the sound and picture story of childrens' experiences at a summer camp set up on an ordinary farm.

Trained educators provide unobtrusive guidance while the children explore their new environment. Children from two to seven years old walk in daisy fields—become acquainted with a dog and a goat—with rabbits, kittens, mice, ducks, frogs—help build a wading pool—play in a tree house that is now a ship, now a castle—saw boards, paint boxes, and pound nails—in "a world where there is time to find out what it's all about, and where nobody tells you what to do—a world where there are nice grown-ups around, but they don't 'butt in.'"

The children are allowed to make their own social adjustments, and they are housed, fed, and guided into a program of activities under a plan calculated to encourage physical health, mental alertness, and courage to attack new problems.

The commentator, Munro Leaf, points out some of the advantages of such farm camps as evacuation centers for city children under war conditions.

COMMITTEE APPRAISAL: This film provides unusual demonstrations of basic methods, specific techniques, and equipment which can be easily obtained or made for the organization and operation of centers for the care and training of children from two to seven. It should be useful in training courses for nursery school, kindergarten, and primary teachers, camp and playground supervisors, and volunteer workers in childrens' groups. It should be especially valuable to stimulate interest in, and provide guidance for programs now under way for community care of children whose normal pattern of life has been and will be disarranged increasingly by the war.

Fighting the Fire Bomb (Transfilm, Incorporated, 9 Rockefeller Plaza, New York City) 14 minutes, 16 mm. sound. Sale price, black and white $38.00, Kodachrome $68.00. Guide furnished.

This official training film of the Office of Civilian Defense tells the story of the fire bomb, what it is, how it is used against civilian populations in war, and how to control it.

The common magnesium incendiary bomb is shown, together with actual fires resulting from an incendiary air attack. A burning fire bomb in the living room of a house is brought under control with a home fire extinguisher. The construction of the bomb and the chemical reactions of its burning which require special treatment to control are shown in animation. Proper procedures for controlling magnesium incendiaries and the fires started by them with various types of home equipment; sand, soda-acid, foam-type and pump tank extinguishers are demonstrated under actual conditions in the home.

How to make homes less vulnerable to fire bomb attack is shown in detail—the removal of flammable material from attics—sand treatment of attic floors—and installation of proper fire-fighting equipment and training in its use. A series of flashbacks review the facts and skills presented to support the conclusion—the fire bomb can be controlled by an informed and trained citizenry.

COMMITTEE APPRAISAL: Both the pictorial content and the commentary are convincingly used to show that the fire bomb can be fought and to teach how to fight it effectively and with reasonable safety. Information required for intelligent action is introduced in a functional fashion and the necessary skills and proper procedures are demonstrated by members of an average family.

An excellent film for teaching the control of the fire bomb to students from intermediate grades through college, to general adult groups, and to special classes in civil protection. Science teachers will be particularly interested in the chemical processes demonstrated in this film.

School Made Motion Pictures

(*Concluded from page* 235)

6. Why isn't 16mm negative film more widely used in school film production?

Any school that has ever tried to work with 16mm negative film can answer that question very quickly. Briefly, the advantages of the negative-positive process for the school are: (1) at no increase in film cost, it permits the original to be preserved, and (2) it permits the printing of additional copies of the film at about half the cost of reversal dupes. For the school production, however, the disadvantages will weigh much heavier: (1) the negative is extremely difficult for the inexperienced amateur to edit, and (2) it has a substantial tendency toward graininess which can become objectionable on the screen. All things considered, the ease of editing makes the reversal films more popular in the amateur field. G. E.

News and

Visual Education on World Federation Program at Montreal

Dr. John E. Dugan, Chairman of the Section on Visual Education of the World Federation of Education Associations, announces that visual education is being included in plans which are under way for the Conference of the World Federation of Education Associations to be held at Montreal, Canada, July 8th, 9th and 10th, 1942. Delegates are expected from various countries of this hemisphere and from other nations which can send representatives at this time.

The program of the Section on Visual Education will be concerned with the role of visual education in the present crisis, and will pay particular attention to the ways in which visual education can contribute to a better understanding and closer relationship between the nations of this hemisphere.

Machine Shop Films Do Good Teaching Job

The training division of the Sperry Gyroscope Company has been using the U. S. Office of Education Machine Shop Films, distributed by Castle Films, and conducted a little experiment recently with a two-hour class of ten girls to test the effectiveness of films on "The Micrometer" and "The Vernier." None of the girls had ever used a micrometer, and some had never seen one. The films carried practically the entire burden of instruction.

After viewing the Micrometer film and hearing a three-minute oral explanation by the instructor on "feel", each girl made ten measurements on calibrated bars to 1/1000 inch. Of the 100 readings thus made, 77% were correct to .001 inch, 8% were wrong, due to misreading of a .025 inch division, and 15% were true errors. After viewing the Vernier film and hearing a six-minute oral elaboration by the instructor on the correct holding of the micrometer, each girl made ten additional measurements to 1/10,000 inch. Of these readings, 35% were correct to an accuracy of .0001 inch, 54% to .0002 inch, 5% were wrong due to misreading of a .005 inch division, and 41% were true errors. (*Penn. College for Women Bulletin*).

Georgia Audio-Visual Meeting

Last month's *News Letter from* the University System of Georgia reports an interesting and beneficial program enjoyed by the Audio-Visual Department of the Georgia Education Association in Savannah April 24. Mr. J. C. Wardlaw, President of the Department, presided. Dr. H. B. Ritchie, of the University of Georgia, spoke on "Teacher Training in Audio-Visual Aids in Education," pointing out the important part that visual aids and radio are playing in the present program of adult education. Mr. Fred Stewart, Visual Education Supervisor of the State W. P. A., addressed the group on "Production of Visual Aids in Georgia." He discussed the formation of the project of which he is head and which is under the sponsorship of the State Department of Education.

Notes

Texas Radio and Visual Conference

The Second Annual Texas Conference on Radio and Visual Education, sponsored by the State Department of Education, which met at Baylor University, Waco on April 23, 24 and 25 was outstanding in many respects. Outstanding in attendance—more than 900 school superintendents, college presidents, teachers, radio and visual education specialists and civic leaders from every section of Texas and many other states attended. Outstanding in being practical instead of theoretical, dealing extensively with work-study groups and clinics on problems in radio and visual education. Outstanding in its attention to war problems and necessity for harnessing these two dynamic tools in training, informing and inspiring our millions to win the war and the peace. Outstanding in organizing Zone IX, Division of Visual Instruction, of the National Education Association, and Region V of the Association for Education by Radio.

The Conference was inaugurated one year ago by Dr. L. A. Woods, State Superintendent of Schools, and organized and administered by John W. Gunstream, Director of Radio and Visual Education, State Department of Education. Mr. Gunstream is to be congratulated on providing the outstanding state school radio program in the Texas School of the Air and in creating an annual official conference on radio and visual education.

Amateur Color Films Wanted by Army

The Chief of Engineers, United States Army, has issued an official notice urging all cinematographers, amateur and professional, to list their 16mm Kodachrome films photographed outside the territorial limits of the United States with the Engineer Board immediately. Films should not be sent until requested. Letters should be addressed to Motion Picture Section, The Engineer Board, Fort Belvoir, Virginia, giving full information as to length of films, country in which photographed, date when made, etc. A statement permitting duplication of scenes should also be included.

Film Aids Government Nutrition Program

A new educational program to build a strong nation by teaching Americans how to win the war on the food front is in full swing under the aegis of the Federal Security Agency. As part of its National Nutrition Program the Office of Defense Health and Welfare Services initiated the educational campaign to teach every man, woman and child in the country the proper use and conservation of our supply of food products.

One of the dramatic ways in which this project is being carried to the American public is through the motion picture, "Hidden Hunger," starring Walter Brennan, to be released to theatres by the Federal Security Agency. The two-reel film was officially launched at a preview in Washington, D. C., recently.

The picture was produced by the American Film Center at the Fine Arts Studio in Hollywood. Funds

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Current Film News

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, has acquired for general circulation the fourth in the Cathedral Films series of religious two-reel 16 mm sound films, titled:

No Greater Power—Zacchaeus in Film—The story of Zacchaeus, the poor potter, who became a rich money lender and tax collector in the service of Rome. He was despised by his fellow Jews until Jesus sought him out, stayed at his house, and convinced him how wrong was his idea that there was no

Jesus in home of Zacchaeus

greater power than that which gold bestows. This 20-minute film is professionally made, and reflects Hollywood production standards. Available for rental or lease.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, have acquired the following subject for distribution:

Linoleum Block Printing (from Koerner)—1 reel, 16 mm silent. Ruth Gikow, nationally known graphic artist, demonstrates the cutting and printing of the lineoleum block. Recommended for use in all grades from grammar school to university and art school.

■ National Film Board Of Canada, Ottawa, announces that the following Canadian films have been released:

Ottawa—Wartime Capital—16mm sound, 11 minutes—A picture of government under stress of war, from the offices of key officials down to the crowded desk of the most junior stenographer. Here the war plan of the country is conceived and is seen translated into action, with Canadian men, ships and airplanes in combat with the enemy.

Canadian Landscape — 18 minutes, sound and color—vivid portrayal of the work of one of the foremost artists of this continent, Alexander Young Jackson. The camera follows Jackson to the northern hills of Ontario, brilliant with their fall coloring, and to the snow-covered Quebec countryside; then to his Toronto studio where Mr. Jackson turns his landscape sketch into a large canvas, the film following each step in the process. Photographed in Kodachrome, the paints the artist uses appear in truthful reproduction on the screen.

■ Transfilm, Inc., 35 W. 45th St., New York City, producer of "Fighting the Fire Bomb," has completed another civilian defensive movie, namely:

Fight that Fire!—1 reel, black-and white or color, 16mm sound. It demonstrates the most effective methods of fighting this enemy that can destroy vital war materials, and gives clear-cut instructions in the use of right fire-fighting weapons. This film is approved by the U. S. Office of Civilian Defense and leading fire protection organizations.

Additional defense films are in production, dealing with correct procedures during an air raid, first aid and home protection against gas, and high explosive bombs.

■ Post Pictures Corporation, 723 Seventh Ave., New York City, announces the release of

Capt Fury—the fourth in a series of theatrical productions Post is making available in 16 mm sound. The previous three subjects, as announced in these columns, were "Zenobia", "There Goes My Heart" and "Topper Takes a Trip." "Captain Fury" is a full length production featuring Brian Aherne in an adventure story based on the life of an Australian "Robin Hood" and his fight for freedom a century ago.

The 1942 catalog detailing the complete list of full length features now being offered in 16 mm sound through Post Pictures Corporation may be had on request to the company.

■ British Library of Information, 30 Rockefeller Plaza, New York, reports the following "Recent Additions" from abroad, each a 1-reel sound subject:

Battle of the Books—burning of banned books by the Nazis, the effect of the blitz on Britain's publishing trade, wartime reading habits and the position of writers in a democracy.

A Few Ounces A Day—all-diagrammatic film (Isotype) explaining in simple terms the need for collecting salvage of all kinds and how prevention of waste helps reduce wartime shortages.

Fighter Pilot—work of a fighter pilot in the air and on the ground shown in thrilling detail with actual combat shots.

H.M. Navies Go To Sea—His Majesty's Navies in action in every ocean of the world.

Empire's New Armies—the new techniques of modern warfare, emphasizing various types of mobile forces, air invasion and the value of women.

R.A.F. Action—a review of the highlights of R.A.F. activities in Britain and the Dominions, with illustrations of all latest types of bombers and fighters.

South Africa Marches—a South African production covering all aspects of her armed forces and armament industry.

Venture Adventure—story of Britain's Air Training Corps, which provides specialized training for boys between the time they leave school and the draft age.

■ General Electric Company, Schenectady, New York, has completed a new series of six one-reel, all-color sound motion pictures designed to help speed war efforts through the faster and better training of welding operators.

The Inside of Arc Welding—title of the series—will show for the first time just what actually goes on inside the arc and, therefore, will be of great interest to the expert welder as well as the beginner. Vivid charts, animation, demonstrations by expert operators, close-ups of the arc in action, as well as cross sections of good and bad welds are combined to bring to even the largest of classes the benefit of individual instruction.

Each of the six parts of "The Inside of Arc Welding" is complete in itself and presents in detail one particular phase of arc welding. The first film covers

View from "Inside of Arc Welding"

the fundamentals of arc welding. Others deal with technique of arc control and electrode manipulation for all welding positions. Clearly shown, explained, and emphasized throughout are the four principal factors of good welding—current setting, angle of electrode, arc length, and speed of travel.

The films were produced by the Raphael G. Wolff Studios, Hollywood, who have evolved a new technique for picturing this difficult subject. Technical supervision was by the General Electric Welding Laboratories, with the cooperation of government and industry representatives. The 16 mm films may be obtained for single showings, by writing to the Visual Instruction Section, Publicity Department, General Electric Co.

News and Notes

(*Concluded from page* 239)

for the production were provided by Swift & Company. It is non-commercial in character and presents the newer scientific knowledge of nutrition.

Since the film is one of the most important projects carried out by the Office of Defense Health and Welfare Services under Administrator McNutt, the latter is asking national organizations such as men's and women's clubs and service groups, educational groups, youth groups and similar bodies, to help promote the film as part of their effort for our national defense program.

Workshop on Auditory Problems Uses Films

The National Workshop of teachers of the hard of hearing will convene on the campus of The University of Southern California, July 2 and 3, to discuss problems of the hard of hearing in war time. Motion pictures for rehabilitation of the handicapped and for training in speech reading will be demonstrated. Mr. B. V. Morkovin, Director of the Hearing Clinic, University of Southern California, reports that these films were successfully used all over the country last year.

Ban on Amateur Cameras Lifted at Marine Studios

Since the opening of Marine Studios, world's only oceanarium, in 1938, all amateur motion picture cameras have been banned. At a recent meeting of the Board of Directors, it was decided to open the huge ocean-side tanks to the amateur movie camera fan. Built originally as an underwater motion picture studio and designed especially for Hollywood feature productions all experimental work has now been completed, and officials have declared open season on the thousands of brilliantly colored tropical specimens for 8mm. and 16mm. cameras. Thirty-five millimeter cameras, however, still are prohibited, except by special permission.

During the past three years innumerable numbers of short subjects have been produced by the major motion picture companies, namely among them, the Pete Smith Specialty, *Marine Circus;* Grantland Rice Sportlight, *Marine Round-Up;* and a large number of newsreel subjects.

Additional Summer Audio-Visual Courses

(*Supplementing April and May Listings*)

Louisiana

Centenary College, Shreveport — June 2-Aug. 4
Audio and Visual Aids in Teaching (3) A. J. Middlebrooks

Minnesota

State Teachers College, Duluth — June 8-July 17
Audio-Visual Education (4 qr.) George S. Corfield

Oklahoma

Okla. A. & M. College, Stillwater
Introduction to Visual Education; Visual Education (2 each) Haskell Pruett-J. C. Muerman

Motion Pictures—Not for Theatres

(*Continued from page 223*)

Christian Education. It was published by the Westminster Press in 1932.

When Miller died so suddenly, leaving plans at loose ends, the relationship of the Presbyterian board and the Harmon Foundation became somewhat delicate, and only the high character and good faith of those concerned evolved a happy ending. No formal contract had been drawn. It was understood, however, that there would be a generous number of exchanges scattered over the country, and that the board would pay for a proportional number of prints of the Harmon productions. But, in reviewing the situation after Miller's death, Robinson concluded that much fewer exchanges could serve the project at the start of distribution with fewer prints. Miss Brady naturally sought to protect the Harmon Foundation by obtaining a contract, and Robinson, without in the slightest intending to repudiate the original agreement, naturally wished first to see some of the "I Am the Way" pictures to judge the probable church demand for them. This threw the responsibility for delivery upon Wythe; but he, in turn, had been prevented from prompter completion of the series by the unanticipated difficulties of obtaining and examining the "King of Kings" material from Hollywood.

The "I Am the Way" reels were never fully completed by Wythe. It had been intended to "score" them with sound, and, to demonstrate with one subject, he obtained coöperation of the Radio Corporation of America. Not only the R.C.A. recording and studio equipment was thus made available for the experiment, but a full choir from the Roxy Theatre, New York, and the large orchestra from the Broadway production "Blossom Time" volunteered to provide the impressive sound. Everything seemed right for continuing the plan despite the death of Harmon, but the funds intended for the purpose became bogged in a real estate stagnation, and the work was obliged to stop. However, the Foundation goes on even today with the library so auspiciously begun, and Miss Brady, with a utility film man who can photograph occasional scenes as well as care for the institution reels, adds from time to time to the supply.

Other materials are sent in by denominational efforts outside, such as the picture made in 1934 by John, son of the Rev. W. H. Gable, head of the Rocky Boy Mission in Montana, in coöperation with the Foundation. It is a three-reeler called "Below the White Top," and it shows the work of the Rev. John Killinger in the Virginia Blue Ridge country. It is in addition to several other subjects similarly produced by John Gable. In February, 1936, a 16-mm. silent picture was completed under Foundation sponsorship by amateurs of Port Washington, Long Island. It gained general publicity because the "leading man" and "leading lady" announced their engagement to be married coincidentally with the preview.

Major productions made with Foundation support and sponsorship are a number in the wider missionary field. They include eight informative reels on China, three concerning India, a trio of African titles, and approximately four reels covering religious activities in Brazil. Other projects are constantly in work or under consideration.

One of the most fervently held policies of the Foundation has been always that the organization of a proper church film program should be maintained, if not initiated, by the churches themselves. The Foundation was willing to gather necessary information to point out objectives, and to bring active persons together; but it positively would not undertake the support of an enterprise which so manifestly should be the full responsibility of the religious orders. It therefore seemed a happy culmination of the Foundation's seventeen years of earnest endeavor when, March 25, 1942, the Religious Film Association, Inc., opened headquarters at 297 Fourth Avenue, New York.

This enterprise—with William L. Rogers, who had produced a number of interesting films under Foundation auspices, as executive secretary—was on that date described as the union of sixteen leading Protestant denominations. The purpose was to distribute suitable motion pictures for the ultimate benefit of some 122,000 churches. Apart from this ambitious goal, interest of the non-theatrical field in general was aroused by the inclusion of a novel circulation idea. The large publishing houses maintained by the various leading sects were to take over the physical handling of the reels. In other words, this plan was not just a dream, on paper. It was so far a reality that the Association already possessed the machinery for an effective distribution system, with operators in all centers currently used for sales of printed literature, trained and seasoned in the specialized objectives, and already in friendly contact with the customers.

Success of this new undertaking obviously must be a matter for future record. Its leadership gives luster to the bright promise of its approach. The chairman is Lovick Pierce, of the Methodist Publishing House at Dallas, Texas. George W. Card, of the Baptist Sunday School Board at Nashville, Tennessee, is vice-chairman; and John Ribble, secretary of the Presbyterian Board of Christian Education at Philadelphia, is secretary-treasurer.

The early efforts of the Harmon Foundation to bring about a similar amalgamation of religious interests had been to develop a film service through the Federal Council of Churches in America. Some passing reference to that experience has been made in preceding paragraphs. When progress in that direction became difficult, the Foundation turned its attention toward the International Council of Religious Education as a group better qualified to attack the problem. Out of the proposals and conferences—out of all the accumulated experience, indeed—emerged at last the present Religious Film Association. If this does not succeed, however, it is assured that the Harmon Foundation will try again, in some other way, to see that American churches are regularly supplied with proper films.

In those eventful years since the establishment of the Religious Motion Picture Foundation in 1925, Miss Brady has acquired a comprehensive knowledge of non-theatrical problems and undoubtedly has made, in addition to her labors as an instrument of the Foundation, a valuable personal contribution to the field. The various endeavors listed in the organization's current literature owe much to her conscientious support as an individual; and it must be observed that all have been encouraged with the clear understanding that their work is expected to be self-supporting, and that the Foundation will not be controlled, in its own words, "by any denomination, religious faction or prejudice."

(To be continued)

S.V.E. Kodachrome Slides

Four new catalogs of Kodachrome 2″x2″ slides, available from the extensive library of the Society for Visual Education, have just come off the press. They present a wide selection of color slides on the following: *The Arts*—44 pp. (architecture; paintings—religious, secular and juvenile; sculpture; landscape gardening; literature; costumes; fashions; dances; design and crafts); *The Social Studies* 72 pp. (United States and world history; geography; world's fairs; sports; transportation and communication; sociology); *The Sciences*—26 pp. (nature study for young science students; botany, zoology, biology, geology, etc.; medical and technical subjects; useful arts); *The Beale Collection*—26 pp. (from hand-painted glass slides of the illustrations of Joseph Boggs Beale).

To obtain copies of these catalogues, write to the Society for Visual Education, Inc., 100 East Ohio Street, Chicago, Ill.

Slide Viewer

The new "Hollywood Viewer", manufactured by Craftsmen's Guild, 5773 W. Olympic Boulevard, Los Angeles, California, is made of Tenite and designed for viewing 2″ x 2″ Kodachrome slides and 35 mm strip film. It accommodates slides in paper, glass or metal mounts. A slight pressure on the sides makes possible the removal of the diffusing window for the viewing of 35 mm strip film. The ground polished lens has a depth of focus which provides effective magnification without the necessity of adjustment. The curved top of the case allows the corners of the slides to project so they can be inserted and removed easily.

Scene is one of the Curtiss-Wright Airplane Division classrooms for training U. S. Army ground crews.

Visual Training dons olive drab

How to take a fighting plane apart and put it together again—how to "keep 'em flying"—how to combat enemy tactics—how to win this war quickly—is the problem!

Speed in imparting a clear understanding to millions of fighting men—millions of civilian defense workers—is attained best by projection methods. Dramatically, they magnify and project charts, drawings, photographs and detailed close-ups. The student can retain the graphic picture better than the words of the instructor. Seeing becomes knowing how. Knowing how is the answer!

★ ★ ★

Optical instruments are so vital to defense that the nation's needs absorb practically all of Spencer's greatly increased production. We are, of course, endeavoring to give our customers the best possible deliveries, but understandable delays and shortages are bound to occur.

★ ★ ★

Spencer LENS COMPANY
BUFFALO, NEW YORK
SCIENTIFIC INSTRUMENT DIVISION OF
AMERICAN OPTICAL COMPANY

HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 212)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on page 209)

College Film Center (3, 5)
59 E. Van Buren St., Chicago

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago
(See advertisement on page 241)

Dudley Visual Education Service (1)
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Co.
Teaching Films Division
Rochester, N. Y.

Eastman Kodak Stores, Inc. (3)
Eastman Classroom Films
356 Madison Ave., New York City

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erpi Classroom Films, Inc. (2, 5)
1841 Broadway, New York City
(See advertisement on page 229)

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
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Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
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Hoffberg Productions, Inc. (2,5)
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Ideal Pictures Corp. (3, 6)
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Knowledge Builders Classroom Films
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153 Kearney St., San Francisco, Cal.
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Douglas D. Rothacker
729 Seventh Ave., New York City

Transfilm, Inc. (2)
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Visual Art Films (2)
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Visual Education Service (3)
131 Clarendon St., Boston, Mass.

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Old Colony Bldg., Des Moines, Ia.
(See advertisement on page 238)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE MACHINES and SUPPLIES

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Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
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DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago
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Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

General Films, Ltd. (3, 6)
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156 King St., W. Toronto

Holmes Projector Co. (3, 6)
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Ideal Pictures Corp. (3, 6)
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Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on page 225)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 233)

Radiant Mfg. Corporation
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Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILMSTRIPS

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Ideal Pictures Corp.
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Meadville, Pa.
(See advertisement on page 210)

Radio-Mat Slide Co., Inc.
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Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 238)

Williams, Brown and Earle, Inc.
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STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago
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Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Keystone View Co.
Meadville, Pa
(See advertisement on page 210)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 243)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16 mm silent.
(2) indicates 16 mm sound.
(3) indicates 16 mm sound and silent.
(4) indicates 35 mm silent.
(5) indicates 35 mm sound.
(6) indicates 35 mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.

EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION

25¢ A COPY $2.00 PER YEAR

SEPTEMBER, 1942

DE VRY CORPORATION

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CHICAGO
NEW YORK
HOLLYWOOD

Dear Friends and Customers:

This letter is written to express something of the feeling on our part that has been brought about by the complete upheaval in our business relations since the advent of the war.

We believe that we owe this to our customers and friends. We do not think we are unique in this regard. Everyone must feel much the same way. Certainly every industrial business, whose operation is geared to the war program, has been jolted and jarred throughout its whole structure by the swift transition of its status from an individual enterprise to a component part of a vast war machine.

In this, we, like everyone else in productive fields, have gone along with the rest. Total war effort is the only thing that matters. Gratitude for past favors, the human impulse to give preference to those who have shown friendship for us, appreciation of business courtesies; all these things, it seems, must be "frozen" for the duration. They must go by the board; we must help win the war. In the world's present state, we would not do otherwise if we could; and neither would you.

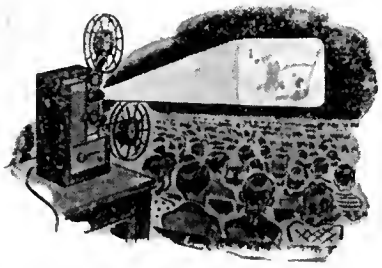
Yet, we want you to know that this gratitude, this human impulse, this sense of appreciation is still there. We are always conscious of it, even though we must govern our relations with our customers and friends along lines that would have seemed fantastic or impossible in peace-time years.

Time is our most precious commodity. Today, in all branches of our Nation's armed forces, in industry, in schools and other institutions, motion picture films are demonstrating their inestimable value in shortening the teaching period of millions engaged in learning wartime skills.

Our entire resources, backed by 29 years of research and engineering leadership, are now dedicated to new developments; improvements which will benefit all now--and when peace comes.

Yours for Victory,

W. C. DeVry, President
DE VRY CORPORATION



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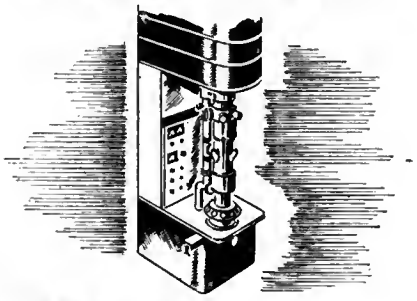
4 REMARKABLE FILMS AT NO RENTAL COST TO SCHOOLS!



UNSEEN WORLDS

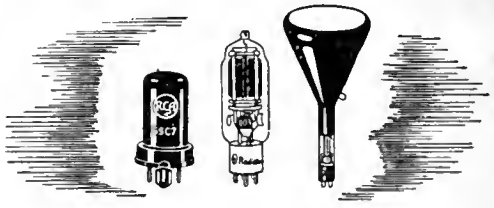
An educational film unfolding the hitherto unseen worlds revealed only recently by the new RCA Electron Microscope. Far more powerful than any optical microscope, this amazing instrument magnifies objects 50,000 to 150,000 diameters. It promises to revolutionize research in many fields. Sound movie, one reel, 16 mm, 10 minutes running time

TELEVISION

An interesting film study of one of the outstanding marvels of our day—pictures through the air. Shows the history of television, how it works, etc. Fascinating to people of all ages, and especially timely because of the great development in television expected after the war. One reel, 16 mm, with sound, running time 10 minutes.

AIR WAVES

The spectacular story of radio broadcasting, beginning with its earliest formative stages and moving ahead to its present day status. Glimpses behind the scenes showing famous artists, announcers and engineers at work. One reel, 16 mm, sound, showing time 10 minutes.



ELECTRONS ON PARADE

The story of electrons and the part they play in our life. The electron tube that runs your radio, transmits messages, opens doors (electric eye) and has a hundred other war and peace time uses, is "dissected" before your eyes. Two reels, 16 mm, sound, showing time 20 minutes.

HOW TO SECURE FILMS—Write to William J. Ganz Co., 19 East 47th Street, New York, N. Y. Or to RCA Manufacturing Co., Inc., Camden, N. J. Films will be booked for transportation charges only.

★ KEEP BUYING WAR BONDS ★

RCA VICTOR

AUDIO VISUAL SERVICE • EDUCATIONAL DEPT., RCA MANUFACTURING COMPANY, INC., CAMDEN, N. J.

The EDUCATIONAL SCREEN

VOLUME XXI SEPTEMBER, 1942 NUMBER SEVEN
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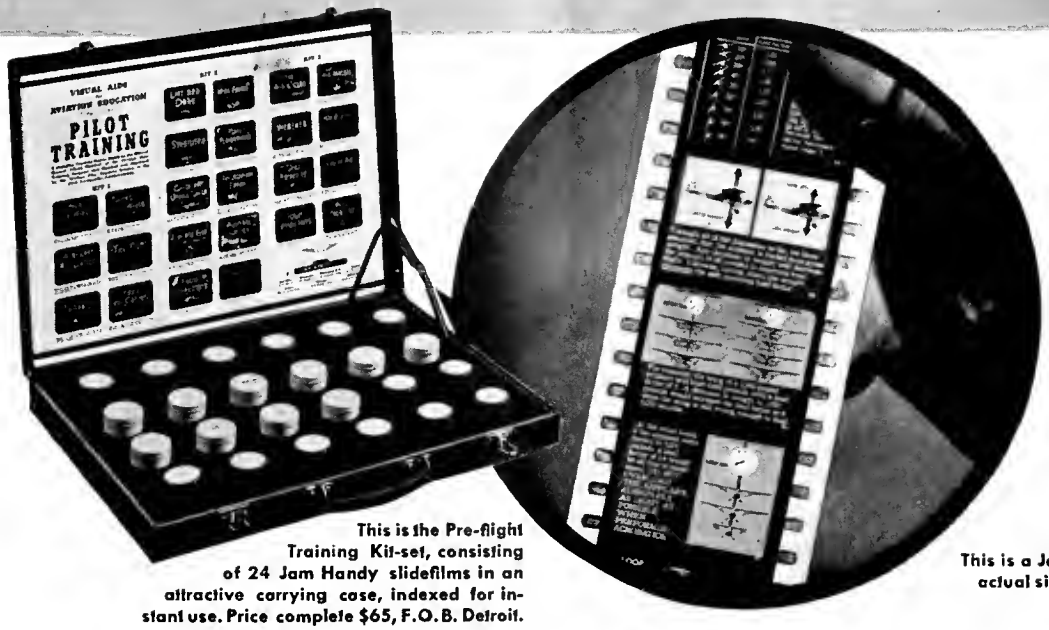
1,742 Pictures



This is the Pre-flight Training Kit-set, consisting of 24 Jam Handy slidefilms in an attractive carrying case, indexed for instant use. Price complete $65, F.O.B. Detroit.

This is a Jam Handy slidefilm actual size, 35 millimeter.

···to Help Air-Condition Young America

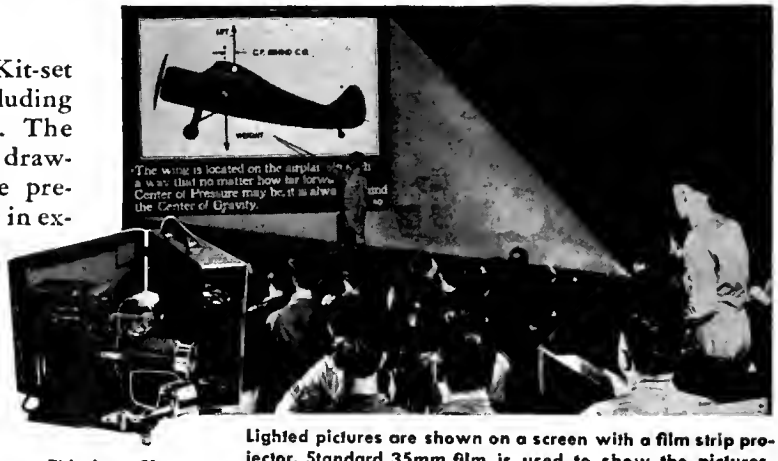
Here is a teaching tool that is ready now to help you air-condition your school program. Your school will find it an invaluable aid in your pre-flight aeronautics course. This series of Jam Handy slidefilms is now being used in schools in every state in the Union.

Pictures Stimulate Discussion

Each of the 24 slidefilms in the Pilot Training Kit-set deals with a different phase of aeronautics, including aerodynamics, meteorology and avigation. The 1,742 captioned pictures—photographs, charts, drawings, cross-sectional views and diagrams—are presented in planned sequence to assist the teacher in explaining what he means as he goes along. They help the instructor impart abstract and technical information easily, quickly and clearly. They stimulate and guide class discussion. The pictures *talk to the eye.* Teacher and students can talk about what they see and talk while they look.

Proved by Nationwide Use

Over one-third of all the C. A. A. Civilian Pilot Training Program franchised units are using these films regularly. They are in successful use in high schools, colleges, and universities, non-college groups, air training schools and in our armed forces. Names of the users nearest you and a complete list of subjects covered will be sent upon request.



This is a film strip projector. Anyone who can sharpen a pencil can operate it.

Lighted pictures are shown on a screen with a film strip projector. Standard 35mm film is used to show the pictures. The size of the picture can be varied in accord with the number of students and the size of the classroom.

The student's attention is focused. Everyone in the class can see exactly what the instructor means. Any of the 1,742 lighted pictures can be held on the screen as long as required.

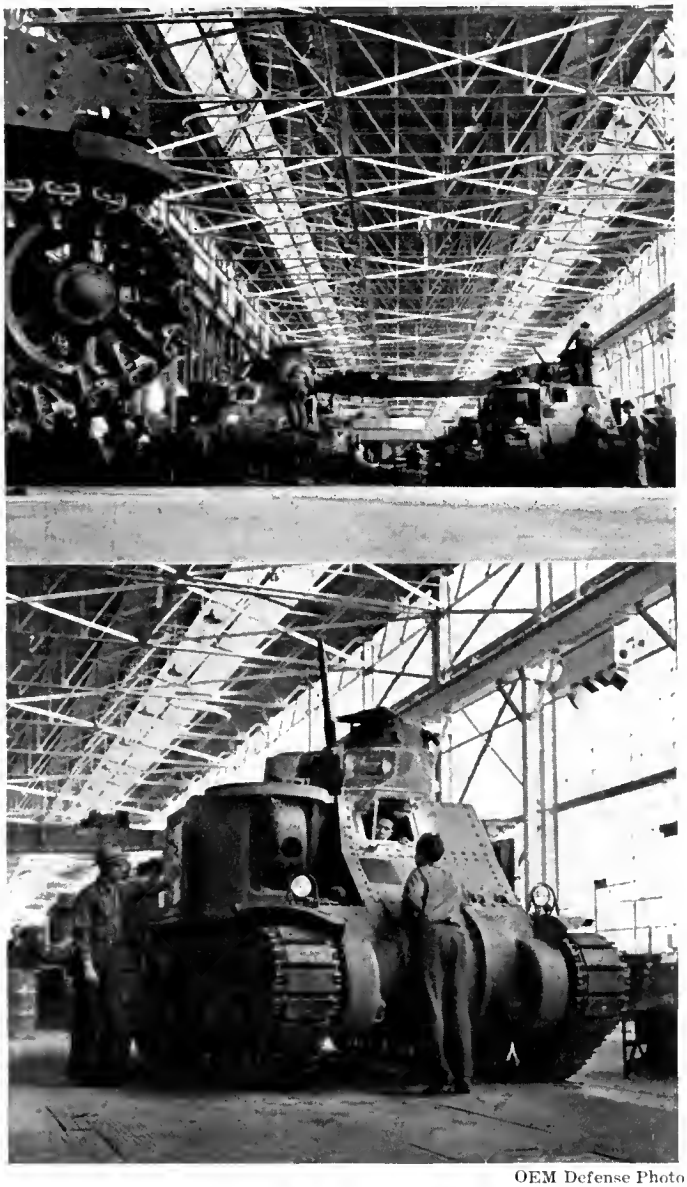
See an authorized visual education dealer for a preview

The JAM HANDY *Organization*

Educational Sound Pictures • Slidefilms • Vocational Training • Visual Aids

★ New York	★ Washington, D. C.	★ Detroit	★ Dayton	★ Chicago	★ Hollywood
1775 Broadway	Transportation Building	2900 East Grand Boulevard	Talbott Building	230 N. Michigan Boulevard	7046 Hollywood Boulevard

A Program for War Film Use



OEM Defense Photo

Mass assembly lines in the Chrysler tank arsenal.

A concrete and soundly practical program whereby the school field can serve the war effort by promoting the maximum use of available films.

PAUL C. REED
Head, Educational Division
Bureau of Motion Pictures
Office of War Information,
Washington, D. C.

"THE democracies have a good story to tell and they ought to tell it. OWI is telling it, and will tell it in increasing volume . . ." This was in part the answer of Elmer Davis, director of the Office of War Information, to a question put to him by a newspaper interviewer about OWI plans.

The Bureau of Motion Pictures of the Office of War Information is using the potent motion picture medium as it has never been used before to aid in telling the good story about the democracies. The importance of the non-theatrical audience—the audience to be reached by the sixteen millimeter motion picture —has been recognized by the Government. A comprehensive plan for the production, distribution, and utilization of 16mm informational war films, not only has been outlined, but has been put into operation.

Each month, through the Educational Division of the Motion Picture Bureau, new motion pictures are being released. These are pictures about the war and the war effort. They are the facts about the war effort. They reflect the basic "truth" policy of OWI which, as stated in Elmer Davis' words, is that "We stick to the truth, for we believe the truth is on our side."

Motion pictures that tell the truth about the status and progress of our war effort are being produced and released specifically for the non-theatrical audience. What are the facts of our war production? What are our raw materials problem? BOMBER, TANKS, and LAKE CARRIER are the titles of pictures already released to answer such questions.

New motion pictures about production goals, about what science is doing in industry, and about our vast power resources are "in the works." What are citizen groups doing to help the war effort? DEMOCRACY IN ACTION is a picture telling how the farmers are dealing with their war time food production problems. COLLEGES AT WAR, soon to be made available, tells what serious minded college groups are doing as they readjust their programs to an all-out war effort.

What can every citizen do to help? SAFEGUARDING MILITARY INFORMATION, produced by the Signal Corps is a picture which dramatically tells one thing that every citizen can do. Pictures are in the making which emphasize every citizen's contribution to the

Still from the OEM film, "Lake Carrier."

conservation, salvage, nutrition, price control, and manpower programs. These are the home-front pictures.

This is a fighting war and a united war effort. There will be pictures of our armed forces; their enlistment appeals, their training accomplishments, and their success in combat. There will continue to be pictures released about our allies. The British-produced TARGET FOR TONIGHT is one of the most authentic and stirring pictures of air force operations to come out of the war. The United China Relief picture, WESTERN FRONT, emphasizes with the drama of reality the role that China continues to play in our war against Japan. The Bureau of Motion Pictures of the OWI is telling the facts about the democracies at war. It has planned and is executing a program which will aid in developing an intelligent and informed understanding of the war effort and what every American can do to help.

Significant motion pictures are not only being produced—they are being distributed through existing 16mm channels. A large quantity of duplicate prints is being made available and these are being placed with commercial film rental agencies, university and other educational film lending libraries, city visual departments, and other established outlets. The Motion Picture Bureau will place the films with agencies already actively serving users of non-theatrical films, so that pictures can be obtained through usual sources. Distributors selected to carry on this essential job have been enthusiastic and energetically cooperative. They are keeping film users informed of latest releases; they are speeding up their service; and they are seeking maximum use from every print made available.

How can schools make best use of official war films? Are these "classroom films"? No, they are not classroom films. Although some subjects may correlate well with classroom instruction, their most important use will not be through curricular correlation. Government war films will have greatest school value in secondary schools. Film content and war information objectives will have most meaning for junior and senior high school students. Auditorium programs and specially planned extra-school meetings, in which war films provide the basic information for forum discussions or later discussions in classrooms, is an ideal way to use these films.

R.A.F. pilots appearing in "Target for Tonight."

OEM Defense Photo

Joining wing and nose to a Martin Army Bomber.

Those who are responsible for planning film use in schools therefore, have a particularly important job to do here. Just showing any three or four films on a program will not provide for maximum values. Careful selection should be made of films from many sources related to some specific problem or area of interest for each film program. Government films need not be used alone to make a program. War information meetings could be a regular part of every high school's activity. Why not a weekly or bi-weekly forum discussion on "What Can We Do To Help Win The War?" or "What Are We Fighting For?" or "The Nature Of Modern Warfare." Motion pictures would provide an authentic and interesting background for such a series of meetings.

Important as it is, the in-school use of non-theatrical

(*Concluded on page 255*)

Visual Education Serves a City In Wartime*

The functioning of educational films in the present emergency portends a greater future for visual education.

JULIAN LESSER, Chairman
Los Angeles Defense Council Film Bureau

WORLD War II opened the curtain on the educational film to the national audience. Until the outbreak of hostilities in Europe, American visual education had largely been confined to the classroom and the sales meeting. Today, visual education is playing a vitally important part in our war effort in instructing, informing, and fortifying the morale of our people. The War alone did not bring this about, however. Visual education was standing in the wings, more than ready. The national emergency found this able performer had so perfected itself since the last War that it could carry these large responsibilities.

The medium was ready for the great tasks to be imposed by the new War. What the War brought about were certain conditions which *demanded* the use of visual education.

1. The new type of warfare introduced by Hitler—total war—required that the enormous masses of citizenry be quickly acquainted with methods of defending themselves. No medium but films could so effectively, so rapidly, and so economically acquaint our people with these methods. Thus the current production of OCD films.

2. The armed forces and war workers similarly had to be quickly trained in the technical science of warfare and production. Thus the huge film programs of the armed forces, and the U. S. Office of Education series.

3. Our people had to adapt themselves to new philosophies of life. Films illustrate these new philosophies, and help harden our will in the morale type of picture. Thus the OEM program ("Women in Defense," "Bomber," etc.).

4. Away from our shores, our allies and potential allies must gain a true picture of our sincerity, our power, and our determination to win. Hence the film activity of the Coordinator of Inter-American Affairs.

*Presented before the 1942 Visual Education Conference, Claremont College, California.

National Coverage by OCD Films

Of all war films, the Office of Civilian Defense subjects will reach the largest audience in the U. S., probably all but the infants, the aged, and the infirm. The program contemplated will cover first the entire OCD voluntary corps, or 8,000,000 workers, as stated by Lt. Col. Walter O. Burn, former Chief of Training. The voluntary corps, if they follow the standards set by certain local workers, will cover the country neighborhood by neighborhood.

In one week, Mr. Gledhill, a Community Air Raid Warden for Hollywood, reached 7,000 people, three-fourths of his district, with continuous showings of training films at the Chamber of Commerce Bldg. The plan was executed by the 814 defense volunteers of the district. Would it be out of order to assume that a considerable proportion of the students and teachers of the country will see OCD films in their classrooms? (Others among you can supply a more detailed answer than I). The vast theatre audience of the country will receive OCD films in a program that is already under way. Over 13,000 theatres have pledged their

Women on the battle-front of science — experimentalists in the world's largest research center, Beltsville, Md.

(Scene from "Women in Defense", OEM motion picture.)

screens to the War Activities Committee of the Motion Picture Industry for the "dating" of war films.

According to Dr. Gallup, 32,000,000 of our people seldom attend theatres. A large segment of them will be reached by OCD films under a "public availability" service, such as supplied by the Los Angeles Defense Council Film Bureau. Under this plan, all types of community organizations have the privilege of borrowing films and projection facilities for their meetings. Now Mr. 32,000,000 may not be a movie fan, but he is usually a member of some kind of organization. In this highly complex modern society, everybody belongs to something. If he is not a Mason, he is an Elk; if neither, he has a grange card, a union card or she has her reading club or service group. Both men and women have their company associations, and of course, their churches. The program chairmen of these varied groups are constantly on the alert for material to present to their meetings, particularly in wartime. Be assured that in Los Angeles, this service is gaining wide usage.

Visual Education For Civilian Defense In Los Angeles

Let me now describe in some detail the Civilian Defense use of the educational screen in Los Angeles. On December 8, 1941, Visual Education was a highly important guest at the Civilian Defense party. On the one hand were the public and volunteer workers clamoring for authentic information and practical training methods on what to do, and how to do it! On the other hand was visual education, able to answer most of the questions, and ready with a score of films to answer them immediately. But the location of these films was a mystery only an expert could solve, and the means to project them was an even greater mystery. In short, there was the universal demand for screen education, and there was a supply of films, projectors, and operators. But liaison between the two was non-existent, and over all lay the problem of feasible financing.

To face these problems and supply the answers, the Defense Council of the City of Los Angeles authorized the creation of a "Film Bureau," under its Morale and Public Relations Committee. The Film Bureau is devoted exclusively to the educational film.

The financing problem was quickly settled. An invitation to leading business men and executives in Los Angeles resulted in an overflow meeting at which films were shown and the plan presented. Enthusiastic approval followed, the financing was underwritten by the business group and the Film Bureau was able to conform to Defense Council policy of not handling any money.

The Film Bureau first proceeded to comb every film list we could lay our hands on. We found scores of valuable films available, all the way from the local OEM office to the British Ministry of Information in New York City. Of all, these were selected for immediate service in Los Angeles: FIGHTING THE FIRE BOMB, LONDON FIRE RAIDS, SAFEGUARDING MILITARY INFORMATION, WAR AND ORDER, STOP THAT FIRE, WOMEN IN DEFENSE—and the entire OEM list.

There were roughly 275 sound projectors in the Los

Courtesy Bell & Howell Co.

From the British film, "London Fire Raids."

Angeles area divided into three main groups: the preponderant group owned by the Public School system, a large group in the hands of commercial firms and institutions, and a group scattered among private individual owners. The use of school projectors was facilitated by the fact that most Civilian Defense meetings are held in school auditoriums, by design of the founding fathers of OCD. Those projectors could be borrowed by proper application to the Board of Education. The remaining projectors were registered into a voluntary pool, under Mr. Walter Evans, a professional volunteer, as Director. He also pooled experienced volunteer operators, and is preparing a course to train additional volunteer operators with the aid and cooperation of the school system.

The Film Board took the policy of being a service organization, supplying the needed liaison between demand and supply. That is, we stocked and facilitated the showing of the above films for the Wardens, Auxiliary Police, etc. We did not initiate their exhibition; we did not cover the city with each film in a rigid program. Rather we arranged showings at the request, and under the direction of the Defense Officials. This was important, because it enabled the Police Department and Fire Department, for example, to coordinate the films into their own training program.

Within the first four months of operation the Film Bureau supplied 419 bookings to a total audience of approximately 116,750. These figures can be broken down as follows: Civilian Defense Corps Units accounted for about 60% of bookings and audience; Los Angeles Public Schools (Students, Teachers, PTA), for 20% of bookings and 28% of audience; General Public (Private Schools, Clubs, Organizations, etc.), for 20% of bookings and 12% of audience. This circulation will be increased, and we anticipate reaching everybody who should be reached in Los Angeles County within two years or less, unless a speedy end to the war terminates the Film Bureau function. Ultimately the largest audience will of course be the General Public, once our machinery is in operation. Such results are a tribute to the power of the educational film. The above circulation was accomplished, mainly, with only 18 prints!

Under the system of allowing the group captains to call for the films one day and return them the next, we find that our prints of FIGHTING THE FIRE

Gauging anti-aircraft shells for the Navy, preparatory to packing.

(A scene from the OEM film, "Power for Defense")

BOMB were in use practically every single day since January 14. By close planning, one print worked four times one day. And still the demand remained large, uniform and rapidly growing. Therefore, we made no public announcement of the service of the Bureau, feeling that such announcement would treble and quadruple the demand for our prints, a demand which we could not satisfy. Our first obligation was to the Defense Corps, whose showings must precede the general public's. So we delayed publicity until such time as we should have sufficient prints and projection service to satisfy the general public demand. As of this date, we have not reached that point. The demand still greatly exceeds the supply.

School Cooperation

The schools of the country have an integral relationship with War screen education. Schools are the logical meeting place by virtue of their geographical locations, for Civilian Defense meetings. The public school is a municipal institution, supported by everybody's taxes. Conversely, in the case of War films, the cooperation of the schools is essential because of their locations, their possession of projection equipment that is unused at night, and their ability to furnish trained instructors and operators. A school meeting is psychologically more effective for Mr. John Doe when he comes to learn. Old reaction patterns are recalled, and he absorbs more than if he were to meet at his Club house.

There is a public relations feature too, for the schools. The adult visitor appreciates the more the facilities which the school affords him. Any posters or exhibits he sees as he walks down the corridors are not lost upon him. We found a familiar use for films that is rather important to civilian defense. A film gives a group leader concrete matter around which to build a meeting, and meetings are the essential means of community organization. In this connection, any relevant film will do, be it newsreel, documentary, official appeal, or instructional.

Personal Suggestions

There are some personal thoughts I bring to this gathering. In these, please understand that my approach is colored by my professional activity in "the movies".

1. Could a survey be made of the time saved in America's war effort by educational films? They say that films cut the time of training a welder by 25%. If 20 ships are built in a week then possibly films will deliver 20 extra ships to the country every fourth week. When we win this terrible war, we should know in black and white, the film's contribution to our victory.

2. How about a series of annual awards for excellence? Almost every line of endeavor has such. Newspapers have their awards of merit. Hollywood has the Academy Awards. Such awards would promote the standards of educational films, encourage advanced effort, and attract ambitious people into the field. There could be awards for the best treatment of a mechanical problem, of a philosophical problem, of the use of animation, etc. Could some recognized institution do this? No emoluments would be necessary.

3. A new understanding is arising between the theatrical and non-theatrical motion picture industries. Now, largely because of the war, Hollywood at last appreciates the merit of the educational and documentary film, and its makers. At the annual Academy Awards Dinner, held last February, a special category was created for a documentary. Even prior to this, the "March of Time" had been awarded a statuette. I recall that two prominent documentarians, Mr. Pare Lorentz and Mr. Herbert Kline, have been employed to devote their talents in the film capital.

The Research Council of the Academy has undertaken an immense program of training film production by all studios for the Army Signal Corps, which will include about 100 completed subjects. Since every studio participates, there will be a group of people experienced in educational production, spread uni-

formly throughout Hollywood. We can expect great contributions from them to the educational screen under the Academy program and in the future. Mr. Walt Disney has deeply interested himself and his firm in the educational medium, and has already made great contributions in technique. Every studio will make a part of the 26 war shorts programmed by Mr. Lowell Mellett, Coordinator of Government Films. Unquestionably this program will advance the educational film. It is expected that Hollywood will help shape the production of OCD films and further contribute thereby.

As for the theatres, they are according the war educationals signal honors, by donating their screens to play them. And then, a miracle was recently wrought: a sponsored film got in, in a big way. The Weyerhauser Lumber Company half-hour educational was booked into the entire Fox West Coast Theatres circuit. The door is now wide open for other sponsored subjects to follow.

On its part, the educational field is realizing first hand, the matchless technical proficiency that Hollywood has attained. The field is also understanding the lore of mass appeal, which is the special ability of the screen center. The educational field can aid the theatres by showing the country its War films outside the theatre, in the OCD meeting, in the classroom, and in the group meeting. Theatres are being asked to play an increasing number of non-theatrical films, which are bound to become somewhat of a burden. Sooner or later, the theatres will cry for relief and visual education can take over.

As a matter of fact, the theatre may not be the place for a needed war educational film. Mr. Citizen must pay to get his knowledge if he is to see it in the theatre. The subject must be tightly condensed, because the average audience will only sit comfortably for a limited period, and time must be allowed for the feature attractions. The production must be slanted for entertainment, because that is why Mr. Citizen goes to the theatre; entertainment is not always possible in a grim documentary. Mr. Citizen is not always in a mood to be taught in his cinema palace. Who has seen "Fire Bomb" in a theatre? I did, and when our hero stalked the incendiary into the parlor, giving us a superb view of his posterior, the audience howled.

But there was no reaction of laughter to "Fire Bomb" in any non-theatrical 16mm showing. The groups met for a serious purpose; their attention was sharp; there was time for detailed explanations and questioning; the film could be repeated; and interest was high. The theatrical and non-theatrical fields are active in different medium—the one in entertainment, and the other in instruction. A good rule of the thumb is: theatres bring people to the screen; visual education brings the screen to the people. But these two entirely different forms can be, and are of immense aid to each other.

4. Could a less unwieldly name than "visual education" be found? A good nickname would do it. The "Motion Picture Industry" identifies itself as such only in speeches and in financial reports. Otherwise, it's "the movies", and they have gone a long way on that name. "Audio visual aids" is a technically correct term, but you could slay a dragon with it. Some simple name to express visual education, and all the various complicated synonyms, acceptable to all in this field, would be a rallying symbol to all so engaged.

In conclusion let me say that America, and our allies, can be proud of visual education. When war needs called, the response was prompt, and the service great. But the medium has a responsibility to continue even more effectively those particular jobs wherein no other medium will suffice—in training, informing, and fortifying the morale of an entire people. Every worker and student in the field must stick at his task like a soldier, that visual education may attain these ends, now so vitally important, and be continued to further peaceful intellectual and cultural progress after the War. The way is bright for an illimitable future of service and advancement to all.

A Program for War Film Use

(*Concluded from page* 251)

war motion pictures is only a part of the total program for their use. Schools have responsibility for developing a community-wide use of war films. Adults need and want authentic war information just as much as do high school students. Schools can make that opportunity available to adults in two ways: by planning special film forum discussions in school for community attendance; and by providing film, projector, and operators for adult meetings outside of school buildings.

In the past several years schools have increasingly taken their place as centers for community cultural activities. What better opportunity could a community provide for a regular series of discussions on the status and progress of the war effort than the use of the town or district high school? What better medium than the motion picture could be found for bringing adults together in school meetings and presenting the facts interestingly and realistically.

Besides seeking to serve the whole community, the schools have increasingly recognized the educational importance of providing opportunities for students to share in community activities. Most high schools now have a corps of pupil projectionists who operate motion picture equipment within the school. Alert school superintendents and principals will readily recognize the desirability of making films, school projector, and student operators available to women's groups, fraternal, and business men's meetings, especially when projection equipment and service is not otherwise available to these groups. Here is a chance to serve and serve well.

We know that the American people want to be informed and intelligent about the war effort. We know that every citizen wants to do his part. We know the power of the motion picture to inform and educate. We have motion pictures that will aid in winning the war and we shall have more pictures in increasing quantity. We have in this country more than twenty thousand 16mm sound projectors to be mobilized for war work through the initiative of those who own them. We have an organized national film distribution system to provide films wherever they can be used. Now we need the combined intelligence of all workers in the field of visual education in making maximum use of these resources to help win the war.

Planning for Improved Use of the Flat Opaque Picture in Teaching*

ELLA CALLISTA CLARK
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After actual school visitations the writer concludes that schools could greatly improve their instructional use of visual aids, and with but little expense.

One of the drawings from the Informative Classroom Picture Series on "Clothing Long Ago".

IT is conceivable that these critical times are far from being detrimental to the expanded and improved use of visual aids. Rather, this may represent a remarkable opportunity to make telling progress in certain important areas which have been too long neglected. Along this line, school visitation reveals that the flat opaque picture is not being used nearly as effectively as its potentialities warrant. Yet the ready availability of this powerful teaching tool is not impaired by the existing crisis. Accordingly here is an excellent opportunity for every teacher to effect a rich improvement in teaching efficiency.

Our magazines and newspapers, for eample, increasingly recognize the necessity of supplying pictures with reading matter to portray ideas. Almost immediately after a spectacular event our newspapers convey the facts to us with pictures of the important factors in the incident. Similarly, in teaching we are attempting to present ideas, and pictures are an even more powerful tool for the child than for the adult since the child has but limited experience.

As a result of a first-hand survey of school visual education programs, the writer here attempts to bring together some of the major considerations which, if they are kept in mind, should materially increase the effectiveness with which flat opaque pictures are used for instructional purposes. Teachers frequently maintain that they have never had these techniques presented to them and they wonder why not. Unfortunately, some persons responsible for teacher training (in-service training included) assume that because a teaching tool is not relatively new, teachers need not receive specific training in its effective use. A dentist, for example, has actual practice in handling efficiently every tool he needs to use in his professional career, why not teachers? Noteworthy, too, is the fact that application of these suggestions is possible with but very little expense; the will-to-do is the essential requisite. And the dividends the effort pays are rich indeed.

With any teaching tool it is necessary to keep in mind that the tool itself possesses no magic. The skill with which it is selected and used, determines its effectiveness.

If teachers are to make optimum use of pictures, there are several things they need to keep in mind. In the first place, a teacher must be skilled in the selection of educationally worthwhile pictures. This entails a knowledge of criteria of selection and practice in applying such criteria. In this connection, Miss Lelia Trolinger has made a valuable contribution in her study *Evaluation of Pictures for Instructional Use* which resulted in the development of a set of standards by which to judge pictures according to technical and instructional quality. It is as follows:

Technical quality—40 *points*—Artistic; clear and definite; free from blemishes; of practical size; properly colored.

Instructional quality—60 *points*—Truthful, authentic; relevant; significant; stimulative; suggestive of size.

*Address delivered at Denver, June 30, before the summer meeting of the Department of Visual Instruction of the National Education Association.

Teachers who, with the aid of the suggestions incorporated in Miss Trolinger's article (EDUCATIONAL SCREEN, April 1939), are trained to use such a score card, show a high degree of skill in ability to evaluate pictures. They get to "know gold" when they see it. And this is essential, for in general, pictures represent a wide range of value; some are of excellent quality, and some few are useless. Therefore, skill in selection becomes of major importance.

Sources of Pictures

There are on the market several collections of pictures organized for instructional purposes. For instance in social studies alone there are several sources of valuable materials. To mention a few, Informative Classroom Picture Publishers, Grand Rapids, Michigan, offers through its Picture Reference Library, many sets of fine, well-authenticated, original drawings, with functional texts prepared by teachers to enrich pupil understanding. The Visualized Curriculum series of carefully selected photographs and accompanying study guides, published by the Creative Educational Society of Mankato, Minnesota, is another valuable addition to the equipment of the elementary school. The F. E. Compton Company (Chicago) picture units also contain valuable pictures organized with guides for teaching purposes. A very recent addition to the supply of flat pictures for teaching use, is a set of photographs included as part of a series of Kits of Visual Teaching Aids, prepared under the guidance of an outstanding teacher advisory committee, and produced and distributed by Foley and Edmunds, 480 Lexington Avenue, New York City.

One picture source worthy of special mention consists of such illustrated periodicals as the National Geographic Magazine, Travel, Asia, Nature Magazine, rotogravure sections of newspapers, and other current magazines.

Besides, several up-to-date sources of free and inexpensive pictorial materials are available. For example, The Educator's Index of Free Materials which is frequently revised and the list published by Bruce Miller, Ontario, California are decidedly helpful.

Care of Pictures

If a picture is worth using it is worth mounting, labeling, and filing. For filing, a standard-sized mount for all pictures should be adopted. Careful trimming and artistic mounting greatly enhance the value and life of a picture. A durable material is essential for mounting, as pictures must be handled often to be be of real service. The best quality of a colored picture is emphasized by a mount the color of which harmonizes with the predominant tone of the picture. However, for school purposes, gray accommodates most pictures satisfactorily. After the picture is trimmed and the title removed, to be placed on the back if desired, it should be pasted smoothly with a good quality paste and placed on the mount so as to leave a wider margin at the bottom. The size and shape of the picture will determine the top and side margins. Immediately after mounting, the picture should be placed between two pieces of stiff cardboard and dried in a press. Consistently labeling each picture in the same upper corner (right or left) greatly facilitates filing. Many prefer to place such a label on the back of the mount so as not to detract from the appearance of the front.

If pictures are to be available when needed, they must be filed systematically. No scheme of filing seems perfect for all materials. However, many favor the vertical file because it is simple, practical, and economical. Inside dimensions of 15½ inches wide and 10½ inches high will accommodate most materials. Ordinarily the classroom teacher finds it advisable to classify material according to subject and then file it alphabetically. The straight dictionary arrangement is gaining in popularity because of its ease of use. If one does not have a vertical file, individual folders, the backs of which are labeled are convenient for filing. These can be arranged on shelves in alphabetical order if desired. In the same way some teachers find cardboard boxes of uniform size very usable. However, for a permanent collection, the vertical file drawer is the most satisfactory as it permits ready expansion and means economy of time for the busy teacher. Many such excellent files now in use began their existence in a humble orange crate, therefore expense is no deterrent to proper filing. A well organized catalog which lists the filed pictures might well hang beside the file to facilitate ready location of pictures.

Use of Pictures

Teachers who recognize the tool aspect of pictures in instruction avoid cluttering up their rooms with too many pictures. Instead, they carefully select a few well-mounted pictures designed to serve a specific learning purpose, use them in a manner which seems to be psychologically sound, and when they have served their purpose, remove them promptly.

Using too many pictures in one lesson may be a great waste of time too. First of all, the interest

Courtesy Virginia Conservation Commission
Palace of the Royal Governors, Williamsburg, Va.

Courtesy U. S. Department of the Interior

Temple of the Sun in Carlsbad National Park

span, especially of young children, is very limited Besides, scattering attention over many pictures none of which is thoroughly studied may lead to superficial thinking. Rather, choose carefully a few particularly significant pictures and use them skillfully as a teaching tool just as any skilled workman uses a certain tool for a specific purpose.

Use of pictures unsuited to the mental level of the child may defeat one's purpose by adding monotony rather than interest to the lesson. No child gains a feeling of satisfaction with materials which fail to challenge his interest and understanding.

Finally, and most important of all, the picture must fit a specific teaching need if its inclusion in classroom procedure is justifiable. The picture must be effective at this particular stage of learning, and it must serve a definite end satisfactorily. Furthermore, if students are to read pictures intelligently, they need to be trained to do so. At best, the flat picture is but a representation and therefore lacks many elements of reality. A person who completely and accurately interprets a picture must be able to read into the picture the important elements which it otherwise may fail to portray. Among these are size, distance, color, motion, weight, sound, speed, odor, and moisture. Much money and effort are now being expended in supplying improved pictorial materials in textbooks and other teaching aids, but if these highly promising learning aids are to function satisfactorily in the learning process, students must having training in how to interpret them. On the other hand, teachers keeping in mind the limitations of flat opaque pictures will realize the importance not only of using well-selected significant pictures of superior quality, but also of supplementing the pictures with more realistic visual aids such as the excursion, exhibit, model, specimen, and museum collection as well as the stereograph and the motion picture.

Methods of Showing Pictures

The bulletin board affords a most convenient means of displaying pictures. A few well-mounted pictures carefully selected to fit a specific purpose can be made to function very satisfactorily when arranged artistically on the bulletin board. Pupils will develop the habit of observing the bulletin board if material displayed on it is constantly used in class discussion. At times, it is helpful to direct a child's observation by writing under a picture a question or suggestion which stimulates intelligent interpretation. In order to be of optimum value, the bulletin board must be kept up-to-date by having the material on it changed frequently; otherwise interest in it will not be kept alive. It is not necessary to have an expensive cork bulletin board; a very satisfactory one may be made of beaver board or a piece of corrugated cardboard covered with wrapping paper is a good temporary bulletin board. Therefore, no teacher need be without this aid to teaching because of the expense involved.

The opaque projector gives superior satisfaction in the use of pictures for group discussion since the projected picture is large enough so that all pupils can see it easily; consequently, it is possible to focus the attention of the entire class upon the subject discussion. The opaque projector permits the use of post cards, drawings, photographs, pages in a book, written work, and various small objects in a size visible to all. It reproduces color accurately on the screen, and the material projected appears well defined if the room can be adequately darkened. In selecting an opaque projector, one must make sure that it represents the best now available, as there are some still on the market which give but poor visibility and are not equipped with ventilating fan. The lens should be of a size which facilitates placement of the projector the desired distance from the screen. The best results seem to be obtained with front projection on a beaded screen. A cardboard folder with a 6" x 6" window cut in one side facilitates use of clippings from periodicals in the opaque projector.

Sometimes a teacher finds it satisfactory to have a group of pupils gather around a picture in a semicircle while the picture is being discussed. If the picture is large enough so that all can see it easily, this method serves very well.

However, the ingenious teacher who realizes the compelling power of pictures as an instructional device will find a way to use them despite apparent lack of equipment, and conversely no amount of excellent equipment will guarantee effectiveness of use unless the classroom teacher is sufficiently motivated to make the careful preparation necessary to success in using pictures.

MOTION PICTURES—NOT FOR THEATRES

The first detailed non-theatrical history resumes with Installment 39, relating how Harvard University undertook to open bottlenecks that hold back the films in education.

By **ARTHUR EDWIN KROWS**

THE Chronicles project of Yale may have encouraged the idea, or possibly it came about merely because Philip Davis of Boston, an A.B. from Harvard, was also a motion picture producer and distributor. Anyway, about 1924, while the Chronicles of America Picture Corporation still made films, Philip Davis returned to his Cambridge *alma mater* and tried to persuade those in charge to enter the business.

His proposal was attractive, especially as it seems that he did not call for a sum remotely approaching a million dollars. I do not know the details, but it is probable that the scheme had points in common with his enterprise then recently stopped by the Boston *Post,* involving films produced in coöperation with industry. That a joint effort of this sort could be carried on with dignity had been proved conveniently by the experience of the National Government, notably the Bureau of Mines, and by that of Holley's Civilian Bureau of Commercial Economics. In the circumstances, better not say too much about the unhappy episode of the *Post.*

The Harvard Corporation toyed with the idea, learning thus that here was one way in which a University film program might be built up inexpensively, but did not do much about it. At the same time there did appear presently, some educational subjects informally known as "Harvard University Pictures," produced "in coöperation with" several leading manufacturers. The subjects included one on cotton, made by the Nashua Manufacturing Company of Boston; one on sugar, made by the National Sugar Refining Company, and another on food distribution, financed by the Great Atlantic & Pacific Tea Company. But this effort soon died out.

As a matter of fact, institutions of such size as Harvard University do not act, as a rule, upon first suggestion. Like the large ponderous foundations which William Harmon used to contrast so disadvantageously with his own conception of a small mobile one, they dare not move too quickly; whatever they attempt must be considered at length in advance to protect the complexity of their parts. So the Harvard officials listened to the glamorous first propositions as they came, and made no serious commitments. They just looked and listened. It is not improbable that they, themselves, may have conceived spontaneously the idea of making pictures. The suggestion was in the air. It was a time when the visual thought was uppermost in pedagogical circles throughout the nation. Wallace W. Atwood, professor of physiography at Harvard, had joined the board of directors of Harley Clarke's Society for Visual Education in 1919, and had personally appeared in a specimen teaching film. But despite the rush of other institutions of learning to command this new screen medium, there was something to be gained by waiting. The longer they waited, the more clues they received through somebody else's costly experience, clues to the advisable way for a well disposed University to join the movement with dignity and effect.

John Harvard and John Haeseler

AT about the time of Professor Atwood's significant step, while he was still teaching at Cambridge and before he became president of Clark University, there was an undergraduate at Harvard who was extraordinarily interested in visual education, and who was destined to affect Harvard's participation in a remarkable manner. He was John A. Haeseler. Member of a comfortably situated family, he had been able to travel widely without pressing distractions—just a short time before he had returned from a year spent in China, Mongolia, Japan, Korea and the Philippines—and, with a lively sense of the deeper differences between races, he had decided to major in anthropology. Having a correlative desire to pass along what he knew to the rest of the world, he decided upon motion pictures as the effective vehicle.

Few educators seeking to use pictures have had the patience or the willingness of John A. Haeseler to learn film limits and facilities.

For a time he sought to obtain the backing of George Eastman, who was then sojourning in Florida, for the production of a series of films on the races of mankind, to be sponsored by the Harvard Department of Anthropology; but although that proposal was not finally declined, the delay in hearing a decision was too long for an eager young man to wait. It is interesting to know that he decided to master the camera for himself on the advice of Dr. George A. Dorsey, who had produced many travel films, including the notable ones in Prizma color. Dorsey, with a strong sentimental interest in any Harvard enterprise of this kind because he himself held the first Ph.D. degree ever awarded by that University in anthropology, had told Haeseler a sad tale about being held back in his film undertakings solely because he had been at the mercy of his cameramen. Haeseler must never, he warned, permit that handicap to exist for himself.

Just before his own graduation from Harvard, Haeseler came to New York on a tentative inquiry as to where he might learn the mechanics of photography. Chance brought him to the office of the remarkable Mrs. Edith Dunham Foster of Community Pictures, who was then about to join Paul Smith at the American Motion Picture Corporation. She received him with her characteristic cordiality and introduced him to William Brotherhood, who was to become production manager of the new concern. He also was friendly and invited Haeseler to become a nominal assistant that he might study production under practical conditions.

Graduating then from Harvard, and pending an intended further study of anthropology at Oxford, Haeseler displayed his determination to prepare thoroughly for his life work by coming to New York to study how to operate a motion picture camera and to see what steps were necessary in the proper processing of films. This learning was done under qualified instructors. Importantly, too, he made a personal survey of the concerns which were producing the so-called educational pictures.

Shortly after his graduation at Cambridge he had gone to Chicago to call upon Nelson Greene, editor of *Educational Screen,* for guidance in this matter. That kindly gentleman has left upon record his real enthusiasm for Haeseler and Haeseler's ambition which then was to build a library of superior films on human racial stocks, acceptable to scientists as to photographic experts. It was Editor Greene who urged him especially to see Mrs. Elizabeth Richey Dessez, who was then employed at

Pathé; and, although Haeseler could not have known it at the time, the meeting that resulted was destined to culminate, as will be related presently, in a notable association of Harvard and the motion picture industry. In this preliminary period Mrs. Dessez opened the Pathé Library to Haeseler that he might see, tentatively, if he could build up a proper anthropological film from what was there. Elmer Pearson, executive vice-president of Pathé, hearing of the plan, even volunteered to pay the young man a small compensation for his time. Haeseler eventually found himself working along the line of a film on anthropoid apes; but he discovered that the apes of the library were mostly engaged in doing circus tricks, and he abandoned that plan. Nevertheless, in his search for material he had become definitely impressed with other educational opportunities in the Pathé treasury of pictures.

In New York, Haeseler introduced himself at various non-theatrical offices. Charles Barrell, of the Western Electric Motion Picture Bureau, took a strong liking to him, and invited him to spend a week-end at his little summer place in Sugar Loaf, back of the Highlands of the Hudson. There they chatted about the field in general, and Haeseler then concluded that there was not much need to pursue that phase of his survey further when the experience could only repeat the evidence already in hand upon which his mind was by this time made up.

Several months were consumed by John Haeseler's photographic course and non-theatrical survey, and then he sailed abroad for his year at Oxford. During this pleasant sojourn he became prime mover in a student amateur cinema club, no doubt being of great benefit to his associates with practical knowledge already acquired. Obtaining his Oxford certificate in anthropology, he joined an English expedition conducted in the interest of science by M. W. Hilton-Simpson and bound for Africa. Thus it came about that Haeseler made the first film of his intended collection among the ancient Libyan tribes of the little known Berber country on the road to Biskra.

The evening of November 17, 1924, this film, cut to approximately 4,500 feet, was shown to illustrate a talk by the expedition's leader before members of the Royal Geographical Society in London. The audience was enthusiastic, and Haeseler was awarded the high honor of being made a fellow of the Society. Naturally encouraged, he followed this production with a film on Hungarian peasants and tribesmen. September, 1926, he attended the Motion Picture Congress at Paris, held under the auspices of the League of Nations, directed by the French National Committee on International Coöperation. As especial representative of *Educational Screen* he introduced resolutions that photography courses should be instituted in all colleges and universities and that amateur cinema clubs should be encouraged there, although the resolutions were presently dismissed on the ground that the Congress was "not interested in amateurs." In the light of the subsequent development and service of student motion picture production, this seems to have marked the astuteness of Mr. Haeseler and the blindness of the Congress. Anyway, in a lecture prepared for delivery before the Committee, Haeseler stated his general conclusions about educational films, and it was printed in two installments by *Educational Screen*, beginning with the issue dated December, 1926.

With this background and these accomplishments it is quite fitting that John Haeseler should have figured in the Harvard University plan for motion pictures, and that this particular theme should have materialized primarily in the Department of Anthropology. The effort was closely seconded by the Department of Geology; but this was natural, too, because geology had been Wallace Atwood's specialty at Harvard from 1913 to 1920. An additional factor to stimulate progress was provided by the Pathé Educational Film Department, which, having obtained the contract for distributing the Yale Chronicles pictures, was soliciting similar business from other large institutions of learning. Pathé knew something of what was stirring at Cambridge because John Haeseler had been reviewing anthropological material stored in the Pathé vaults.

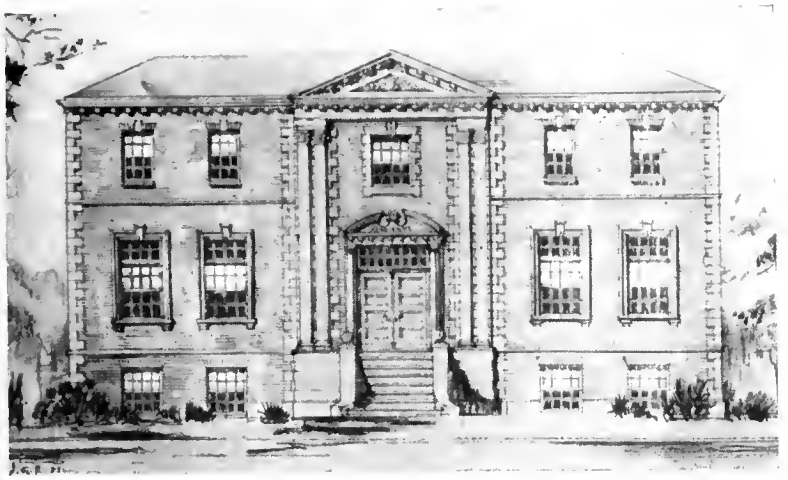
The Pathé proposal was to open this rich collection to the use of Harvard professors for the making of educational reels of various sorts. At that time the library was estimated to contain two million feet, accumulated over the preceding fifteen years. The reels included the "Pathé News," nine years of the "Pathé Review" and eleven celebrated expedition pictures, among which were named pictures of the Byrd and Amundsen polar flights, of Prince William of Sweden's African trip, of Morden's Asiatic trip and Flaherty's "Nanook of the North."

Mrs. Elizabeth Richey Dessez was at that time in charge of the Pathé department, and she is generally accredited with having closed the contract which was signed by Harvard and Pathé about November, 1927. Mrs. Dessez was assisted then, it is interesting to note, by Mrs. C. W. Barrell, who naturally had a lively interest in this development. I believe that Henry Bollman's wife was also employed there at the time. The contract was for a five-year period. It was signed for Harvard by President A. Lawrence Lowell, and for Pathé Exchange, Inc., of New York, by Elmer Pearson, first vice-president. The Harvard men were to have access to the Pathé collection for making their intended subjects—especially those pertinent to anthropology—and Pathé was given the rights to refer in its publicity to Harvard, and to distribute the resultant films to theatres as well as to schools. For needed material not yet produced, Pathé agreed to supply one or more cameramen to accompany anthropological expeditions into chosen fields.

The specific method of operation was to be simply that a Harvard committee, headed by Dr. Kirtley F. Mather, of the Department of Geology, and Dr. Ernest A. Hooton, of the Department of Anthropology, should view reels from the Pathé library, selecting therefrom such material as seemed promising, and that from this, then, graduate students from the respective departments — appointed for the purpose and working in quarters and with equipment provided in the Peabody Museum at Cambridge — should make the final assembly, subject to the approval of the committee and the President and Fellows of Harvard College. Motion pictures were not unknown to the Peabody Museum. Remember Arthur W. Carpenter, of Carpenter-Goldman? He was once a cinematographer on expeditions of the Peabody Museum. As to the profits to be made from the contractual performance, whatever should accrue to Pathé from distribution of these proposed films would be converted into a fund for making further pictures and to help finance future Harvard scientific expeditions.

But all this was still not the full plan. The winter passed and, at the end of March, 1928, a much more comprehensive project was outlined in the formal announcement of the University Film Foundation. This organization, incorporated under the laws of Massachusetts and aided by Rockefeller financing had been granted a working arrangement "with the President and Fellows of Harvard." The announcement was released to the press from the Foundation's New York office, 11 West 42nd Street, by John A. Haeseler, "one of the trustees." It was stated that the organization expected to possess its own complete equipment for motion picture production, and that Harvard had agreed to provide a site at Cambridge, where the Foundation would erect its own building, an architest's drawing of the proposed front elevation being shown in evidence. It was to have a laboratory in the basement, editorial and administrative offices on the first floor, and projection rooms and a small studio on the second floor.

The trustees, beside John Haeseler, were: Oakes Ames, curator of the Harvard Botanical Museum; Thomas Barbour, director of the Harvard University Museum; T. Jefferson Coolidge, president of the Boston Museum of Fine Arts and vice-president of the Old Colony Trust Company; William H. Claflin, vice-president of Tucker, Anthony & Company, of Boston; Charles P. Curtis, Jr., fellow of Harvard College; Edward Elliott, president of the Harvard Board of Overseers and chairman of the board of the Northern Pacific Railway; Edward J. Holmes, then director and later president of the Boston Museum of Fine Arts; Thomas W. Lamont, of J. P. Morgan & Company; Langdon P. Marvin, well known New York lawyer and president of the Harvard Alumni Association; Wilson M.



They were proud days, filled with high hopes, when the architect drew this pretty picture of the University Film Foundation's proposed home.

Powell, another distinguished member of the New York bar; George D. Pratt, Jr., son of an old philanthropist acquaintance of the reader's, treasurer of the Foundation; Dr. Edward Reynolds of Boston, and Samuel A. Weldon, vice-president of the First National Bank of New York.

The avowed aims arose from the assumption that the use of motion pictures in education had been retarded chiefly by a lack of films properly correlated with courses. The Foundation therefore planned to produce reels on fundamentals of human knowledge such as: botany, zoölogy, chemistry, physics, geology, geography, anthropology and fine arts. After these would come the subjects: medicine, public health, physical education, industry and commerce. "Eventually," said the announcement in a burst of pardonable enthusiasm, "the foundation plans to work in nearly every field of learning and human pursuit." Specialists in production might be engaged from other institutions, it was admitted, but mainly Harvard scientists would direct the work, and they would take on younger scientists to be trained in application of film techniques. From time to time they would lend their trained personnel to assist other places of learning in solving their own cinematographic problems, and there would be cooperation with individual outside scientists and explorers going on expeditions. Of course, the Foundation expected to be self-supporting, and to make its scientific and educational films available to schools throughout the country.

The research evinced in the long report prepared for the sponsors of this project was remarkably thorough; and to those who have been privileged to delve into it, it affords an illuminating and authoritative view of the state of the non-theatrical field at that time. In the prospectus issued for the purpose of soliciting funds for the enterprise, the total requirements were set at $550,000 for equipment, staff, and establishment within four years.

Nearly five years later the University Film Foundation was still in existence, with headquarters at Cambridge and a New York branch office on the 24th floor of the 42nd Street skyscraper at the address where it had opened originally. Its high objectives were far from realized, but it had something under thirty reels to offer, the best still held to be Haeseler's study of the Libyan tribes—"An Unknown Race—the Berber"—and a series on land formation from the department of geology. In the lot also were perhaps half a dozen on etching, sculpture and wood engraving made in coöperation with the Boston Museum of Fine Arts; three or four assorted on natural science; a scenic on Belgian cities; a one-reel "Brief History of Transportation," and industrial reels on cotton spinning and weaving.

When talking pictures became established, there was a spirit of renewed activity. Sound recording equipment was installed at Cambridge, and experiments in talking pictures were made with it. In 1932 Dr. Philip J. Rulon, of the Harvard School of Education, conducted some school tests of sound films in nearby Massachusetts towns. His work was done in coöperation with J. A. Haeseler, of the University Film Foundation, under the auspices of Carnegie Institute. Haeseler has continued his film work assiduously since, but, in the true scientific spirit, without fanfare. Its quality is attested by the fact that the Motion Picture Academy of Arts and Sciences bestowed a 1938-1939 short subject award upon his "Busy Little Bears," released by Paramount.

In the autumn of 1933, approximately four and one-half years after the Foundation proper had begun functioning, a survey and inventory showed that many useful accomplishments had been undertaken but only partially made, all without direct support from the University, and that all these projects might be carried to fruition with additional funds, not unreasonable in amount. It now had a well-outfitted plant, equipment costing about $18,500, with an investment of $11,500 in alteration and repair of occupied buildings, plus, of course, salaries for personnel. About $90,000 had been expended in operation and production of films, of which there now existed a fair library, value then undetermined. However, as there was insufficient financing to complete the Foundation work, it had been necessary to cut down production and the size of the staff. On the ground that the work being done was virtually all for University departments, the trustees proposed that the Foundation should be dissolved, and that all its property which was not likely to incur indebtedness should be turned over as a free gift to Harvard. The proposal evidently was a disguised plea for continuance on the original basis; but the University decided to accept the gift. Actual dissolution took place February 28, 1934, and a successive group to govern the reorganized plan took over March 1, under the name Harvard Film Service. The property in general was transferred to the basement of the north wing of the Biological Laboratories, where the film processing equipment, projection room, offices and general editorial work were established.

But the University declined to pay for more than the removal and such structural alteration as had been found necessary; so a scheme was worked out whereby the ten or more University departments which benefited principally from the operation, would contribute parts of their respective budgets as working capital. The Film Service budget was thus quickly obtained to reach June 30, 1934, and more was obtained presently to June, 1935, with a whispered prayer that the University would relent and take the Service on.

Haeseler was naturally and properly executive director of the University Film Foundation. The principal members of his staff were J. P. Bradford, Princeton '28, James R. Brewster, Harvard '25, and Dorothy Haworth, Wellesley '28. James Rollins Brewster became director of the successor concern and, after a short transitional period, the only staff member of the original group to continue. He has carried on there worthily and courageously; his interim reports on progress richly attest that.

The workers of the Film Service remained in the north wing of the Biological Laboratories until June 1, 1942, when they were evicted to make room for a huge national defense research project. However, new (if even less pretentious) quarters were found for them in the Basement-Germanic Museum, entering from Frisbie Place. It was at this juncture that Mr. Brewster found himself sole staff survivor; but he counted himself fortunate on retaining an assistant, a secretary, a bookkeeper and a projectionist.

The Service had—and still has at this writing—its own laboratory for printing and developing film, a studio with disk and sound-on-film recording equipment, and highly satisfactory editorial facilities. It does a certain amount of production work for Harvard instructors,

(*Continued on page 264*)

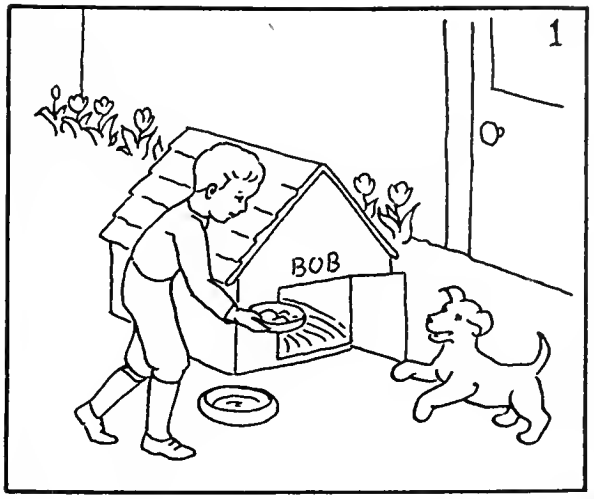
Caring for Pets—In Hand-Made Lantern Slides

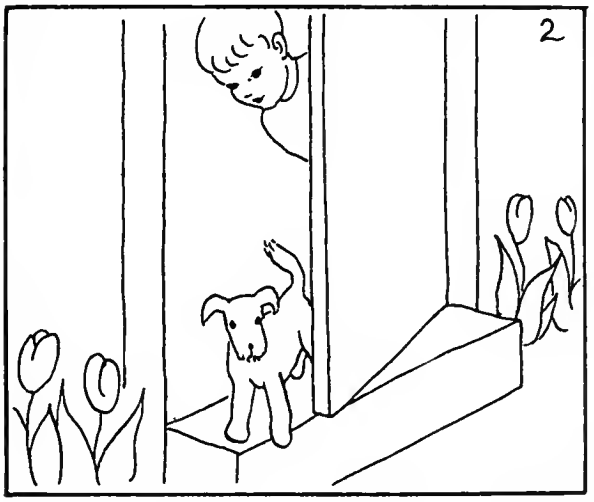
By ANN GALE

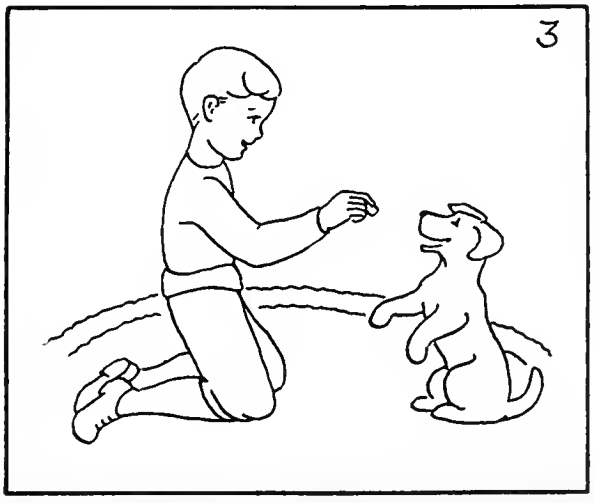
Lindblom High School, Chicago

MANY primary grade children take care of their pets very poorly simply because they know no better. An excellent lesson for them is one in which the care of pets is discussed. Hand-made lantern slides can illustrate the important "do's" in pet care.

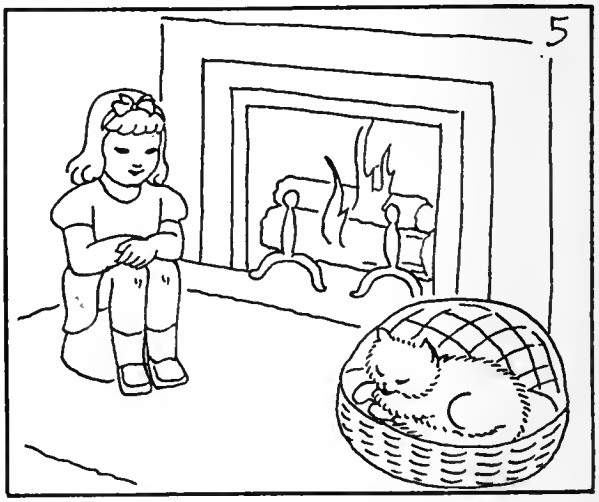
1. The dog's house should be roomy, draughtless, and placed in a sheltered position. The floor should be wooden, and covered with clean straw.
2. After each meal, take the dog outside for a short run.
3. Ignore poor behavior and reward good behavior in training any pet.
4. Kittens must be supported in both hands when you pick them up. When you take the kitten on a trip, carry him in a basket.
5. Keep your cat in the house. Put a warm sleeping basket close to the fire for him.
6. Goldfish should be kept in a roomy rectangular bowl, away from the sunlight (for the fish have no eyelids) and in a section of the room where there will be no sudden change of temperature.

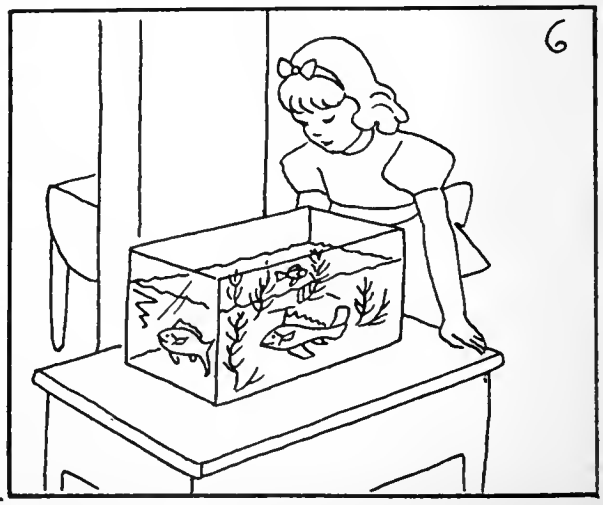






The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.





The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

ADMINISTRATION

Movies in the Rural School—Clarence D. Blair, Co. Supt., St. Clair County, Belleville, Ill. *Nation's Schools,* 30:50 July 1942.

A film program has been worked out in 100 schools of the county, divided into six centers. Twice a month all children are taken to the nearest center and a showing of about 1 hour and 15 minutes is held for all. The assistant who sets up the machine explains the program.

Films are selected to fit in with the school program. University of Illinois film library and other sources furnish films. Free films are carefully and sparingly used. Teachers receive the programs well in advance of the showings.

Parents have also benefitted from the film projector. A closer school-community relationship has resulted from the use of school-made films, as well as agriculture films.

Understanding Visual Communication—Kenneth C. Ray, Ohio State Department of Education—*Ohio Schools* 20:268 June 1942.

A summary of the status of the Slide & Film Exchange operated by Ohio State Department of Education through B. A. Aughinbaugh.

Central Texas Cooperative Film Library—T. F. Higgins, Waxahachie, Texas—*Texas Outlook,* 26—No. 7:8 July 1942.

A group of 5 county school systems and one city system (Temple) has organized a cooperative film library whereby each has contributed at least 6 films. Members keep each film for 6 weeks, so that shipping and bookkeeping are kept simple.

UTILIZATION

The Navy's Use of Motion Picture Films for Training Purposes—Lt. William Exton, Jr., Bureau of Navigation—*Journal of the Society of Motion Picture Engineers,* 38:501 June 1942.

The number of men to be trained in the Navy has increased enormously, and the number of fields in which they must be trained has also increased because of the development of new technics and material. The Navy believes that the use of audio-visual aids will be of tremendous help in this training because of the following advantages they offer: (1) standardize instruction; (2) supplement the instructor who may not have had much pedagogical experience; (3) stimulate interest; (4) contribute to morale. In addition, visual aids give a more comprehensive picture of the application of the technic than is normally possible during training.

The Armed forces of the United States are carrying the use of audio-visual aids for training purposes beyond civilian experience with these media.

The Sound Film for the Gifted—H. A. Gray, Erpi—*Secondary Education* May-June, 1942 p. 365.

Mentally gifted high school students can use sound films in studying problems in social and economic phenomena, biological sciences, physical sciences and the like.

Prison Education and the Sound Film—H. A. Gray, Erpi—*School & Society* Vol. 56 No. 1441, p. 114-16 Aug. 8, 1942.

A suggested series of 10 units in which 4-17 films (Erpi) can be applied to education of prisoners.

SLIDE FILMS

Victory Training through Sound Slidefilms—E. I. Woodbury—*Safety Education,* 21:406 May 1942.

In response to the numerous requests for information about sound slidefilms which the National Safety Council has been receiving from vocational schools offering defense courses, Mr. Woodbury reviews the sound films which are available from the Council, classified into two groups: the industrial subjects valuable for victory training or high school vocational courses; safety films for high school courses in traffic safety. The age level for which they are most applicable is given, along with a summary of the contents. Specific safety sound slidefilms from other sources are also discussed.

PICTURES

Camera as a Supervisory Aid—Phila Humphreys, Elem. Supervisor, Manitowoc, Wis., *Nation's Schools,* 30:52 July 1942.

Teachers are encouraged to have pictures made of important school activities. Thus a file of illustrations is being developed for supervisory use.

THEATRICAL FILMS

The Motion Picture in a World at War—Will H. Hays, President, Motion Picture Producers and Distributors, Inc.—28 West 44th St., N. Y. March 30, 1942.

Provides a good summary of Hollywood's activities and plans in connection with war film production.

BOOK REVIEWS

Focus on Learning: Motion Pictures in the School—Charles F. Hoban, Jr.—Committee on Motion Pictures in Education, American Council on Education, Washington, D. C. 1942 172p. $2.00

Reluctantly we learn that the energetic Motion Picture Project of the Committee on Motion Pictures in Education of the American Council on Education has been dissolved. Five years ago, under a grant from the General Education Board, the Committee began to study the functions of motion pictures in general education and to determine how best the motion picture could fit into the general education program. Charles F. Hoban, Jr., has been in charge of the project since its inception. There was much work to be done and, as evidenced by the many publications now available, much work has been done.

Focus on Learning is the summary report of the director, now serving the U. S. Signal Corps on leave from his position as Assistant Director of Visual Education for the Philadelphia schools. There was no effort to bring together all the studies carried on by the research staff, but rather a summary of the work of the film evaluation program. The bulletins* describe more fully the application of motion pictures to certain educational programs, but the summary report skims the cream from the milk in telling the potentialities of the film medium and what students can be expected to get from it.

The first two chapters of the book are introductory in nature, probably written for persons who are just beginning to consider the role of the motion picture for education. In the third chapter, "Student Reactions," there is an enumeration of the factors determining student reactions to school films. Under "bridgeheads of interest", we learn that students prefer to see in films characters of their own age, and, moreover, of their own sex. Boys like to see boys perform in the films, or men such as they intend to become. Boys and girls like to see films that deal specifically with activities or problems that are exclusively the province of one sex or the other. When activities common to both sexes are shown in a film, boys prefer to see them presented from the boys' point of view, and girls from the girls' point of view.

Similarly, differences in economic and cultural status between the observer and the characters shown in a film tend to influence the reaction of the student. With respect to attitudes toward minority groups, teachers

should know that if a film deals sympathetically with such a group the students can be stimulated into an understanding of the people concerned and a beginning made toward eliminating prejudices. But, if a film does not treat the minority group sympathetically—even if it is indifferent toward the group in relation to other activities of the film—the teacher can expect a strengthening of existing prejudice and he should be prepared to deal intelligently and forthrightly with the basic factors of this prejudice. Students like films that contain some element of familiarity; and they are influenced by their personal sense of values toward people and actions.

The much-discussed problem of films for "dull" and "bright" students is summarized as dependent on the material in the film. The author concludes that "the same film is not equally good for 'dull' and 'bright' alike. To meet the abilities of duller students, films need to move at a slower pace, more detail must be shown, transitions must be clearer, and the vocabulary and sentence structure of the commentary must be simpler. Most classroom films are not produced for the 'dull' student."

An excellent chapter is the one called "The Teacher Takes a Hand". It brings into sharp focus the fact that unless teachers are clear in their own thinking about what they expect from a film, their use of them with students cannot be the best. The description of a demonstration lesson conducted by Mrs. Lillian A. Lamoreaux is especially recommended (p.117-121). It shows clearly how far the teacher had planned to go with the film and the ways in which the children were given freedom, within this framework, to follow their interests and go further into significant study.

The summary might have gone further however, than to list the generalizations to be drawn from the 3-year evaluation program. It could have looked ahead and suggested lines along which improvements can be made. There are many opinions that the research staff can formulate on the basis of use with 5,600 teacher judgments and 12,000 student judgments—opinions which would have been received in good spirit even by those under criticism.

Here are a few questions directed at the Project staff:

Do you think that teachers should continue to use films made for adult and special audiences? Your evaluations include films made by industrial organizations, by government agencies and by public service organizations—all of wihch are not teaching films and are used as such simply because there are no others. But, should this be continued indefinitely?

What do you, and the teachers and the students really think of the films made by educational film companies? Are you willing to support any further efforts on their part to experiment in a much more imaginative way with the media of the motion picture camera and sound track? The U. S Army, for example, is trying innumerable approaches through film to given problems. The British M.O.I. short subjects, produced at great speed, all represent a willingness to experiment with image and sound. Surely we can suggest some revolutionary experimentation along that line.

In the realm of propaganda through films, would you have some concrete suggestions to make to persons who wanted to pursue your challenge that "Propagation of doctrines fundamental to America is a prime function of America's schools, and hence of films used in the schools." By propaganda we mean, of course, the term used in its broad sense to mean the "spread of a doctrine."

You may reply, justly, that these questions will need another book. Then, let us have it so we can have a directive for the future of the educational film, just as we're interested in directives for the future of all aspects of living.

Laboratory Manual and Workbook in Visual Education—M. L. Goetting—Baylor University Press, Waco, Texas. 1942 180 p. mimeo.

Here is a practical accompaniment to a course in audio-visual aids. It is not intended to replace the basic textbooks in the field, but rather to provide more detailed information about the use of equipment and the care of materials than is possible in a book of principles and philosophy.

The most helpful sections of the book are those in which explanations and diagrams are given. Much of this material is not available from other printed sources. For example, there are illustrations of the various types of map projections and samples of charts and graphs (with the pictograph unfortunately omitted). In connection with the projection equipment, there is a simple diagram of the essential parts of each type of still projector, with short explanation and photographic illustrations for each. The opaque projector, filmstrip projector and standard lantern slide projector are compared for size and usefulness. With respect to motion picture projection, there are simple diagrams to show how four standard projectors are threaded. Other kinds of information given include instructions for splicing film, caring for film and projectors and tables to show the effect on size of image produced by a change in focal length of lenses.

The section on photography is nontechnical, amply illustrated by diagrams. Throughout the book it is assumed that the information and diagrams are to serve the student as summaries, not as the basic source of their facts. Where there is opportunity to carry on these laboratory activities, this handbook should be very helpful.

SOURCES OF INFORMATION

Catalog of Films for Church and Community Use. Published by The Religious Film Association, 297 Fourth Avenue, New York City. 80 pp. 35c.

This catalog is a highly selective listing of visual materials prepared by the Religious Film Association for distribution by the denominational publishing houses co-operating in the Association, and should fill a long-felt need on the part of those church leaders who desire to increase the effectiveness of their programs through the use of visual materials. The introductory article, by Dr. Paul H. Vieth of the Yale University Divinity School, offers valuable assistance to beginners in the use of visual aids by acquainting them with the values of such aids, types of equipment to buy, and best methods of using visual aids. New ideas are also offered to the more experienced.

Over two hundred 16mm films, silent and sound, are listed, taking up over half the pages of the book. Ten pages are devoted to useful filmstrips and kodachrome slides. The films are classified according to subject-matter. The major subject-headings are: The Bible and Bible Lands, The Christian Life, Leadership Education, Missionary Education, Nature and Worship, Our Social Order, The World and Its People, Recreational Films. Films treating more than one topic are listed under other appropriate headings.

The catalog is unique in that the film descriptions give critical reviews and evaluations. Rental prices are given for each subject. Many film sources are represented, from some of whom teaching guides' may be obtained for use with the films. The "Alphabetical Index of Motion Picture Titles" in the back of the book is a further helpful feature.

Documentary News Letter, published monthly by the Film Center, London. $1.50 year. Subscriptions through American Film Center, 45 Rockefeller Plaza, N. Y.

A stimulating publication, worth reading and re-reading.

Motion Pictures—Not for Theatres

(*Continued from page* 261)

for teaching purposes and as research records. Major production, though, is small; funds are scant for that. But since 1940 the Service has made some medical films, all passed and approved by the American College of Surgeons. There is a library of 110 Erpi films and some of the Service's own, prints of which are variously rented and sold under different plans. And, of course, there is extensive and continuing projection work, using licensed operators for standard Simplex machines in three University booths.

(To be continued)

Films At Work For Victory

Below: Colonel Richard T. Schlosberg, Chief of the Motion Picture Production Division, Army Pictorial Service, is shown, at the left, discussing some of the problems about War Department Training Films with Lt. Dennis R. Williams, formerly mid-western representative for Erpi Classroom Films, during a recent visit to Headquarters Eighth Service Command, San Antonio, Texas. Lt. Williams is Visual Aids Coordinator for the Eighth Service Command, with headquarters in the Visual Aids Section of the Signal Office, Headquarters Eighth Service Command, San Antonio, Texas.

Above: From the British Ministry of Information comes this interesting picture of an 800-year old church which was turned into a community hall for the showing of war films, after the village hall had been damaged by bombs.

Below: MOVIES TEACH FIRST AID —The Civilian Defense class in First Aid at Revere Park Field House, Chicago, report great benefits from the showing of the Bell & Howell film course in "Emergency First Aid."

Above: FILMS IN INDUSTRIAL PLANTS—The U. S. Office of Education films on Machine Shop Practice are being used in industrial plants not only to train workers for specific jobs, but in general to help develop efficiency. At the Ampro Corporation in Chicago, groups of employees meet every week to view these new training films, as shown in the photograph. Workers are enthusiastic about their practical value. Even when the subjects do not apply directly to the work of every employee, they do serve to develop an appreciation of precision work. Films shown include those on "The Engine Lathe," "The Milling Machine," "The Vertical Boring Mill," "Precision Measuring," and others in the series. The films are distributed through Castle Films in New York and Chicago, and they may be obtained through Ampro Educational Dealers.

General Douglas MacArthur

A few Features that Fight for Victory

Bombs Over Burma	7 reels
Burma Convoy	9 reels
Cipher Bureau	7 reels
Flying Cadets	9 reels
Prisoner of Japan	7 reels
Special Agent, K-7	7 reels
Sons of the Navy	8 reels
Ski Patrol	9 reels
Torpedoed	7 reels

Rental Rates and Release dates furnished on request.

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Lake Carrier
Men and Ships
Power for Defense
Ring of Steel
Safeguarding Military Information
Tanks
Army in Overalls
Homes for Defense
Women in Defense
Defense Review No. 1
(Training Skilled Workers)
Defense Review No. 2
(Synthetic Rubber)

The Land W

Short Song Shorts

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Orchids (South America)
Our Neighbors Down the Road
Patagonian Playground (Color)
Sundays in the Valley of Mexico (Color)
Hill Towns of Guatemala
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Navy Department

American Sea Power
Submarines at Sea
Eyes of the Navy

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RN 16MM PICTURES CO., 705 Exchange Bldg., Jacksonville, Florida
LOUGHBY PICTURES, Inc., Suite 600, 1600 Broadway, New York City.

EXTRA SPECIAL!
"Target for Tonight"

— 5 reels —

This is one of the most outstanding films of the War. An account of an actual air raid over Germany by the Bomber Command of the Royal British Air Force. Shows details of staff planning, routine of preparing bombers, getting weather reports, instructing the crews, and take-off. From this point the camera stays with a big Wellington bomber to its destination, and as it descends to bomb the designated target amidst a barrage of enemy anti-aircraft fire. There is a spectacular explosion as tho bombs find their mark. Its engine in trouble, its wireless operator wounded, the plane heads for home. Picture ends with crew's report back to headquarters.

This film will be included in any program booked from us for a service charge of $1.00. To all others the service charge is $2.50.

A New Approach to the Home Economics Teaching Problem

POLLY PATTERSON

AFTER devoting twenty years to teaching home economics in the Los Angeles High Schools, I left the teaching profession to accept the post of "Prudence Penny" with the Los Angeles Examiner. It was during my tenure there that I was privileged to actually conduct cooking demonstrations for the student body of ten high schools each year. As an outsider I was placed in a position to study teaching problems as never before; see things that were a puzzle during teaching days. I realized then that any new approach, regardless of the responsibility lifted from the teacher's shoulders, was something the students liked. It set me to thinking. Briefly, Polly Patterson's Course of Home Economics is, I hope, the happy result.

Compiled and written as forty separate lectures, each requiring fifteen minutes to record, they correlate with the usual course of study as followed generally throughout the country. Each is designed either as the nucleus of a week's work, or as a review of it. A complete script is provided the teacher in advance, so that she will know beforehand what is coming, together with twenty questions and answers unraveling the problems.

Listed are the forty subjects dealt with:

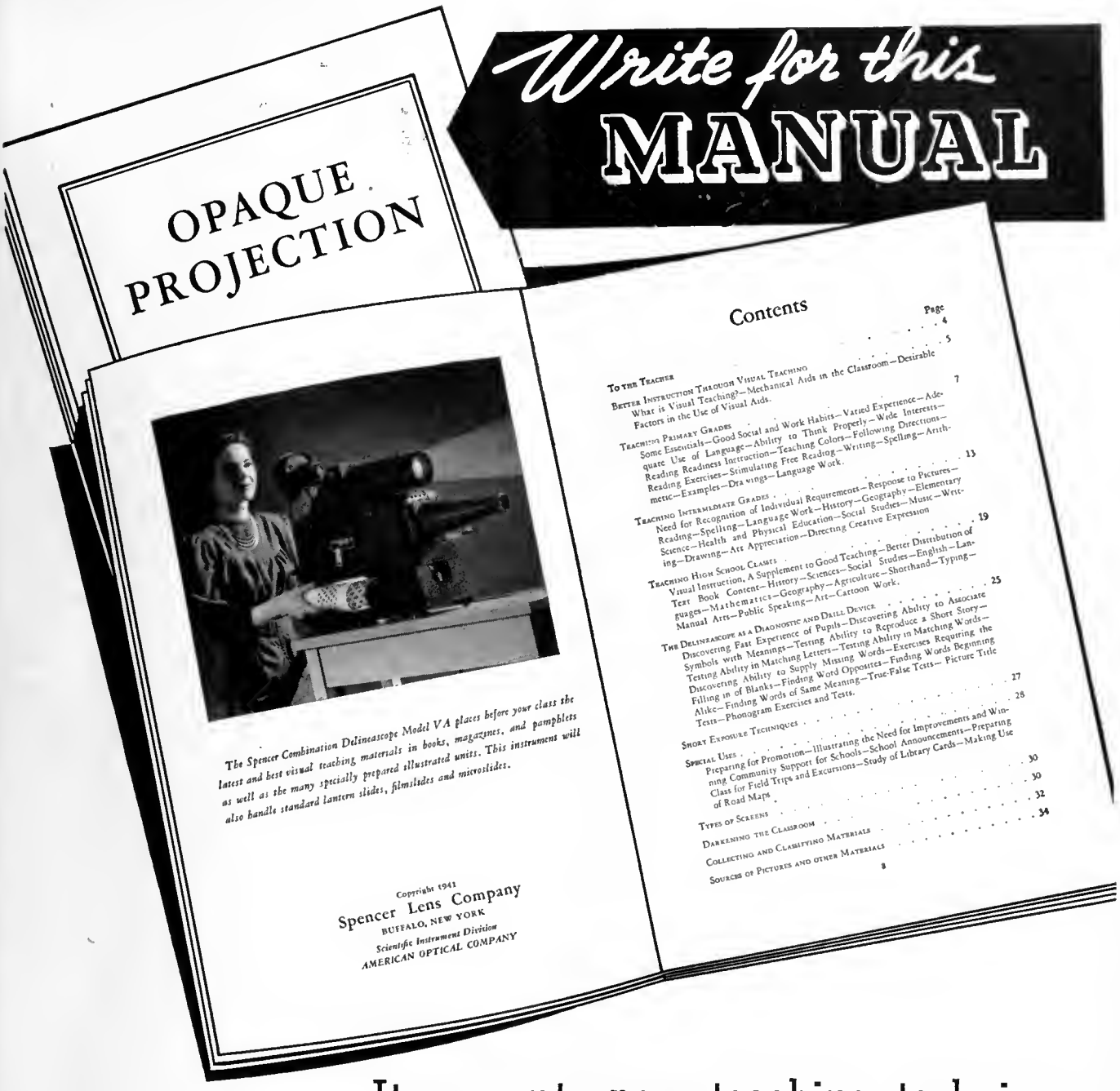
Measurements and Methods of Cooking, Menu Planning, Cereals, Flour, Flour Mixtures, Pour Batters, Drop Batters, Soft Dough, Stiff Dough, Bread, Eggs, Milk, Butter and Cheese, Deep Fat Frying, Fish and Meat Substitutes, Meat Buying, Cooking Meat by Dry Heat, Cooking Meat by Moist Heat, Fruits, Vegetables, Soups, Salads and Salad Making, Sauces, Desserts, Cookies, Cakes, Food Preservation, Canning, Jellies and Jams, Altitude Cooking and Picnic Lunches, Beverages, Home Planning and Furnishings, Meal Service, Entertaining, Evening at Home, Party Menus and Games, Buffets, Barbecues, Care of Tools, Range, Equipment, Cleaning Agents, Laundry, Stain Removal.

This series of lectures eliminates the necessity for repetition on the part of the teacher; merely play it over and over and over if necessary. It also provides the spark needed to interest students in the subject through a new and novel approach.

The Los Angeles school system is now using twenty sets and a full fifty are seeing regular use in Southern California. Oddly enough, one of these finds employment in the Los Angeles County Jail, where it is used to instruct the inmates.

Further than this I believe the "Course" lends itself to classroom work and teaching problems to a much better advantage than does radio. The possibilities of using pictures in conjunction with lectures are simply unlimited. Still pictures or projected slides, of the teacher's own selection, can be readily and effectively integrated with the records throughout the series, and actual classroom demonstrations are also in order.

Write for this MANUAL



It presents new teaching techniques

This illustrated 36-page manual was published by Spencer in the interests of better instruction through visual teaching. It contains a wealth of specific suggestions for the use of the opaque projector and includes some teaching techniques printed here for the first time.

The majority of summer schools conducting courses in visual education utilize this booklet as a text.

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SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

DAVENPORT High School of Davenport, Iowa, has developed an unusual film based on Oliver Wendell Holmes' poem, *The Last Leaf*. Miss Margaret E. West of the school's English department has, upon request from your editor, written a description of the making of the film. Her account follows:

"Last year the American literature classes in the high school at Davenport, Iowa, began the building of a film library to be composed of pictures made and produced by the students assisted by faculty members who were interested in the project. For a beginning, nothing seemed better adapted to our limited resources than the film version of a short poem to be photographed in natural color. From many attractive possibilities—we selected Oliver Wendell Holmes' classic, *The Last Leaf*. We liked this poem for its emotional appeal in its mingling of humor and pathos, and for its simple but effective histrionic qualities. Since all of the characters would appear in costume, nothing in the picture could become outmoded. Later we expect to add to our Holmes' album a film version of *The Chambered Nautilus* and *The Height of the Ridiculous*. Then poems of Whitman, Longfellow, Whittier, Lanier, Emerson, and Poe, offer alluring possibilities also.

"Committees were formed for casting, research, script, art, and publicity. The scenes were planned according to the exact order of the poem. The art committee painted appropriate title backgrounds in colors that would be effective in Kodachrome. The lettering chosen was Old English script. This was done in India ink on embellished scrolls drawn against the illustrated backgrounds. By the time these were returned from processing, we were ready to take the action shots. Our problem of location was easily solved by the offer of a beautiful Colonial home with extension grounds and gardens situated far enough in the country to relieve us of all distractions."

A portion of the scenario used in filming the picture follows:

Main title: THE LAST LEAF

This was followed by a creeping title which gave the circumstances of the writing of the poem and explained any points which seemed to need clarification. All who had a part in making the picture were then listed.

Title A. I saw him once before
As he passed by the door,

Scene 1. Medium shot of Colonial home.

Scene 2. Medium shot of the Colonial door. The character representing Holmes is dressed as a collegian of 1831 with a brown cutaway suit and a purple ribbon tie. He is standing in the doorway and appears to have been watching someone pass by. He comes out of the door and walks to a rustic chair in the yard. He takes a book from his pocket and begins to read. A handsome St. Bernard whose spots blend with Holmes' suit enters and lies at the poet's feet. In the background are tulip beds and in the extreme background, woods stretch into the distance.

Title B. And again
The pavement stones resound,
As he totters o'er the ground
With his cane.

Scene 3. Long shot of the aged Melville coming in from the distance. He is dressed in the costume of the days of the American Revolution. He is very stooped and is leaning heavily on his cane as he totters along.

Scene 4. Closeup showing the old man's feet and cane with a little foreground. Fade out.

Title C. They say that in his prime,
Ere the pruning knife of Timé
Cut him down,
Not a better man was found
By the Crier on his round
Through the town.

Scene 5. Montage shots to build up the idea of Melville's vigorous young manhood. Medium shot of Melville whipping out his sword and brandishing it. Another scene shows Melville fencing with a friend followed by one in which he is seen talking excitedly to a group of patriots. The fourth short scene shows Melville with two companions hurrying to meet the town crier. The latter is carrying a lantern and ringing a bell. Fade out.

Title D. But now he walks the streets,
And he looks at all he meets
Sad and wan,

Scene 6. Medium shot. Street scene showing Melville meeting a Quaker preacher who bows to him very deferentially.

Scene 7. As Melville continues along the street, he meets a group of girls dressed in colorful costumes of a century ago coming out of a house. They all turn to look at him and smile to themselves. This action can be slightly exaggerated.

Scene 8. Closeup of three of the girls who are smiling quite broadly. Their expressions change in a moment to sympathy for the old man.

Title E. And he shakes his feeble head,
That it seems as if he said,
"They are gone!"

Scene 8. Medium shot of Melville shaking his head sadly. He rubs his hand across his brow as he thinks of his loved ones who have been dead for so many years.

Title F: The mossy marbles rest
On the lips that he has pressed
In their bloom,
And the names he loved to hear
Have been carved for many a year
On the tomb.

Scene 9. Long shot of Melville approaching the cemetery.

Scene 10. Medium shot of Melville entering the gate of the cemetery. He walks slowly among the tombs and then

(*Concluded on page 272*)

REGRETFULLY, but also proudly, we announce Godfrey Elliott's appointment as First Lieutenant assigned to the training films section of the new visual education unit in the Army Air Forces. The great work of training the hosts of Democracy by visual methods demands the "best" that the educational field can supply, and is getting it.

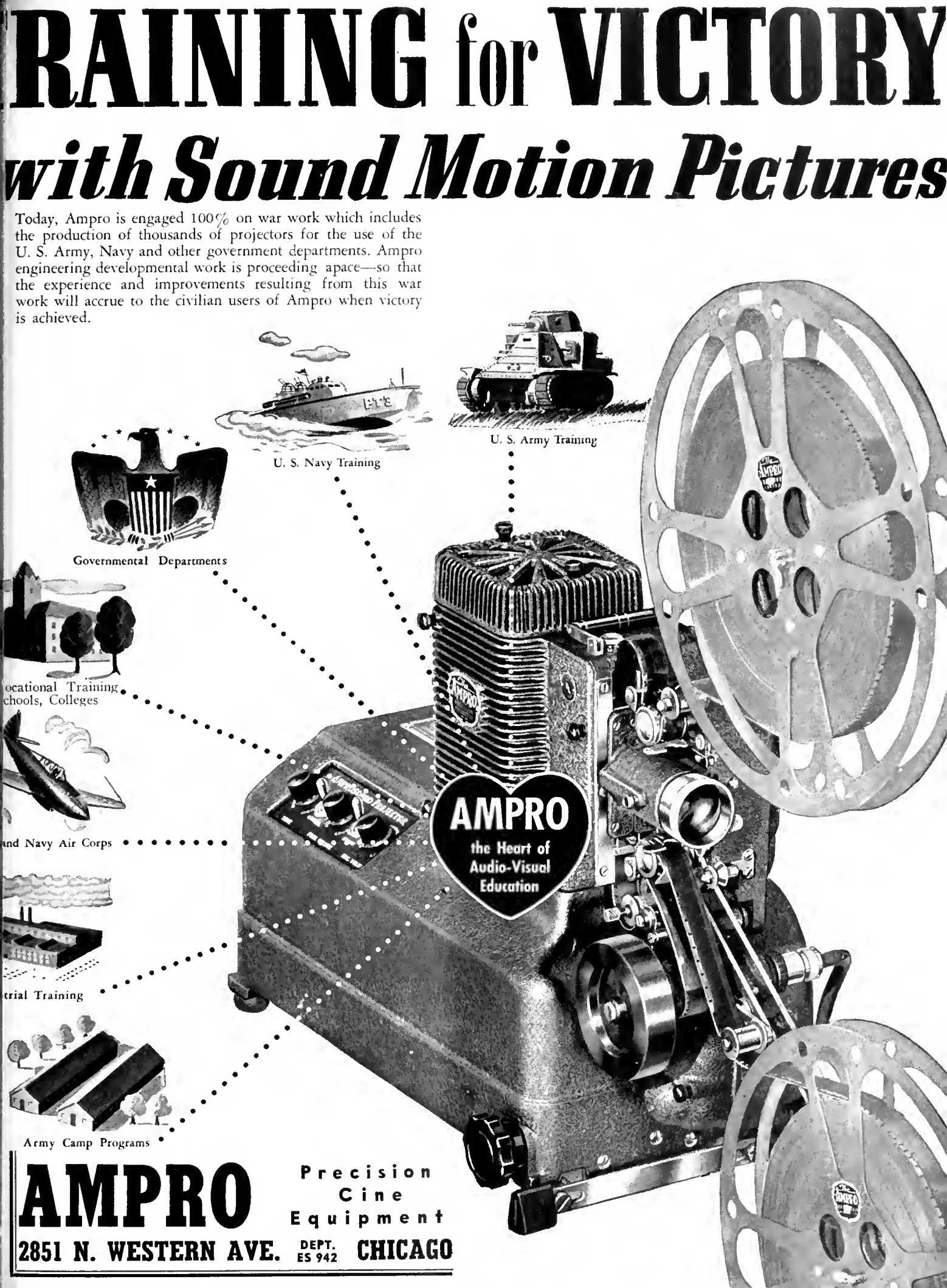
This magazine and its readers will accept willingly Lieutenant Elliott's decision, which reaches us just as we go to press: "This means the end of my column 'for the duration.' September material will be the last from me until Hitler and Company are liquidated. I hope to pick up where I left off when I return." We'll be waiting.

N. L. G.

RAINING for VICTORY

with Sound Motion Pictures

Today, Ampro is engaged 100% on war work which includes the production of thousands of projectors for the use of the U. S. Army, Navy and other government departments. Ampro engineering developmental work is proceeding apace—so that the experience and improvements resulting from this war work will accrue to the civilian users of Ampro when victory is achieved.



AMPRO Precision Cine Equipment

2851 N. WESTERN AVE. DEPT. ES 942 **CHICAGO**

(*Continued from page 270*)
pauses before one of them. He has in his hand a bouquet of tulips in pastel colors. As he gazes at them lingeringly preparatory to placing them on the grave, they dissolve into the face of a young girl about 18 years of age.

Scene 11. Dissolve into the picture of the girl dressed in a fancy Colonial costume of blue satin. She is standing in a garden and is holding some tulips in her hand. A breeze sways her gown slightly.

Scene 12. Young Melville dressed in fancy costume approaches her and leads her to a bench. They converse looking lovingly at each other. Then Melville kisses her. Fade out.

Scene 13. Fade in. Melville stands for a moment still looking at the flowers and then tremblingly lays them on the grave. Fade out.

School Movie Contest Winners

Thirty high schools from New York, New Jersey, Connecticut, California, and other states entered the first annual high school motion picture contest sponsored in May, 1942, by the Department of Motion Pictures of New York University.

The winners, as announced by Dr. Robert Gessner, department chairman, were the James Madison High School, Brooklyn, N. Y., for the best narrative and most imaginative motion picture; Herbert Hoover High School, San Diego, California, for the most technically proficient motion picture; and Greenwich (Conn.) High School, for the most instructive and useful film. Judges of the contest were Alice V. Keliher, director of New York University Film Institute Library; William J. Fadiman, story editor, M G M; and Michael Zala, manager of the Eighth Street Playhouse.

The department of motion pictures offers a four-year major in motion picture writing and direction leading to the Bachelor of Arts degree.

Question Box on School Film Production

1. What is a "work-print"?

The work-print is a duplicate copy of the original film, which is used throughout the editing process. The original film can be damaged easily through excessive splicing, careless handling, projector scratches, and all sorts of unavoidable accidents. Once it is damaged it cannot be replaced. In order to preserve the original in good physical condition, a work-print is made. If the original is in 16mm reversal, the work-print would be made as a reversal dupe. Its cost ordinarily would be five cents per foot; one manufacturer (Agfa) supplies a cheaper work-print at about 3½ cents per foot, known as a "scratch print" because of defacing marks running through each frame. After the work-print has been edited into the desired form, it is a comparatively easy matter to match the original film to it. The investment in a work-print is well justified if the film is of any value at all.

2. What constitutes a "scene" in scenario writing?

The simplest description of a "scene" would be that interval of action which takes place before the camera while it continues to run without interruption. The moment the camera motor is stopped and started again, the new flow of action is labeled as another scene. There may be considerable movement of the camera within one scene: e. g., panning, dollying, etc.

3. What is the cost of 16mm sound recording equipment?

Complete equipment for recording sound on 16mm film will cost between $1000 and $3500, depending upon the quality and versatility of performance demanded of it. It would be difficult to give a very definite answer to such a question, since it depends so largely upon what the producer wishes to do with the equipment he purchases. Manufacturers of 16mm recorders invite serious inquiries.

4. Where can we buy a tripod triangle, and how much does one cost?

Such an accessory can be purchased from any camera equipment dealer. The cost is not much, but will depend upon the type and quality of construction. It is, however, a very simple matter for the school shop to make a tripod triangle that will answer all the purposes of school production. Construct a simple equilateral triangle out of three pieces of light-weight lumber whose dimensions are approximately ½" x 2½" x 30". Place a hole or socket of some sort at each apex of the triangle for the tripod legs. Such an accessory will prevent the tripod from collapsing or spreading on any type of floor.

5. We want to lend one of our films to a Canadian school. What procedure must we follow in sending it through the customs office?

Educational and school-made films may be shipped into Canada for loan without payment of duty, provided there is no rental charge made for them. Secure from the local Railway Express office, or from the United States Department of Commerce, "Form 7525—Shipper's Export Declaration" and fill out in triplicate. Place these in a strong envelope, label the contents of the envelope for the customs authorities at the point of Canadian entry, and attach the envelope securely to the shipping container. This procedure is necessary, not only for the duty-free entry of the film into Canada, but also for its return into the United States.

6. Where can we obtain the cotton gloves recommended for use in handling film?

Light-weight white cotton gloves, recommended for use at all times in handling film, may be obtained from any large equipment dealer. In small quantities, such gloves may cost twenty or twenty-five cents per pair.

G. E.

Experimental Research in Audio-Visual Education

By DAVID GOODMAN

Title of Thesis: THE DEVELOPMENT OF THE DIORAMA IN THE MUSEUMS OF THE U. S.

Investigator: IRENE FLETCHER CYPHER

Thesis completed 1942 for the degree of Doctor of Philosophy, New York University, New York, New York.

Purpose of Study

The purpose of this study was to trace the development of the diorama as a medium of exhibition technique and as a teaching aid in the museums of the United States. In order to present a clear-cut picture of this development it was necessary to consider the subject in the light of a three-fold treatment: (1) A historical study of the development of the diorama itself and of its use in the museums of the United States; (2) A study of how the museum diorama has been employed as an objective teaching aid by schools in the United States, and the extent to which the schools have also made and used dioramas; (3) A study of how commercial and industrial agencies have made and utilized the diorama as a medium for advertising and publicity.

Sources and Method

The original sources found to be most valuable were the actual dioramas in the museums, and first-hand accounts of the making of these dioramas. It was the investigator's privilege to talk with those who were responsible for the first dioramas installed in museums, and to discuss with them the subsequent development of the diorama. The investigator made a tour of one hundred and ten museums throughout the United States to examine and study dioramas. The observations thus made, together with personal interviews with museum directors, preparators and educational workers, and a questionnaire sent to one hundred and forty-seven museums, formed the basis of this study.

Other sources found to be helpful consisted of the Annual Reports of museums, and the records of museum work throughout the country, as printed in the *Proceedings of the American Association of Museums*, and the publications *Museum Work* and *Museum News*. Reference was also made to numerous articles and books dealing with museum-school relations and museum work, and with commercial advertising and publicity media. The data thus obtained was finally presented as a historical study of the development of the diorama.

Summary

As a result of the findings of this study this investigator offers the following definition of a diorama as representative of the most frequent usage today: "The miniature, three-dimensional group consisting of an arrangement of small modeled and colored figures and specimens, with accessories, in an appropriate setting, and in most cases artificially lighted. The scale and size of the group is variable; there is no standard shape; there is no limitation as to subject matter, which may be realistic or imaginative according to what the creator of the group wishes to portray."

The developmental period of the diorama in the museums may be said to have spanned the years from 1914 to the present date; in the schools it may be said to have taken place from about 1930 to the present date; and in the commercial world from approximately 1930 to the present date.

Those sources to which one may look for prototypes of the diorama may be said to fall into three main classifications: (1) *Religious groups*—the crib or manger displayed at Christmas time in Catholic churches all over the world since the time of St. Francis of Assisi; (2) *Stage sets*—miniature carved stage sets, toy or juvenile theaters, shadow boxes, puppet theaters, cardboard cut-outs, peep-show, and shadow pantomimes; (3) *Miniature carved models*—small carved models of houses, theaters, gardens, temples and peoples.

(*Concluded on page 274*)

(*Concluded from page 273*)

Those sources to which one may look for the immediate forerunners of the diorama fall into the following classifications: (1) *The panorama or cyclorama*—these life-size painted scenes provided the idea of a background painted in perspective and curved to follow the normal horizon line; (2) *Museum habitat groups*—these groups provided the idea of showing mounted specimens and a foreground set against curved painted backgrounds, the whole so arranged through forced perspective as to present a realistic reproduction of the actual place from which the specimens came; (3) *Exhibits in fairs*—the small, modeled groups, shown in exhibitions and fairs since about 1876, provided the idea of miniature, scenic groups.

As far as the research of this investigator can determine, the use of the diorama in the museums of the United States came about as the result of the introduction of small historical groups, first made by Dwight Franklin about 1914. Evidence of the readiness of the museums to utilize dioramas is to be seen in the rapidity with which they were adopted and constructed and installed.

Habitat groups, which were first utilized in museums in 1901, became exceedingly popular in the natural history museums as a means of installing and exhibiting life-size specimens. The habitat group however was expensive to make and best adapted to the needs of large museums. The diorama offered smaller museums an opportunity to possess less expensive but equally effective groups. History museums in particular found the diorama an effective way of representing historical episodes and peoples. The small-scale dimensions of the diorama have not proven a barrier to its effectiveness as a display medium. The three-dimensional qualities of the diorama enable it to present an illusion of reality which is not lessened by its miniature size.

The diorama was first introduced to the schools as a part of the study collections circulated by the museums. The schools have since used the museum dioramas, and have also made their own. Both museums and schools have instituted teacher-training courses in the making of dioramas. The diorama has been accepted by the educational world as one of the modern objective teaching aids and has been used on all levels from elementary school to university.

Apparently the diorama reached the commercial world from the exhibition or fair, and was patterned to a great extent after types of exhibits found in Europe. Since 1931 all of the large fairs in the United States have made elaborate and extensive use of the diorama as an exhibit technique. Business firms, stores and other industrial groups have utilized the diorama a a means of window display, publicity and advertising. In the construction and use of dioramas, commercial agencies have followed an entirely independent course of development, and have not to date consulted with the museums to any great extent.

One great controversial factor lies in the use of motion and mechanical animation. Makers of dioramas in museums and schools have tended to frown upon the use of such devices, whereas the commercial diorama maker regards motion as one of the chief means of attracting attention.

The greatest hindrance to a proper understanding of the term "diorama" lies in a lack of agreement as to terminology. The museums have never established a standard terminology. In one museum the term diorama applies only to the miniature group; in another it applies to the habitat or life-scale group; and in still another it applies loosely to both types of groups. This same lack of definition of terms prevails in the schools. There, almost any type of cut-out or group effect is classified as a diorama.

The diorama has won a place among the exhibits of the museums, the school world, and the commercial and industrial world. All three are allied in one respect—they are seeking the favor and approval of the public. Which of the three will take this common technique and utilize and develop it to its fullest possibilities remains for the future to reveal.

In the light of conditions concerning the present status of the diorama as outlined in this study, this investigator would make the following recommendations:

For the Museums: The formation of an inter-museum committee to draw up a standard terminology to be used and applied in all museums, and acceptable to all museum workers.

A study on the part of each individual museum of its exhibits to determine their effectiveness as instruments for conveying information. The past two decades have been a period of great expansion on the part of the museums. The need now is for an evaluation of the results of this work. If the museum diorama is to fulfill its role as an effective visual aid, it must be studied and evaluated.

The museums have long been regarded as guardians of the artifacts and evidences of cultures of the past. If future generations are to have evidences of the life of today, the diorama might well be employed to record events taking place now. Primary evidence is always the hardest to secure. The museum makers of dioramas would be performing a definite service if they made more dioramas showing various phases of present day life and civilization.

For the Schools—An evaluative testing program to determine the relative merits of the various types of objective teaching aids other than slides and motion pictures. No statements as to the teaching value of the diorama should be established unless a *true* diorama has been the basis of the testing. School workers need to see that flat cardboard cut-outs cannot reasonably be expected to yield exactly the same results as carefully modeled, three dimensional dioramas.

For Commercial Agencies—The establishment of an acceptable common terminology for all types of display materials. This would mean the substitution of a new term to indicate groups in which mechanical motion and animation were employed—perhaps "motorama" or some such similar term.

To conclude, the diorama should be used in that relationship or situation in which an illusion of reality will prove beneficial. The value of the diorama as an objective display technique is such that it warrants the attention and talents of the most skilled craftsmen. It is capable of being an effective teaching aid, a display medium, and a valuable advertising medium. The results achieved through its use will be in exact proportion to the wisdom and care with which the particular diorama has been made, selected and then used. This investigator feels that the diorama is one of the most effective of visual aids being made today, and that the future will see a greatly extended field of usefulness for it.

The Stereoscope Goes To War

In the August 17 issue of "Life" there is a full-page picture of a second lieutenant looking through a stereoscopic device, and underneath is the following legend: "G-2 STUDENT GETS INFORMATION ABOUT THE ENEMY BY READING AERIAL PHOTOGRAPHS THROUGH AN ARMY STEREOSCOPIC DEVICE."

Keystone stereoscopic vision testing and training equipment, likewise, plays a large part in the selection of men for specialized work in both the Army and in the Navy.

If the use of the stereoscope and stereoscopic pictures is so important to the efficiency of the Army and the Navy and to the successful conduct of the war, it seems hardly necessary to emphasize its importance in the education of our children for their future—whether that future involves war or peace. With its impressive elements of reality, the stereograph brings both to the soldier and to the student factual information that can be obtained in no other way.

With these facts in mind, many schools are buying the Keystone units of stereographs in the social studies and in elementary science.

Each unit covers a limited and specific field of subject matter, and has been prepared, and provided with a teacher's manual, by an outstanding leader in that particular branch of education.

Why not take advantage of this opportunity to equip your schools and your teachers with this valuable teaching aid?

Keystone View Company

Meadville, Penna.

News an

Government Film Offices Re-Organized

By an Executive Order signed June 13, 1942, the President established the Office of War Information to which were transferred the motion picture functions of the Office of the Coordinator of Government Films and the Office for Emergency Management Film Unit. These two organizations are now combined into the Bureau of Motion Pictures, Office of War Information, located in Temporary Building V, 1400 Pennsylvania Avenue, Washington. Lowell Mellett, Coordinator of Government Films, is chief of this new bureau. His assistants include Arch A. Mercey and Edger Dale.

The Director of the Office of War Information, Elmer Davis, issued OWI Regulation No. 1 setting forth the functions and authorities of the various bureaus of the newly established OWI. Section 7 of this regulation reads:

MOTION PICTURES. The Chief of the Bureau of Motion Pictures, Office of War Information, will serve as the central point of contact between the motion picture industry and Federal officials to the end that the motion picture industry, both theatrical and non-theatrical, may make the maximum contribution to keeping the American public fully informed on vital aspects of the war. Official motion pictures of the Federal Government as a rule will be produced under the direction of the Chief of the Bureau of Motion Pictures; they may be produced by individual Departments and agencies after review, clearance, and approval of the Chief of Bureau.

The Bureau of Motion Pictures will continue the work of the O. E. M. Production Unit and the Office of the Coordinator of Government Films, with offices in Washington, New York, and Los Angeles. Under the new set-up the Bureau is organized into the following branches: Newsreel, Army and Navy Liaison; Research, Reports and Information; Educational Division; Production Unit; Motion Picture Industry Liaison Division. Paul C. Reed, formerly Director of Radio and Visual Education, Public Schools, Rochester, New York, is Head of the Educational Division.

A comprehensive program for the production and distribution of official government 16mm sound motion pictures has been developed and put into operation by the Bureau. These films, planned to inform the American people about the war effort and what they can do to help, are available through more than one hundred fifty established film libraries and rental agencies. The cost to users of obtaining these films has been kept at at minimum. In addition to transportation costs, distributors are permitted to make a service charge to users not to exceed 50c for the first subject and 25c for each additional subject included in a single shipment.

Schools and other groups interested in obtaining official government war films for use in a planned program of war information should seek information directly from their usual sources for 16mm films. A complete list of all distributors of official government war films may be obtained upon request from the OWI Bureau of Motion Pictures.

Notes

Government War Film List

"A List of U. S. War Films," just issued by the Bureau of Motion Pictures, brings up-to-date the extensive listing of the film material available from the various government departments. The directory includes Films of the Armed Forces from the United States Army Recruiting and Induction Service, and from the United States Navy—Coast Guard, Marine Corps, Recruiting Stations; Civilian Defense Training Films from the Office of Civilian Defense and Department of War; Office of Education Industrial Training Films; Informational Films from the Department of Agriculture, Office of the Coordinator of Inter-American Affairs, Federal Security Agency, Department of the Interior (Bureau of Mines); and the Office of War Information subjects.

This list is available upon request from the Bureau of Motion Pictures, Office of War Information, 1400 Pennsylvania Avenue, Washington, D. C.

Office of Education to Produce More Training Films

Because of the marked success of the first forty-eight U. S. Office of Education industrial training films, the program is being extended to include the production of pictures on other vocational trades, such as airplane manufacturing operations and the making of optical glass. The first group now being circulated is devoted to machine shop practice and shipbuilding.

A total of almost 6,500,000 feet of 16mm prints of these subjects has been sold by Castle Films, the distributor, during the seven months beginning December 1, 1941, indicating their wide acceptance by vocational schools and industrial plants. Requests also have been received from the Governments of other nations.

Dr. C. F. Klinefelter, assistant to John W. Studebaker, Commissioner of Education, stated that film strips have been found so vital in instruction that they would not only be included in future film units, but would be produced for all of the pictures made to date. "The strips," he explained, "are used where it is desired to stop movement to show in detail a particular point on which more detailed instruction is necessary."

Projection Equipment in Elementary Schools

A Survey of Projection Equipment in the Elementary Schools in the United States has been released by the Bureau of Foreign and Domestic Commerce. The study, which is Part II of a survey of equipment in schools throughout the country, was conducted by Nathan D. Golden of the Bureau who also compiled the data. Information is given concerning the location of motion-picture and slide-film projectors in elementary schools, within each state. Figures on State Totals are also given.

At the beginning of the school year last September, the Department of Commerce sent questionnaires to

40,000 elementary schools. Replies were received from 25,703 schools. Of the schools reporting, 7,845 own either 16 or 35-mm motion-picture equipment, 6,602 are serviced with equipment from central distribution points within 709 school systems and 11,256 do not own and are not serviced with such equipment but rent or borrow projectors.

Projectors located in the 14,447 elementary institutions either owning or being serviced with motion-picture projectors, consist of 6,055 16mm silent projectors, 4,373 16mm sound projectors—a total of 10,428.

Part I of the survey, covering motion-picture equipment in colleges and high schools, published in March 1941, disclosed that those institutions owned 6,037 16mm silent projectors and 6,374 16mm sound projectors—a total of 12,411. Accordingly, there are 12,092 16mm silent and 10,747 16mm sound projectors—a grand total of 22,839—in the 17,500 colleges and high schools, and the 25,703 elementary schools in the United States that have reported in response to the Department of Commerce questionnaires.

Data obtained in the survey can be used to advantage by both civilian and military agancies that have motion picture films—factual, skill-enhancing and morale-developing—which could be distributed with beneficial results through the school system of the United States.

Expansion of College Library

The Indiana Film Library at Indiana, Pennsylvania, State Teachers College has branched out to include fifty Eastman Classroom silent films, and a transcript library of a limited number of records, reports Wilber Emmert, energetic director of the Library, which was originally a sound film library of sixty subjects. The plan of the library remains the same, operating on a membership basis with film bookings made up one year in advance.

Inter-American Activities

Francis Alstock, formerly assistant to John Hay Whitney, has been appointed to succeed Mr. Whitney as director of the motion picture division of the Office of the Coordinator of Inter-American Affairs. Mr. Whitney has become a captain in the Army Air Corps and is now on active duty in the intelligence branch.

Many new short subjects with direct anti-Axis propaganda content are planned for circulation in Latin American countries. These will be produced in Hollywood from ideas suggested by Washington and Latin American sources through the office of the Coordinator of Inter-American affairs, headed by Nelson Rockefeller. The Coordinator is also planning the exchange of U. S. Army training films with the military staffs of our neighbor republics. These will be translated into Spanish and Portuguese, shipped to South America, and shown by U. S. military attaches to the general staffs and war colleges.

In the non-theatrical field, the motion picture division has released several additional 16mm sound films for distribution in the United States. Titles of the most recent are: *A Line from Yucatan, Argentine Soil, Columbia Crossroads of the Americas, Fiesta of the Hills, Fire and Water, Jungle Quest for the Great Stone Heads, Mexico Builds a Democracy, Sky Dancers*

of Papantla, Sunday in the Valley of Mexico, The Bounteous Earth. These subjects are available, free of charge, from the Office of the Coordinator of Inter-American Offairs, 444 Madison Avenue, New York City, from State University Extension Libraries, and other depositories.

Films Speed Up Army Training

By using training films to supplement drill, manuals and textbooks, soldiers are being trained now in 40 per cent less time than it took in 1917, according to Colonel Melvin E. Gillette, commanding officer of the Army Signal Corps photographic division.

American Education Week

EDUCATION FOR FREE MEN is the theme of the 22nd annual observance of American Education Week, November 8-14. This theme is most fitting at a time when the entire world is at war to determine whether freedom or tyranny shall prevail among men.

American Education Week is a time for a concerted effort on the part of all school systems throughout the nation to help the public understand why education is more and not less important as a result of the urgency of the war effort. It is a time for interpreting to the people what the schools are contributing to the war effort and the part that they must play in the peace that is to follow after military victory is achieved.

The National Education Association has prepared materials to assist local school systems in the observance, among which are posters, leaflets, stickers, manuals, plays and other materials. A 35mm sound motion picture trailer, "Education for Free Men," narrated by Lowell Thomas, can be obtained for showing in local theaters. Write to the National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C., for complete information.

Documentary Film Group Disbands

The Association of Documentary Film Producers is suspending all activities for the duration of the war since a majority of its members have been called to active war service, either military or governmental, and are unable to carry on the work of this group. The publication of its monthly news letter, *Documentary Film News*, will cease for the present.

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS and CAROLYN GUSS
Extension Division
Indiana University, Bloomington

Ring of Steel

(Office of War Information, Washington, D. C.) 10 minutes, 16mm. sound. Produced by OEM Film Unit. Sale price approximately $8.00. Apply to distributor for list of depositories.

Spencer Tracy speaks Wallace Russell's prose poem about the American Soldier with dignity and masterful ability while a musical score by Morton Gould and scenes of American battlegrounds, monuments, and modern material progress lend reality to the story of the incredibly swift growth of America.

Scenes of Concord Bridge, Bunker Hill, Valley Forge, Ticonderoga, Niagara, Lake Champlain, Manhattan, King's Mountain, and Yorktown punctuate the story of how the American Soldier carried arms for the rights of man and to establish the frontier of freedom.

How the American Soldier made safe the way for expansion of the growing nation from the Rio Grande to the 49th parallel, and west to the Pacific; how he fought in blue and grey for union and peace; how with his engineers and medical corps he conquered the Yellow Jack in Cuba, joined the Oceans at Panama, and licked the Mississippi floods, are parts of America's greatness. Sculptored in bronze, the American Soldier, standing fast among his wounded comrades, is shown as "he held like a rock at the Marne."

Finally, the American Soldier is pictured as he answers today's call to arms for freedom—by ones, by squads, by companies, regiments, armies he is shown—West Pointer, regular, rookie—rifleman, cannoneer, skier, engineer, gunner, tankman, scout, signalman, mechanic, flyer—America's citizen-soldiers forming a ring of steel around democracy. Out of 120,000,000 Americans, one soldier for every hundred today—two or three for every hundred tomorrow if need be.

COMMITTEE APPRAISAL: This brief account of the influence of the army on American history is a superior film for the glorification of the accomplishments of the American soldier. While some of the generalizations which students may draw from this film may not be compatible with the role which may be waiting for America in the post-war world, it is, nevertheless, an excellent film for classroom, assembly and adult use for the duration of the war.

Democracy in Action

(Office of War Information, Washington, D. C.) 11 minutes, 16mm. sound. Produced by United States Department of Agriculture. Sale price approximately $8.00.

A portrayal of the way the American farmer is using the three essentials—men, machines, land—to win the Battle of Production.

The film opens with the President delivering his war message to Congress. Scenes of tanks and ships in action, and farmers planting, cultivating, and harvesting, emphasize the importance of the President's plea for an adequate Battle of Production.

At the out-break of war, the United States had reserves which had been built up under the ever-normal granary plan. Farmers under the auspices of the AAA meet, discuss, and vote to control this production to insure a potential supply of more needed commodities. With the capacity to grow the corn to form a mile wide belt six times around the world, to grow the cotton that could hang on a clothesline 134 times around the earth, they pledged themselves to provide more soy beans, flax, milk, and eggs. Vegetables are canned for civilian use, for military use, and for Allies receiving assistance under the lend-lease act. The amount of these essential foods necessary to feed an American soldier for a week is given.

The film concludes with the suggestion that the American farmer will play his part in providing free homes, free schools, free people working together, and an abundance of food for fighters, workers, for our Allies, and others—all to keep *Democracy In Action.*

COMMITTEE APPRAISAL: The basic theme is that farmers working together in democratic ways will and can produce enough food to feed both America and our allies. Teachers in the social studies will be interested in the use of the film as a background for a discussion of the application of the democratic processes to areas of cooperative action between the government and other economic groups. Farmers personally answering the challenge of the needs of America at war add to the authenticity of the film.

Columbus

(Hoffberg Productions, Inc., 1600 Broadway, New York City) 12 minutes, 16mm. silent. Sale price $10.00. Apply to distributor for rental sources.

Motion pictures of shadowgraphs enacted by students of Woodland School first show Christopher Columbus as a lad, fascinated by the tales of sailors and traders, studying maps and charts and dreaming of new worlds to conquer.

Then he is represented in audience with Queen Isabella of Spain, who appoints him admiral and provides him with three ships. He loads the ships, and on August 3, 1492, they set sail for the great beyond. For weeks the ships sail westward. An animated map shows Columbus' first voyage. The crew threatens to mutiny and pleads to turn back; Columbus persuades his men to sail on and at dawn on October 12, seventy days after embarking from Spain, land is sighted and the entire crew rejoices. Columbus gives thanks to God. Having gone ashore, Columbus lays claim to the land in the name of the Queen of Spain. His men make friends with the Indians and trade with them. Thinking he had reached India, Columbus begins his search for gold.

No riches found and the Santa Maria wrecked, early in January, 1493, he sets sail for Spain in the Nina and soon is joined by the Pinta. The terrible storm encountered on the return voyage is shown after which he and his men land at Palos. Columbus then has a second audience with Queen Isabella who persuades him to make two more voyages.

(*Concluded on page* 282)

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer, and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

NEW

"FILMS THAT FIGHT FOR FREEDOM"

THRILLING! EDUCATIONAL! INSPIRATIONAL!

Latest timely releases from B&H Filmosound Library

Keep up with a fast-moving world, with these stirring new films. Many are *exclusive* releases—*all* are of vital historical importance. Order *now* for school auditorium programs.

MIDWAY-CORAL SEA BATTLES

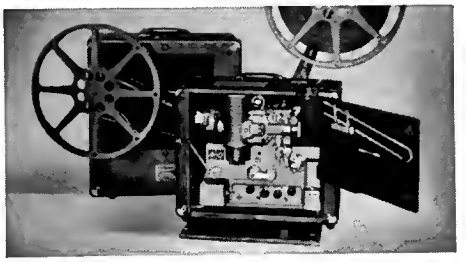
Latest war news release. Thrilling actual combat photography of our naval and air forces in action against the Japs.

MEXICO MARCHES

16-minute film tribute to our fighting ally, Mexico. Powerful combination of artistic Russian pictures with modern material supplied by Mexican Government, makes brand-new setting also for feature length "Mexican Symphony."

THIS WAS MODERN POLAND

10-minute sound film showing steel mills, mines, harbors, factories, farms—and cultural life of ancient people in new republic. War material makes up about 20% of film, correctly related to economic and historic phases.



FILMOSOUND UTILITY

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ALSO AVAILABLE

LIBERIA—AFRICA'S ONLY NEGRO REPUBLIC: 10-minute sound film showing people, industries, products, schools, transportation—with primitive and civilized phases in proper relationship.

THE REAL HAWAII and PUERTO RICO: 10-minute sound films—in color or black-and-white. Economic and social approach to island life and defense.

TARGET FOR TONIGHT: Stirring 50-minute documentary of bomb raid on German target. Just completed major theatrical run. Most other British documentary films also obtainable through the Filmosound Library.

CIVILIAN DEFENSE FILMS: The best of those produced by private and government sources now available.

A complete list of all available new films—educational, recreational, and inspirational—as well as the latest supplement to Filmosound rental catalogs will be mailed you free. Simply fill out coupon.

Bell & Howell Co., Chicago; New York; Hollywood; Washington, D.C.; London. *Established 1907.*

BELL & HOWELL COMPANY
1817 Larchmont Avenue
Chicago, Illinois
Without obligation, please send me, free:
( ) Films That Fight for Freedom;
( ) Filmosound Library Catalog Supplement 1942-A.

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MOTION PICTURE CAMERAS AND PROJECTORS

PRECISION-MADE BY

Bell & Howell

Again through the use of an animated map the routes of the second and third voyages (1493 and 1498) are designated. Because of false gossip carried to the ears of Queen Isabella by enemies of Columbus, she orders his arrest, and he is brought back to Spain in chains. Queen Isabella sets him free and punishes his enemies, but Columbus never recovers from the humiliation. He makes a fourth and disastrous voyage which is again represented by an animated map. Columbus as a forgotten and lonely old man is shown in retirement at Seville.

COMMITTEE APPRAISAL: Recommended for use in elementary classes as an interesting and faithful account of the story of Columbus. Teachers will find this film suggestive both to themselves and their students in coping with the problems of creative dramatics. The staging and direction of student actors and the preparation of sets, especially in miniature, are to be complimented.

Coal for Victory

Bituminous Coal Consumers' Council Washington, D. C. 5 minutes, 16mm. sound. Apply to distributor for list of depositories.

Emphasizes the need for conservation of coal in order that our victory program will not be slowed down by a shortage of this vital natural resource.

The manpower, machinery, and critical materials required for coal mining are illustrated by scenes of coal being blasted from the mine and loaded into underground cars by mechanical shovels. Our country's vital need for coal to run trains, to produce steel, to heat private homes, to make artificial gas for cooking, and some of the many products and derivatives obtained from coal are described.

Chemists are shown determining the B. T. U. or heat content of coal by burning coal in crucibles and analyzing the residue. Diagrams give the chemical analysis of good bituminous coal. Wasteful methods of firing a furnace—allowing ashes to accumulate in the ash pit, removing all ashes from the grate, and putting fresh coal on top of burning coal—are illustrated by animation. This is followed with a demonstration of the proper way to fire a furnace. What would happen to the war effort if America did not have enough coal is pointed out as trains, ships, steel mills, and other vital transportation facilities and industrial processes are stopped through the use of trick photography. The film closes with an appeal to home owners to save coal for victory.

COMMITTEE APPRAISAL: A good short subject for consumer education on how to use coal intelligently. It is of particular interest to anyone, youngster or adult, who must fire a furnace or stove. Science teachers will prefer to use a more technical 22 minute film from the same source with the title of "Know Your Coal."

Romance of Robert Burns

(Teaching Film Custodians, 25 West 43d Street, New York City) 17 minutes, 16mm. technicolor sound. Produced by Warner Bros. Pictures. Three year lease $100.00. Apply to distributor for rental sources.

The picture opens with views of the Scottish heather where Bobby Burns grew to manhood and penned his immortal ballads. The musical accompaniment is one of Burns' folk melodies, "Auld Lang Syne."

The scene shifts to a village tavern where groups of men are drinking and talking. Burns' neighbors declare that Burns writes poetry from his heart but has done nothing about having it published. Burns leaves the tavern to meet his sweet-

heart, Jeanne. In none too friendly a conversation Burns informs his sweetheart of his intentions to leave tomorrow by post for Edinborough where his poems are to be published. Even though Jeanne is pleased by the prospects of publication, she does not trust him with the lovely ladies in Edinborough's society and threatens not to bid him farewell on the morrow. However, with some misgivings, Jeanne does see him off.

Burns is next shown in a fox hunt. He takes time out to make love to a beautiful lady and is observed by a young nobleman who apparently does not approve. At the hunt dinner the lords and ladies have begun to tire of Burns' unpolished manners, the chasm between their background and his, and his lack of appreciation of the worth of nobility. To their taunting remarks he replies with fiery lines from his poetry. Finally in self-defense he rises and recites with deep emotion "A Man's a Man for a' That." This is too much for the nobility who had received the plowboy into their midst, and at the conclusion of the recitation one young dandy challenges Burns to a duel. To the surprise and discomfiture of his opponent, Burns chooses fists for weapons, asks to fight it out there and then, and easily downs his opponent.

The next day Burns leaves by coach for his native village. En route he learns that Jeanne is to marry the man of her father's choice on that very afternoon. In the village the preparations for the wedding progress, and the procession wends its way through the streets heralded by the bagpipers. Then back to Burns, who bribes the driver to quicken the speed of the horses and to take "the high road." After a headlong and precipitous ride he arrives at the church just in time to snatch the bride from her intended groom and claim her for his own. The film closes with the two lovers reunited and the villagers joyfully singing "Auld Lang Syne."

COMMITTEE APPRAISAL: Rather than an authentic account of the life of Robert Burns, the film presents a dramatic and fictionized interpretation of the incidents in the life of the Scottish bard. Recommended for classes in English literature to stimulate interest in and appreciation for Burns and his poetry. The film makes Burns a real man; recreates the customs, manners, tempo, and class differences of the people in whose time the poet lived; discloses the sophistry and snobbery of the nobility; and, therefore, should be a tremendous help in understanding and appreciating the farmer-poet.

Marine Corps Seeks Instructional Films

EDUCATIONAL SCREEN has received the following letter from Franklin Adreon, Jr., Major, U. S. Marine Corps, Marine Corps Photographic Section, Quantico, Virginia, with request that it be publicised in our columns:

> "There are many non-military motion pictures and filmstrips in instruction—Science, Geography, etc.—which would be of value in the training of U. S. Marine Corps. The Photographic Section, Marine Corps Schools, in which all Marine Corps visual education is centered, desires to maintain a complete file on such films, with purchase details. Interested educational producers and distributors are asked to send their catalogues and lists. Any industrial firms who have made their own subjects, and believe that they would be of value to the Marine Corps are also asked to send synopses and purchase details, addressing them to me at the above address to the attention of the Distribution Section. The Section asks to preview subjects before procurement; senders to assume transportation charges."

We are very happy to cooperate in making the Marine Corps film needs known to our film producers and distributors.

Current Film News

■ Castle Films, Inc., 30 Rockefeller Plaza, New York City, has produced three important new films on home defense, in cooperation with the United States Office of Civilian Defense. All are available in 16mm and 8mm silent versions, as well as 16mm sound. The subjects are:

Air Raid Alert—illustrating the divers duties and functions of wardens during warnings and actual air raids. It also instructs householders what to do in air raid alerts and blackouts.

Shots from Castle Defense Films:
"Air Raid Alert" (top)
"Civilian Fire Fighters" (center)
"The Civilian Serves" (bottom)

emphasizing important safety rules for civilians during a raid. Refuge rooms and necessary equipment are discussed.

Civilian Fire Fighters—covering the organization of auxiliary fire-fighting units as well as specific instructions on fire-fighting methods. It shows how to deal with the thermite incendiary bomb, how to open doors in burning buildings, leg holds and lock holds, types of hydrants, hose loading.

The Civilian Serves—pointing out numerous ways in which civilians can do vital work in wartime: as messengers, auxiliary police or firemen, air raid wardens, fire watchers, rescue squads, demolition crews.

Latest Castle releases to come from the battle front are:

Midway and Coral Sea Battles—an authentic record of the air-sea struggle in the Pacific. Highlights are the bombing of a Jap heavy cruiser, and the role the Lexington played in smashing the Jap invasion fleet before its explosion and sinking.

Fight for Egypt—containing amazing desert fighting scenes, filmed at short range. Tank attacks, rescue of damaged tanks, bombers diving and dropping their load on enemy equipment, and huge guns in action afford spectacular shots. Front-line first-aid stations care for the wounded. A British convoy is seen fighting its way from Gibraltar under terrific attack by Axis planes.

Washington In Wartime is another timely Castle film. It is an up-to-the-minute record of action in the city, showing intimate meetings of war leaders—President Roosevelt, Admiral King, General Marshall, Donald Nelson, and others—and the busy War Agencies where thousands of workers are employed.

■ Brandon Films, Inc., 1600 Broadway, New York City, has in production a series of "Films to Help Win the War" under the title *America Calling!* The films are available in 16mm and 35mm sound, one reel each in length.

Shock Troops for Defense stresses the need for a strong, nationwide auxiliary fire corps, and volunteers for such an organization. The purpose of this subject is to popularize the important role of auxiliary fire fighters and to stimulate participation in the Civilian Defense Program.

Scrap for Victory, second in the series, deals with the problem of what every person can do for the nation-wide salvage campaign. The picture was made in cooperation with the War Production Board, Division of Industrial Salvage (N. Y. Region) and is designed to stimulate widespread

Scenes from Brandon releases:
"Shock Troops for Defense" (top)
"Scrap for Victory" (bottom)

participation on the part of men, women, and children.

A new group of features and shorts is being released by Brandon Films as part of their 1942-43 program of *United Nations at War Series.* The new films in 16mm sound include:

Under Siege—1 reel—a stirring portrayal of Russia's all-out defense. Provides graphic lessons as to how a whole people—military and civilian, urban and rural—can help to bring about eventual defeat of the invading Nazis.

Czecho-Slovakia Marches On—1 reel—a cheerful account of the gifted and heroic Czechs in exile who are being trained to regain their homeland.

Red Tanks—6 reels—a dramatitc story of Russia's modern tank brigades battling the Nazis on the most colossal war front in history.

■ Films, Incorporated, 330 West 42nd Street, New York City, announces the addition to its sound film library, of the first full-length Technicolor subject to be made available in 16mm size, namely Max Fleisher's animated cartoon feature—

Gulliver's Travels—6 reels— based on the famous story by Jonathan Swift, telling of the amusing adventures which befall Gulliver when he is shipwrecked on the island of the Liliputians.

■ Post Pictures Corporation, 723 Seventh Avenue, New York City, is now distributing its new catalog (Volume 5), describing 16mm sound film releases. The catalog contains a large and diversified selection of short subjects as well as full length features made by major producers, selected for their educational and recreational appeal. Post has exclusive distribution rights on the complete list.

Special attention is directed to a group of films including the *Port O'*

Call series, *Poetic Gems, Symphonies in Stone* and *Flip the Frog* series, as well as to substantial reductions which have been made in the price of a number of pictures heretofore listed.

The catalog can be obtained by writing Post Pictures Corporation.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, announces the release of the following new pictures:

Target for Tonight—5 reels—famed British documentary filmed under fire, telling the story of an RAF raid on Germany from the plotting of the objective to the joyous return of the last plane. This unique motion picture, with its cast consisting of fliers and ground staff, is one of the great pictures of this war. Authentic and thrilling, it proves that truth can be more exciting than fiction.

Fueling and loading the bombers—from "Target for Tonight"

Middle East—a one-reel sound short of unusual significance, depicting the vital necessity for Britain to hold the Middle East against Axis forces. With maps and animation.

Mask Making—a silent reel on one of America's oldest arts, produced by Remo Bufano, famed modern maker of masks, who has created almost three thousand papier-mache masks. His masks have been used by the New York Metropolitan Opera House, the circus and others.

How To Read a Map—1 reel silent—showing how to interpret geographical and military maps. Profuse with drawings. Suitable for both school and general use.

The Office of Emergency Management films, as well as the Inter-American series are also obtainable through Gutlohn on a service charge basis.

■ The Manse Film Library, 1521 Dana Avenue, Cincinnati, is handling the release in 16mm sound, of

The Last Days of Pompeii—10 reels—an RKO production, with cast headed by Basil Rathbone and Preston Foster. A strong religious theme is interwoven in the story which portrays the grandeur, greed and cruelty of Roman civilization, and the destruction of Pompeii by Mt. Vesuvius.

■ Ideal Pictures Corporation, 28 E. Eighth Street, Chicago, has issued Supplement No. 4 to its main 116-page Catalog. This supplement covers latest additions to Ideal's large library of 16mm features and short subjects. Outstanding among the newly available subjects are:

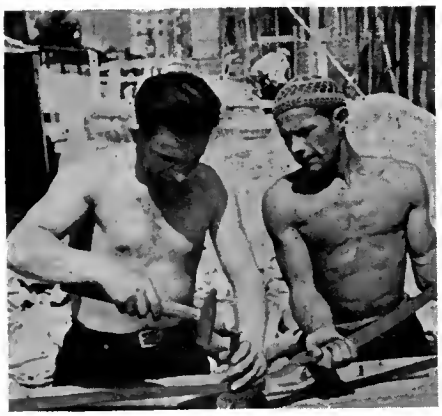
Our Town—7 reels—the United Artists production of the memorable Pulitzer prize play by Thornton Wilder, starring Martha Scott.

Keyboard Concerts—one-reel musical classics—presenting the Gallico Three Piano Ensemble in special arrangements of six master-compositions, including Artist Life by Strauss, Minute Waltz by Chopin, Schubert's Moment Musical, Tchaikowsky's Troika, Rachmaninoff's Prelude in G Minor and Flight of the Bumble-bee by Rimsky-Korsakoff.

Complete descriptive listings of Ideal's film library of 16mm sound and silent and 8mm silent films are contained in the 116-page 22nd Edition, Supplements No. 1 and 2, the Victory Film Supplement and the new Supplement No. 4, any or all of which will be furnished film users by request direct to Ideal Pictures Corporation.

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, reports many additions to the Filmosound Library, among which are:

This Was Modern Poland—1 reel, sound—made just before the Nazi invasion. This picture reveals steel mills, coal mines, Gdynia harbor installations and town, farms, factories, cultural and religious life in the Polish republic, disrupted by Hitler's conquest.



A scene in Poland before invasion

Cruising the Grand Canyon—1 reel, sound and color—America's greatest natural spectacle seen from a most unusual angle—a boat tossing through tremendous whirlpools as it travels the Colorado River through the Canyon to Lake Meade and Boulder Dam.

New subjects are constantly being added to a series of museum films on which the Bell & Howell Film Division have collaborated with the producers—scientists in outstanding museums of America. This series, available in color and black-and-white, cover not only wildlife in its natural habitat but the preparation of the finished museum exhibit. One of the latest releases in this group is:

Pea Fowl of Indo-China—1 reel sound—produced by John W. Moyer, Field Museum of Natural History, Chicago. Every step in the preparation of a habitat group is shown, from unpacking of the skins to the finished exhibit.

Films that Fight for Freedom are listed in a red-white-and-blue illustrated broadside just issued by Bell & Howell. They are classified into ten distinct fields in which motion pictures are aiding in the defense effort, namely: war reports by newsreel cameramen, civilian defense, democratic principles, aviation, industrial training, emergency first aid, victory gardening, life of friendly neighbors, religion, general education and morale-building education. Copies of this folder can be obtained free upon request to Bell & Howell Filmsound Library.

■ Erpi Classroom Films, Inc., 1841 Broadway, has released new 16mm sound films which will be particularly valuable to Social Studies and History classes.

Colonial Expansion—1 reel—presents events in the colonial expansion of North America from 1492 to 1763 by means of animated drawings and interpolation scenes. French, English, Dutch, and Spanish conflicts in the founding of southern, New England, middle, and West Indies colonies are depicted. Development of industry, inter-colonial and foreign trade, and the extension of settlement are pictured.

The Industrial Revolution—1 reel—describes the lot of man prior to the machine age, depending mostly on muscular effort with which to do work. It compares methods of work from the time of the first steam-powered loom to the modern Diesel electric-powered locomotive. Animation points out the mechanical advantage of machines. Cause and effect relationships are treated with respect to their social and economic implications.

The Airplane Changes Our World Map—1 reel—gives a clear overview of the evolution of maps, with particular reference to the effect which the airplane has had on distance, direction and time concepts in map making and interpretation. Distortions of all types of maps are illustrated, including the projections of Mercator, Mollweide and Goode. The concepts of latitude and longitude as devices to measure distances and locate points on the earth's surface,

are presented in accurate detail. The Great Circle route is traced, and airplane and steamship travel distances are compared. In conclusion, the film points out that our thinking with regard to the world about us must be revised to conform with the tremendous implications of modern air travel.

■ Harvard Film Service, Basement Germanic Museum, Frisbie Place, Cambridge, Mass., is offering three films on Aeronautics for rental, namely:

Smoke Streams—2 reels, silent—produced by Charles Townsend Ludington and released by The Franklin Institute, Philadelphia. This is a detailed, technical film on aerodynamics for college and engineering school courses. Types of airfoils and their effects are visually shown by means of streams of smoke flowing over their surfaces, photographed in a special two-dimensional flow wind tunnel.

Theory of Flight—1 reel sound, produced by Erpi—illustrating the application of physical laws to forces acting on airfoils, by means of wind tunnel tests. Control of airplane movements is demonstrated in pitching, rolling, and yawing.

Problems of Flight—another Erpi film intended as a companion reel to the preceding subject. It describes the use of the controls in taking off, climbing, banking, stalling, diving, gliding, and landing.

■ DeVry Corporation, has issued a new, revised and enlarged edition of their film catalog. It lists and describes hundreds of 16mm sound and silent educational films, carefully classified as to subject matter. Lesson guides are furnished. The attractive 44-page catalog will be furnished free to users of educational films, and for 25c to others, on request to DeVry Films and Laboratories, 1111 Armitage Avenue, Chicago.

■ Official Films, Inc., 425 Fourth Ave., New York City, has released an informative reel on the arctic air lanes, the route that may mean Victory, under the title:

Wings for Victory—in 16mm sound or silent, 8mm silent. In addition to portraying the importance of aviation in the Canadian Dominion, the film tells of the northern route to Europe and Asia, and of practical transportation in the future. Depicted are the airfields which first sprang up from snow-covered pastures, isolated weather stations where resolute men check the elements against scientific equipment, and, finally, bombers being ferried to Britain by way of the north.

Official Films also present a series of six animated cartoons featuring the popular and humorous character, "Flip the Frog:" *Jail Birds, Movie Mad, The Village Barber, Stormy Seas, The Cuckoo Murder Case, The Village Smitty.*

Among the Producers

Visual Teaching Kit On South America

Foley & Edmunds, Inc., 430 Lexington Avenue, New York City, have prepared a timely "Kit of Visual Teaching Aids on South America," similar to the previously announced Kit on the United States. Contents of this latest kit are:

Film Strips—Brazil; Argentina, Paraguay and Uruguay; Ecuador and Peru; Chile and Bolivia; Colombia, Venezuela and the Guianas. These film strips consist of approximately forty frames and present the significant geographic characteristics of the different countries and how they influence the activities, occupations and customs of the people.

Charts (6) Titles are: South America, The Land and Its Products; The People of South America; Transportation in South America; South America's Trade with the United States; South American Costumes; Understanding Our Neighbors.

Diorama—A scene in the Amazon jungle region showing conditions of life and the activities of the inhabitants of that region. Activities seen are rubber gathering, fishing with bow and arrow, baking cassava bread, etc.

Adhesive Symbol Set—2 sets of eighty-eight symbols each on occupations, and principal industries.

Outline Map of South America, Showing Political Boundaries and River Systems—For use as a base map in connection with the adhesive symbols and other activities.

A Set of Thirty-Six Photographs on South America—Activities and industries of the people not dealt with in the other materials; cultural contributions.

Teacher's Guide containing background information on each aid and suggestions to the teacher on use of materials.

New Air-Flo Stereopton

The Air-Flo Stereopton, presenting a new idea in design and utility, is announced by the GoldE Manufacturing Company, Chicago. It is a cool-operating unit for showing standard stereopticon slides and takes up to 1000-watt lamps. The motor-driven forced-air cooling reduces operating temperature. The motor has oilite bearings for minimum wear and care, is asbestos-wired and fully enclosed.

Stereopton for standard slides

Other features of the machine are: an easily adjusted, built-in tilting device in rubber padded base; pre-focus socket which cannot burn out; all-steel bellows fully adjustable; patented wire heat-guard to protect operator; unbreakable all-steel slide carrier. Three ground and polished lenses are furnished. A push-pull adjustment for the lamp socket adjusts the beam spread for various lenses.

The Stereopton is 30 inches long and is finished in baked black wrinkle enamel. For further information, write to the GoldE Manufacturing Co., 1216 W. Madison St., Chicago, Ill.

Delivery Status of Radiant Screens

To school and industrial users of projection equipment, who may have the impression that projection screens in metal housings are no longer available, the Radiant Manufacturing Company, Chicago, manufacturers of Radiant "Hy-Flect" projection screens, announce that they will be able to supply tripod, wall and ceiling type screens in all sizes from 30" x 40" to 14' x 14', for immediate delivery, *from stock.*

■ Fisher Body Division, General Motors Corporation, General Motors Bldg., Detroit, Mich., has made another fishing picture starring Tony Accetta, professional bait and fly casting champion, entitled:

Let's Go Fishing Again—2 reels, 16mm. and 35mm. sound, on fly casting, produced as a sequel to "Let's Go Fishing," which was devoted to bait casting. Accetta gives a masterful display of angling for bass, pan fish and trout with a fly rod, and discusses the type of bait to use under varying conditions.

Conservation authorities hailed the first Fisher Body angling picture as a real contribution to fishing lore. With this in mind Fisher Body in producing the second picture has dwelt on shots designed in the interest of conservation.

College Film Center Moves

The College Film Center, and its joint enterprise, the International Film Bureau—operating as rental libraries of educational, documentary and foreign films—have moved from 59 E. Van Buren Street to 84 E. Randolph Street in Chicago.

Lt. Bates at Great Lakes

Carl E. Bates, formerly in charge of the Film Department of the DeVry Corporation, is now Lieutenant Bates, Director of Educational Films at U. S. Naval Training Station, Great Lakes, Illinois.

Additional Valuable Literature —

"1000 AND ONE"—The Blue Book of Films

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The **NEW EIGHTEENTH EDITION** lists and describes over 5,000 films, classified into 176 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film title in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

128 pp. Paper. Price 75c. (25c to E. S. subscribers)

FILM EVALUATION SUPPLEMENTS to "1000 and ONE" under The National Film Evaluation Project

A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 500 teachers after actual use of the films with classes.

Each Supplement consists of 50 standard-size library cards carrying detailed evaluations of 50 films, based on combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid if cash with order).

VISUALIZING THE CURRICULUM
By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK (4th Edition)
By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."

212 pp. Illus. Cloth. Price $1.75

SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production date, producer, sale and rental price and grade level suitability, are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation. 275 pp. Cloth. Price $2.25.

PICTURE VALUES IN EDUCATION
By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph. 156 pp. Cloth. Illus. Price $1.00 (67c to E. S. subscribers)

AN ALTERNATIVE FOR REVOLUTION AND WAR
By Albert E. Osborne.

A stimulating, wide-range view of the higher potentialities of visual instruction in promoting world harmony by a "more humanity-centered education." A pertinent reply to H. G. Wells' dictum that the "future is a race between education and catastrophe." 124 pp. Cloth. Price $1.25.

EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution. 48 pp. Paper. Illus. Price 50c.

PRODUCING SCHOOL MOVIES
By Eleanor Child and Hardy R. Finch

Based on first-hand experiences of the authors and those of many other teachers and movie enthusiasts. Chapters are "Organization (of a Club); Choosing the Idea; The Scenario; Buying Equipment; Using the Equipment; Filming the Picture; Advanced Techniques; Final Preparation and Showing. A welcome book to those who want movie-making explained in simple terms.

151 pp. Paper. Illus. Price $1.50.

HOW TO USE THE EDUCATIONAL SOUND FILM
By M. R. Brunstetter, Ph. D.

Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based upon extended experience in studying teachers' use of sound films and in helping to organize programs of audio visual instruction in school systems. Two valuable Appendices and a full index.

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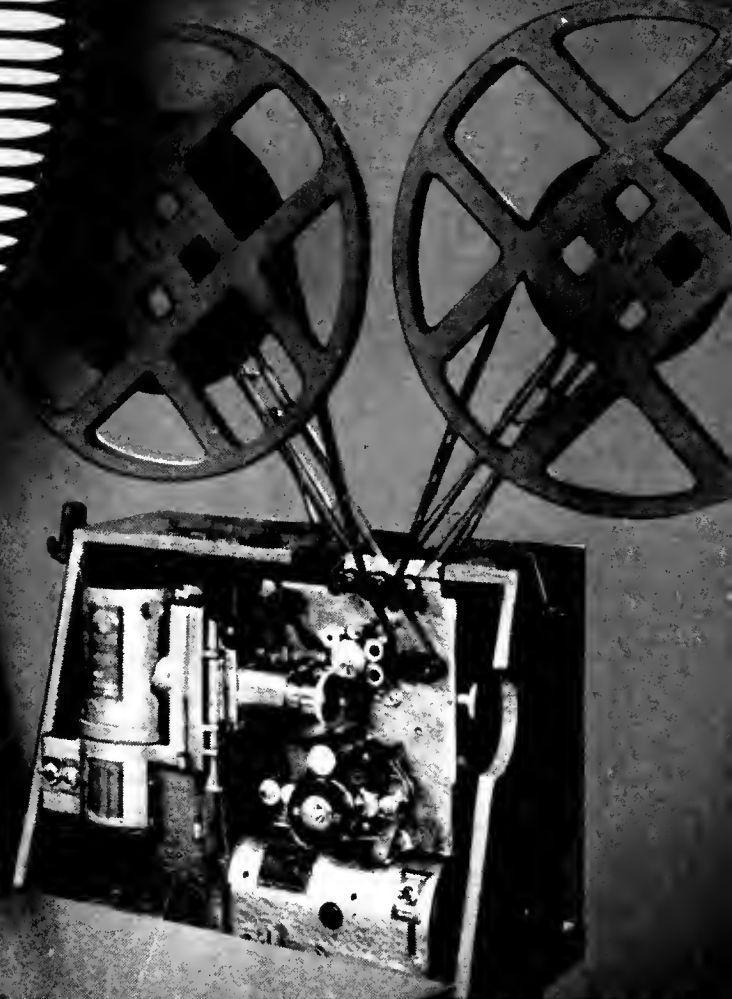

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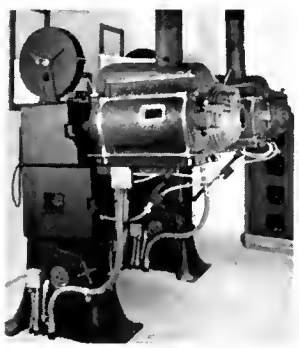

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The EDUCATIONAL SCREEN

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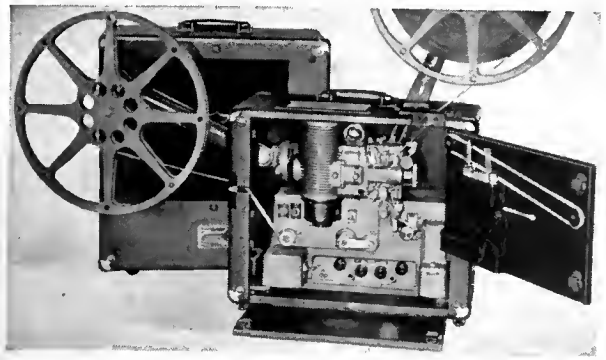

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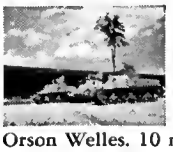

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ES 10

A County-Wide Audio-Visual Program Serves Both School and Community

How one county school system is getting maximum value from its visual equipment in meeting war-time educational needs.

GERALD ALEXANDER
Superintendent of Schools
Parke County, Indiana

THE value of audio-visual aids in education has long been widely recognized by those engaged in teaching and school administration. School people, on the whole, have been eager to make increased use of audio-visual helps, to the extent that the public has been able and willing to make them available. Furthermore, an increased awareness of their educational utility, on the part of the public, has had a steady and consistent growth for the past several years. But now recent defense preparations and the educational war effort have brought about a revolutionary increase in the use of at least one visual aid—the motion picture—in the training of our armed forces and civilian workers. It is altogether likely that the post-war period will bring, as one of the many changes in all phases of American life, a vastly increased use of the visual medium in practically all areas of the teaching process and in all subjects of the school curriculum.

Like most schools, those in Parke County had previously used, in varying degrees, the more common audio-visual aids—school trips, slides, graphs, charts, radio, motion pictures and recordings. The extent of such use, however, depended on the initiative and abilities of individual teachers and schools. For the purposes of this article, only the county-wide program is considered, and the aids discussed will be limited to the motion-picture and phonograph recordings.

The 18-School Circuit

During the past school year, Parke County schoolmen have operated what they believe to be a unique program for providing audio-visual aids to adult audiences and to 3500 grade and high school children in all of the County's eighteen school buildings, on a regular bi-weekly schedule throughout the school year. The eighteen schools participated in general "assembly type" programs of motion pictures during the day, twice each month, with night showings in each of the school communities offered once each month. Motion picture and recording equipment is rotated constantly, arriving at each school at appointed intervals, serving two schools daily—one in the morning, the second in the afternoon—the equipment remaining in the second school for community showing at night. Each two weeks the order is reversed, the "first" school becoming the "second" school and the "second" the "first", thus ensuring each community its night showing of films once each month. The communities thus see a full half of all the films shown in the schools. Transportation is handled by the schools themselves—each school going to the preceding school for its equipment and new program. To prevent any possibility of commercialization, no admission charge is permitted for any program.

A 16 mm sound projector was purchased jointly by the township trustees. Forty projectionists, students or teachers from all parts of the County, were trained to serve each two-day school. The eighteen schools were routed in such a way as to require minimum travel by each school in its transportation duties. Since the County Superintendent owned a recording machine, many amateur recordings of local panel discussions, addresses and educational interviews were made. Some of these, in a very limited way, were included in the transported equipment and included in programs to add variety, interest and some real value.

Bookings of material for the eighteen schools, two days each, obviously require a nine-day booking basis. Teacher committees select the films. Excellent use is made of the film-library services of Indiana University and able assistance has been given by Dr. L. C. Larson, the University's Consultant in audio-visual aids. The greatest educational assets in this plan,

Courtesy Julien Bryan

Tarascan Indian craft seen in a film on Mexico, released by the Office of Inter-American Affairs.

however, have been an alert, progressive County Board of Education and a staff of loyal, cooperative school Principals and Teachers. A combination of rental and "free" films constitute the programs in nine-day booking periods. The selecting committee is composed of school people ranging from First Grade teachers through the High School faculties.

In an effort to give a proper interpretation of this new venture to the schools and communities, the County Superintendent attended the first eighteen night sessions, appearing on the program to explain the details of organization and to emphasize that visual aids are tools of education, not merely "shows" for pupil entertainment. He also discussed the long-view possibilities for expansion and improvement.

The War Films

The war situation has brought a vastly increased importance to the work. This year the school authorities are cooperating with the County Council for Civilian Defense by booking war films, and the many recent productions of the Government departments, for evening use in each of the eighteen community showings. It is a rare opportunity for the schools to contribute mightily to the immense national effort toward mass education at top speed. The war films scheduled for showing on these programs include those released by the Office of War Information, Office of the Coordinator of Inter-American Affairs, and the British Library of Information. Even the modest accomplishments of a single county in one State is increasing the audience for these splendid films by many thousands. This can be multiplied thousands of times by similar cooperation from all the schools, and the ultimate results upon the morale of the nation and the winning of the war will be simply incalculable. The schools are in a key position to help the spread of this national educational effort in the midst of the great emergency. And the aftermath of such an effort will be an intensification of visual teaching through the peace years to follow, with results and values beyond all prediction.

Local Movie Filmed

In addition to the bi-weekly, county-wide circuit of educational films, an 80-minute motion picture was filmed in Parke County as a part of the public relations program. This movie, "A Year in Review" covered the period from August to April, and was limited to the county-wide educational program of the Parke County Schools. Commentary to the 2000 feet film was provided by the County Superintendent. One-third of the film was in technicolor—the remainder in black-and-white. Activities were filmed—persons in the picture were secondary and incidental.

The photography was done by Mr. Hervey Overpeck, a retired business man with amateur movies as his hobby. He provided the camera and donated his time and labor. The county superintendent provided transportation and directed the picture. The extra-curricular school funds provided the film which was purchased at wholesale prices.

The picture, computed as equivalent to 40 full days of actual visitation in schools, covered (1) seven

A Scene from "Air Communique," British film release.

group visiting-days for teachers with demonstration lessons in activity-teaching; (2) panels, and group discussions; (3) tuberculosis testing and immunization free to all pupils; (4) hot lunches; (5) custodian and bus-drivers schools; (6) school inspection; (7) Schoolmen's Club; (8) X-ray examinations for employees; (9) audiometric and visual testing of pupils; (10) educational movies in all eighteen schools; (11) seven academic contests; (12) character education (direct); (13) nursery schools; and (14) the 14th annual All-County Review—as well as the usual meetings and programs common to all counties and functioning every year.

"A Year In Review" has been shown three times. A county-wide audience of 1800 people saw the film at the Fourteenth Annual All County Review held last April. At the request of Indiana University, it was later shown to the Indiana County Superintendents attending a workshop course there. The last showing was in the Ritz Theatre at Rockville, for the public at large. This movie has proved to be one of the most valuable and impressive features of our Public Relations Program. During the coming year it will be booked on a two-weeks circuit, and hence will reach all of the eighteen schools in day sessions and the eighteen communities during the night programs.

Plans for Current School Year

It can readily be seen that while the Parke County program is county-wide, it nevertheless, is merely a start in the direction of a well-rounded audio-visual education program—which program would require at least (1) an evaluation of the films to be used and an appraisal of each particular teaching situation; (2) advance preparation by the teacher, who should have seen the film and determined the purposes for which it is to be used; (3) a preparation of the pupils as to the points in the film to be observed; and (4) a definite plan for follow-up, in study of questions provoked by the picture.

The use of recordings in Parke County also has

OEM Defense Photo

Inspection of tank parts in the Chrysler arsenal—from the government film on "Tanks".

been spasmodic, not sufficiently purposeful, limited largely to entertainment and public relations, and used altogether too infrequently for any noteworthy results.

Plans for the present school year include a continuation of last year's program, with some additional features. Briefly stated, the proposed program for 1942-43 is two-fold in that (1) free and rental films and recordings would be used in the schools and communities, and (2) amateur films and recordings will also be produced in Parke County for school and community use.

To expand the use of recordings on a county-wide basis, the trustees will be asked to provide a two-speed turn-table (33 and 78 revolutions per minute) for use in playing recordings through the motion picture amplifier. Regular recordings will then be circuited, and featured, as a part of each program, preceding the showing of educational films. No further additional equipment will be needed to institute the expanded program outlined below:

I. Use of Educational Films and Recordings
   - A. In all Schools (18)
     1. Teacher film-selection committee to select films correlated with big units of study at various levels by two-week periods.
     2. Recordings selected on above basis.
   - B. In all Communities (18)
     1. Free and Rental films and Recordings for recreation and current news.
     2. Cooperation with war effort: scheduling through Indiana University, all of the government films in civilian defense, war publicity and war promotion.

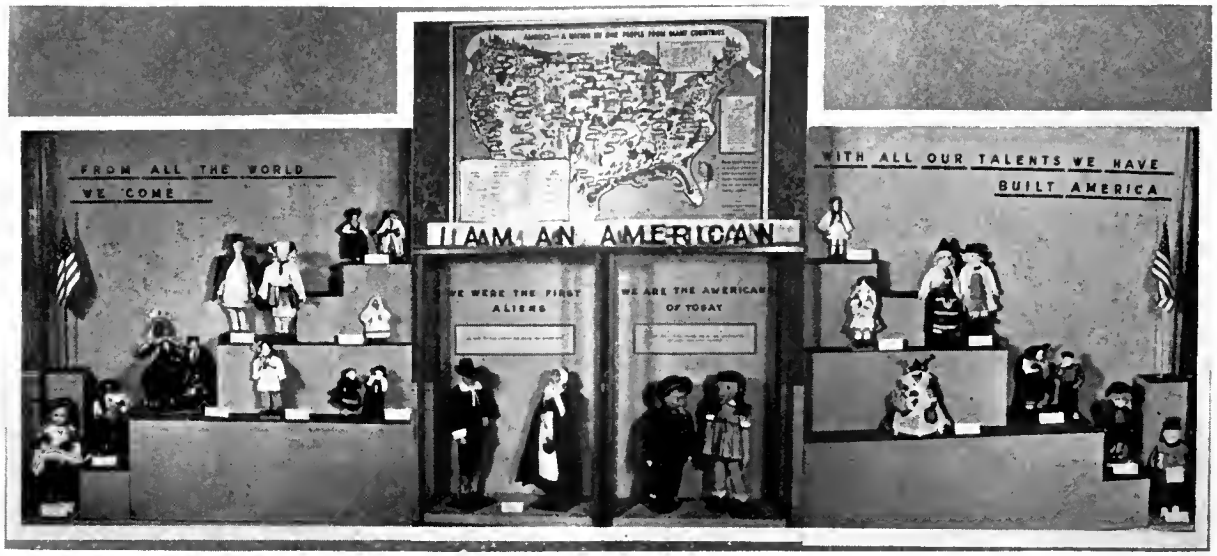
II. Amateur Production of Local Motion Picture and Local Recordings
   - A. An amateur motion picture, which will have teaching value as well as school publicity value, cooperatively filmed by the Parke County Schools (not to exceed 30-minutes in length).
   - B. Recordings made locally for each booking period. County-wide talent to be used in school improvement as well as in Public Relations Work.

Future Possibilities for Program

The possibilities for improvement beyond the proposed program for 1942-43 are almost limitless. A county-wide program for stimulating the increased use of all the many audio-visual education aids other than the motion picture and phonograph recordings might be well started. Practically all schools have radios, but little concerted study and planning for their most effective use has been made. Study-groups, in connection with regular institutes for teachers, could do much to improve use of all other visual aids, and they might capitalize on their own apperceptive mass of learning and better understanding, which should be an outgrowth of their motion-picture experiences in teaching.

Finally, there is certainly a field for greatly increased efficiency in the use of motion-pictures themselves through plans for multiple showings, for study in various subject fields, increased selectivity in type of films used, and greatly improved techniques for evaluation and follow-up procedures. In this writer's opinion, the surface has scarcely been scratched—certainly that is true of the Parke County program.

Stills from Office for Emergency Management films. Above: A skilled assembler—"Women in Defense" Below: Processing aluminum ore—"Aluminum."



A Museum school exhibit on "I Am an American."

The Museum Goes to the School*

Means and methods that make the Museum a living force in the schools of today.

MARGARET M. BRAYTON
Curator, Children's Museum
Detroit Public Schools

WE in museums think of our work with schools as visual education, a term of wide scope and many interpretations. In fact, the many interpretations of visual education remind me of a story about a nine-year old, named Sally. One day Sally came home from the Edison School with a report card showing all A's except one, which was a "C". Her mother, looking it over, exclaimed, "But Sally, you have a "C" in citizenship!" "Yes," said Sally, in a flat tone. "But Sally, what is citizenship?" "Oh mother, don't you know? That's pushing and talking in the halls!" Obviously, Sally's definition of an overworked term had restrictions.

Let me limit, then, my use of the term visual education as employed in this paper, to include those types of material which we associate with museums, namely three-dimensional objects and such pictures, charts, and maps as are used without equipment other than exhibition cases, bulletin boards, tables, and, infrequently, opaque projectors.

Let me add to that definition a corollary. We deal with exhibition techniques of light and shade, of form and color; with displays, collections, and exhibits; with a variety of material ranging from a doll to a dinosaur, in all the gradations of size and shape which our physical confines permit. We accession, we catalogue, we file; we sun, humidity, launder, clean, mend, repair; we explore, examine, collect, select, adapt, and adopt in unending succession, the thousand and one materials which comprise our particular stock-in-trade.

Museums began as the homes of the Muses. They continued as repositories of knowledge down the centuries of early civilization until in 300 B.C. at Alexandria, we find a museum which has as its modern counterpart, the university of today. After the eclipse of Egyptian cultural prestige, museums lost their identity as national institutions of knowledge and emerged as private collections of travellers and scientists. Through the ages, the museum has not only collected but also has disseminated knowledge. Cycles of history have rolled these educational functions over and over down to the twentieth century when once again the cloistered retreats of ponderous galleries have been invaded by public demand; airing, sunning, dusting have transformed physical and mental storehouses into centers of activity. A realistic, practical approach to education is evolving on this turn of the wheel.

Glance at the bibliography on education which the American Association of Museums issues every month. Current exhibits in the museums of wartime America include such titles as "The Gardener's Tool Kit"; "Camp Custer Exhibition"; "Models of Ventilation Systems for Blackouts"; "Sweetnin' Stuff, A story of Sugar and Its Sources"; "Wartime Housing"; "Australia, the Current Exhibit in the Living Map." "The Junior Museum as a Social Agency" is the subject of a paper chosen by the children's director of the Metropolitan Museum of Art. The five major museums of New York City are cooperating with their great resources and personnel to construct 150 exhibits 15'x15' to go to the schools of New York. Since children are not encouraged to go downtown in New York for the duration, the museums are going to the schools. These exhibits differ from the usual product loaned to schools because they are organized on such a scale and around

*Presented at the Spring meeting of Zone III of the Department of Visual Instruction, in Gary, Indiana, April 1942.

such ideas as to turn the 225 square feet which each one occupies, into a small museum gallery wherever they are set up.

What are the objectives of education in museum relations with schools? To arouse new interests, provide vicarious experiences, enrich the curriculum, to stimulate curiosity, teach new skills, permit free activity, develop initiative, and encourage group action through social experiences. Compare these objectives with those of visual and radio education, social studies, art, health, music or language, and you will find the same underlying philosophy, in many instances, the identical objectives.

What, then, is distinctive in education through the use of museum materials? How does museum education differ from the rest? What are its special problems? How can it be used more effectively? How can it supplement and complement other types of education, yet at the same time retain its unique function and identity? These are questions to be raised and discussed. Their answers lie not in any one formula but in the vision and insight, the cooperation and flexibility, the sense of proportion and adaptability which museum educators can call up out of themselves to meet the needs of their own institutions in terms of children, not things.

In the public school system with which I am most familiar, the Museum is one of the three units of the Department of Visual and Radio Education. The other two include the unit dealing with victrola records, films, slides, and their equipment, and the unit wherein all radio education in our schools originates. This Department, together with art, health, vocational education, social studies, school libraries, etc., comprise the Division of Instruction for the entire system, an administrative organization which provides ample opportunity for initiative and cooperation in all instructional activities. Let us think, however, not of museum problems in a large city system, but of those museum problems which are basic in any system, however small.

Current interest in "Our Neighbors to the South" is stimulated by exhibits which can be examined.

Museum materials may be used effectively in any school room where there is a table or desk and a blackboard with a ledge. The smaller the group of children, the easier it is to teach with small pictures and objects that may be examined and handled. It is with large groups of children where more elaborate facilities of bulletin boards and exhibition cases are a protective device for the material, but the more elaborate the equipment, the more obstacles in direct teaching.

Another basic problem is distribution. Again, the smaller the school system, the easier for teachers and sometimes children to call for and return materials. Delivery trucks are necessary only when distance and bulk are major factors. In some cities district centers may be established in schools to which the materials are brought by truck for the use of teachers in that district. The resourcefulness of teachers is evident in the handling of this problem but in general, supply and demand, first come, first served, are the important principles controlling distribution.

A third basic problem is personnel. Suppose you are the teacher to whom the assignment of museum exhibits in your building is made. Suppose you are given half time to devote to museum business in your school, or suppose you are told to go ahead and develop the work on a full-time basis; what kind of a person should you be? First of all, you must be visual-minded. Your work involves telling a story via graphic arts. You must be an educator with a field of knowledge and the point of view of a teacher. You will need all the manual dexterity and skill you possess. And finally, you must understand and enjoy children. Wherever museum materials are used in schools, remember first the children and second the materials that fit their program. The vitality of education through this medium depends upon the tools of knowledge and skill implemented by personality.

To many people the word museum calls up a vision of a dark, cavernous building crowded with cases full of strange and expensive objects near which linger guards to see that the public shows no undue interest and keeps moving. The modern museum educator knows that children like color, variety, informality, and opportunity to handle unfamiliar materials. In selecting materials for school use, the first rule is to present a true conception. An authentic model of a Roman school boy's slate is just as effective for education as the original wax tablet. On the contrary, a habitat case of a beaver colony may have an artistic background and well-modelled animals but is useless to the teacher because the building of the house is being done below rather than above the dam and on the ground instead of in the water. Possibly this is one of the bottlenecks in education. Materials for school use must also be attractive, clean, and well-labelled. Fragile pottery and glass, textiles that are not easily cleaned or laundered should be omitted. It requires unending effort to keep so many kinds of materials presentable, but careful selection, common sense, and fidelity to truth are the rules for building up, over a long period, a collection of

Game in General Language—with exhibit materials made by children in the Detroit Public Schools.

museum materials which are a sound investment. Nor should they be the rare, expensive specimens, but rather the best quality of typical examples.

How is museum material organized for school use? The efficient way is to make up units that correlate with definite units in the curriculum. A vital curriculum, however, is constantly changing in greater or lesser degree. Some areas of instruction have no fixed curriculum for years at a time. Individual projects reflecting local needs or interests sometimes take precedence over the regular instructional program. On the other hand, the reading unit on fishing in the fourth grade does not have the same emphasis that a social studies unit gives fishing in the sixth grade. If fixed units on China, Poland, Russia, and Palestine contain all the material on those countries, an exhibit for the social studies unit on religion will lack the Tibetan prayer wheel, the Mongolian prayer board, the rosary from Poland, the Russian icon, and the Hebrew scroll. This problem of standardization and flexibility is one of the most difficult. Its solution has to be governed by various factors such as quantity of material, number of requests for China as over against the number on religion, and the amount of time a staff member can devote to custom-built exhibits.

The other day, I saw a pictorial report of a reading project which had been stimulated by a film on farm life. The reactions of the children were much the same as those which a museum exhibit on the same subject could engender. The difference lies not in the ends, but in the means of education, all of which have their individual role, some of which are effective in one situation and some in another.

Let us examine a few instances of classroom teaching where museum materials were the means. I have selected examples representing no large expense. In fact, the materials shown in these slides could be produced in many communities, provided the teacher drew upon all available resources of magazines, libraries, homes, industrial and government agencies. As an example of the inter-departmental cooperation to which I have already referred, these slides were made for us by the staff photographer of the unit of Visual Education.

(*Showing of Slides*)

You have had glimpses of the Museum exhibits on CHINA, DOLLS, and DEFENSE. In the first, materials ranging from an inkstick to an ivory fan illustrate fundamental ideas about Chinese civilization: longevity of the family system, contributions to world culture through the crafts, the invention of silk, and the importance of scholarship. In the second, a collection of dolls was used to stress an ideal of America. In the third, the principle of defense was illustrated from various areas of subject matter to show its meaning and how it works and to stimulate the child to make some deductions for himself. The reactions we receive from children who visit the Museum convince us that however interesting as factual information some rooms are, those exhibits revolving about ideas and principles are a unique contribution which museums can make to education. Children spend hours in the Bird Room; they are fascinated by techniques in dioramas on Detroit history but from the exhibit on the principle of Defense, they depart quietly, thoughtfully, often in silence more eloquent than words.

The museum can go to the school with this type of education. Through the guidance of the teacher and the use of visual aids, an exhibit illustrating a fundamental idea or principle could be worked out by the children. What a project could be done on PARENTAL CARE, PRIORITIES, HEMISPHERE SOLIDARITY, BUILD A STRONG AMERICA, or THE ENGLISH LANGUAGE DEVELOPED FROM WORDS OF MANY LANDS.

The children could furnish the ideas, write the story, collect or make the posters, models or other materials, install the exhibit on tables and wall space, make the labels, plan the docentry, prepare the publicity, and invite the school or community. These expressional activities in themselves are done in many other connections. The implementing of the materials around a principle so that step by step, the exhibit proceeds to a logical conclusion, first in the child's mind, then in visual form is unique. It is an educational means implicit in the museum materials themselves and by its use, the museum goes to the school in spirit and in truth.

I have referred briefly to some of our common problems. I have suggested one or two ways in which museum materials may be used effectively. That I am here, is evidence of your good faith in our common job. There are many other problems and questions but more important perhaps, is the fact that we may come together to exchange ideas and broaden our horizons. Unlike Sally with her restricted idea of citizenship, we are broadening our concept of visual education. Isn't it sound proof that we have stopped "pushing and talking" in the halls?

Testing Preferences with 2" x 2" Slides

The economy and efficiency of 2" x 2" slides in school testing procedures.

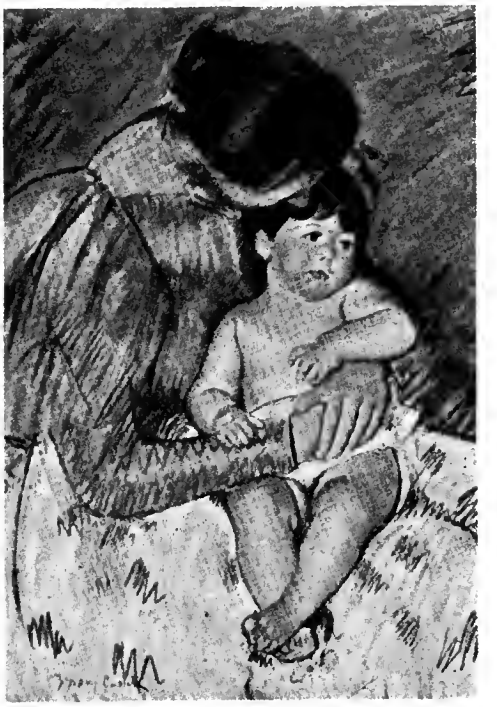
ELIAS KATZ, Ph.D.

THE 2" x 2" Kodachrome lantern slides were used by the writer to advantage in a recent study of children's preference for paintings.[1]

In order to investigate elementary school children's preferences for traditional and modern paintings, it was necessary to obtain some objective measure of their preferences. Since there were no previous tests available for the purpose, an original test of preferences for traditional and modern paintings was prepared.

The test consisted of 64 pairs of paintings. Each pair was composed of one traditional painting and one modern painting similar in subject matter, and approved by a majority or more of eleven competent judges. On the average, there was 84.2 per cent approval of all the items by all the judges.

The Classical Raphael "Madonna del Granduca" (at left) compared with "Sollicitude Maternelle", the modern painting by Mary Cassat.



As original paintings of the quality desired were not available for experimental purposes, either color reproductions or color lantern slides had to be used. The practical advantages of color slides over color reproductions were:

1. Pairs of paintings could be shown simultaneously, and could be changed with a minimum loss of time.
2. Discrepancies in the actual sizes of pairs of paintings were reduced to a minimum.
3. Pairs of paintings could be shown to a large group of children at the same time, thus making possible group testing.
4. The influence of the teacher, the experimenter, and any distracting factors, could be controlled, and reduced to a minimum.

Having secured the judges' approval, all 128 color reproductions of the paintings were photographed in Kodachrome. The photography was done with a Leica camera mounted on a tripod. The camera was equipped with a Zeiss focussing lens, f:2, automatic cable release, and a copying attachment. Kodachrome Type A-Indoor film was used. Photoflood bulbs of 500 Watts, 3200 K., were used as the only source of light. The shutter speed was set at 1/20 of a second. A Weston Photometer was used to test all light readings, and to set the lens aperture accordingly.[2]

After the color reproductions were photographed, the pairs of Kodachrome transparencies resulting were masked off properly, placed side by side between two pieces of 2" x 2" lantern slide cover glass, and the edges of the glass were bound with lantern slide binding tape. The traditional and modern paintings in each pair were distributed to the left side or to the right side of the slide in random order.

In order to standardize the testing procedure, the test was administered under experimental conditions in two schools. On the basis of these preliminary experiments, a standardized testing procedure was adopted for all the five schools in the study.

In each school, one classroom with dark shades was made available to the experimenter. A 56" x 72" portable glass-beaded screen, its lower edge 36" from the

(*Concluded on page* 318)

[1] "Children's Preferences for Traditional and Modern Paintings," Unpublished Ph.D. dissertation, Teachers College, Columbia University, 1942.

[2] The writer formerly graduate student, Advanced School of Education, Teachers College, Columbia University, is indebted to Mr. Theodore Burrows, Staff Photographer, New York Historical Society, for his assistance in the photographing of paintings.

MOTION PICTURES—NOT FOR THEATRES

The Fortieth Installment presents the story of Eastman Teaching Films, one of the most constructive projects in the long history of visual instruction.

By **ARTHUR EDWIN KROWS**

ABOUT 1941 the Harvard Service issued for general circulation a number of phonograph records, one series presenting poets reading their own verse, and another concerning wider literary effort, for English appreciation courses. It is reported that these items are well liked, and that their sales increase to schools and to individuals who just like to listen. In June, 1942, an album of Latin records was financed by the Carnegie Foundation, the grant being made to the Department of English, with Professor Frederick C. Packard, Jr., as editor.

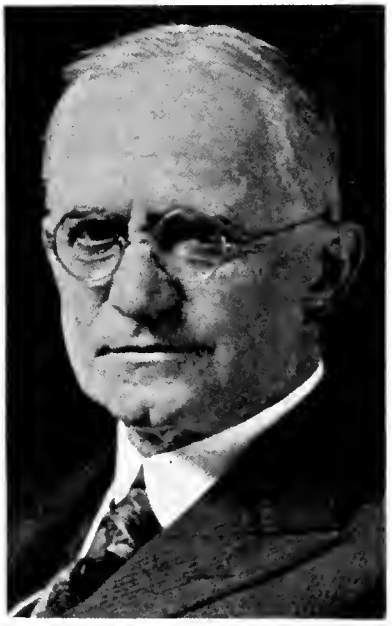
Director Brewster has offered two courses in audio-visual aids as parts of the Summer School program. One was a credit course; the other was a one-week, non-credit course in photography and general projection skills. The director was president in 1941 of the New England Section (now Zone 1) of the Department of Visual Instruction of the N.E.A., and in 1942 he became Second Vice-President of the D.V.I. as a whole.

The Film Service has also done research in the general field. After three years of experimentation, it released a set of films for the Improvement of Reading for high school and college students. These proved successful at Harvard and Radcliffe. To the time of this writing, about thirty-two sets have been sold to other universities, including Yale and Princeton. It was hoped to release another series for the junior high school level, and so on down the line to about Grade Three. The director and Dr. Dearborn have received a Milton Fund Grant to produce and test a set of sound slides for teaching, reading and vocabulary on approximately Grade One and Grade Two levels. Work is also now proceeding to devise a new technique for speeding the process of learning the radio receiving code.

Eastman Teaching Films

FEW INDEED will deny that altruistic motives surely were present in the next Big Business non-theatrical venture, yet one is safe in assuming that the state of the market for raw film also had much to do with its inception. The business was the Eastman Kodak Company, of Rochester, New York, which ever has been keenly and properly alive to opportunities for increasing the sale of its main product. It has been especially watchful when competitive raw stock manufacturers have threatened to seize them first.

George Eastman was personally interested in the project, and that was important for its altruistic implications because his benefactions were many. They were frequently anonymous, too. For instance, it was not known generally for a long time that he was the mysterious "Mr. Smith," who gave so generously to the Massachusetts Institute of Technology. But beyond any necessity for Eastman's private support was the obvious fact that this was a commercially valuable undertaking. So it was sponsored by the Company, and not by the man. It is remarkable, though, that the Company, rather than the man, managed to reach the schools without suffering that disadvantage of suspicion which



George Eastman held that worthwhile things, once clearly demonstrated, will support themselves. So his Teaching Films were based on business considerations, too.

has attended nearly every other commercial film enterprise that has entered classrooms with a profit motive.

In this particular situation, practical commercial circumstances had brought to the forefront the question of service to the non-theatrical field. Until about 1925 the considerable film footage used there had been virtually all of regular 35mm. width. The only serious difference from the theatrical supply was an increasing tendency to use acetate (safety stock), instead of nitrate (inflammable). Now, however, the non-theatrical customers were becoming aware of the advantages of narrow-width film in the ways of reduced costs and greater safety and convenience in handling. These were attractive features which in themselves were increasing the number of non-theatrical exhibitors. In other words, the "off-standard" market was growing. And the duPont interests, especially, were providing a quantity of 16mm film stock—a fact which was well known to and carefully weighed by Eastman.

Beginning before 1917, Alexander F. Victor, founder and president of the Victor Animatograph Company of Davenport, Iowa, had worked earnestly to standardize the narrow-width film in the same manner as 35mm stock had been made uniform throughout the industry long before. His plans were handicapped in their realization by the patented arrangement of sprocket holes in existing narrow-width films, so he devised a new perforation system of his own, and began testing the factors he believed to be required for its adoption. At the Rochester, New York, meeting of the Society of Motion Picture Engineers in April, 1918, he presented his ideas in a paper entitled "The Portable Projector—Its Present Status and Needs." There was some acrimonious dissent. Finally, however, Victor's 28mm specifications were accepted and endorsed. Willard Cook, of Pathescope, who had a virtual monopoly of the old patented perforation, was present; but, instead of opposing the proposal as Victor had expected, he warmly seconded the plan and gave hearty coöperation toward bringing it about.

At the S.M.P.E. meeting of October, 1919, Victor made publicly available a continuous optical reduction photographic printer, whereby 28mm prints might be made from 35mm negative. In the meantime he was undertaking to realize another part of his plan to provide an adequate library of films of the new sort. To this end he reached agreements with George Kleine and George Spoor for the reduction rights to their large theatrical stocks—and this incidentally was the beginning of Victor's valuable non-theatrical list of later years.

In 1922 there was still dissatification over the adopted film dimensions, but standardization was becoming increasingly urgent. Eastman Kodak had announced the availability to amateurs of its new "reversal" film stock, whereby the original negative could be developed into a positive, and equipment manufacturers were much exercised concerning accommodations to be made in their cameras and projectors. Bell & Howell proposed 17½mm, a simple split of the theatrical 35. But Victor held to his idea of a width that could not be so easily provided by some unscrupulous laboratory man who might prefer profits in nitrate stock to safety in acetate. And at last the Eastman Company advocated 16mm as a practical width for their

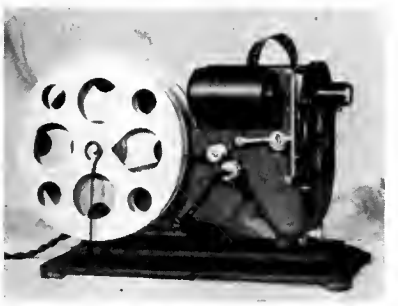
Alexander Victor made his 28mm safety film projector in quantity after his specifications had been accepted and endorsed by the Society of Motion Picture Engineers.

manufacture, meeting the needs of safety and economy at the same time. Victor thereupon at once began the design and construction of the world's first 16mm camera and projector, placing it on the market in 1923. In evidence of the fact he keeps upon his office wall, in New York City, a framed copy of the first advertisement of it, clipped from a Davenport newspaper of that date.

Cook's reward was possibly more substantial. In 1923, also, Eastman began the extensive Kodascope Libraries of 16mm reels, sharply aware that Pathé Exchange, Inc., was at the same time converting its own large collection of films to the same end—using duPont stock. The Kodascope Libraries were organized by Cook, and he thereupon became their general manager, merely increasing the size of his suite in the Aeolian Building, New York, to provide another headquarters beside that of his continuing Pathescope Company of America.

Eastman's Kodascope 16mm Projector was put forth later, ostensibly to attract the home movie enthusiast, with the accompanying novelty in the form of "reversible" or "reversal" film—film which after exposure, could be developed past the negative stage into a positive, thus reducing the usual cost of prints. Other 16mm projectors appeared from several directions. William C. Raedeker's ingenious Capitol Continuous 16mm Projector, for automatic motion picture displays, reached the market in 1925. De Vry had had a continuous model on the market as early as 1916. But, for that matter, Edison had had a continuous projector in 1896. Rather surprisingly, Herman De Vry, who usually was in the first rank with such developments, fought the 16mm innovation. As lately as the close of 1926 he advertised that, "Not one per cent of the film production of the world is on narrow width, off-standard stock." But less than a year later the successful DeVry 16mm Projector made its appearance. Herman De Vry was too sensible not to give in to a trend. In September, 1936, the 16mm standard was adopted and ratified at Budapest by the International Standards Association, largely through the efforts of S. K. Wolf, then or recently president of the Society of Motion Picture Engineers.

In the Eastman Kodak Company's own account of how it was impelled into its school films experiment it has been scrupulously careful to attribute the start to outside influence. According to that cautious statement, the experiment began in 1922, when a committee of inquiry, appointed by the National Education Association, applied to a number of professional film concerns, including Eastman Kodak, for information about where to obtain proper school reels. The year mentioned had other influences, of course, as the reader must surely realize. It was an active period in the visual education movement; Clarke's Society for Visual Education had been founded only lately; it was the year of the establishment of *Educational Screen;* it was the time of the Commonwealth Fund grant to Frank N. Freeman. The committee in question was headed by Dr. Charles H. Judd, director of education at the University of Chicago. There were obvious reasons why the Kodak Company should take the inquiry seriously.



Victor's 16mm projector of 1923, operated by using a hand crank, was the world's first. It symbolized his successful fight for a standardized non-theatrical film.

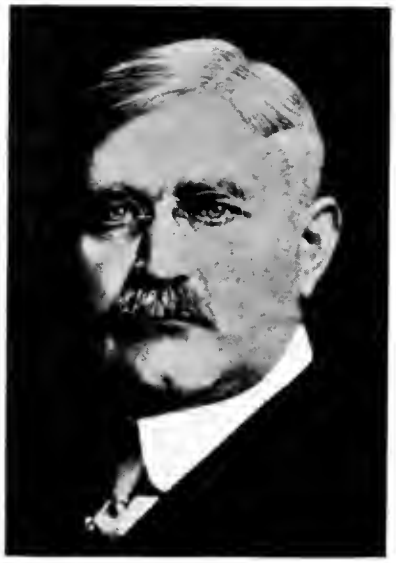
The Motion Picture Producers and Distributors of America, to which loose but justifiable reference has been made in these pages as "the Will Hays Committee," was one of the organizations to which the N.E.A. seekers of truth originally applied, and it is a proud boast of the M.P.P.D.A. that, through its offices, the N.E.A. and Eastman were brought together. It is even stated in a report circulated by the Hays Committee and now before me, that—referring to this very situation—"Without the assistance of Mr. Hays and Governor Milliken, educational pictures might have been long delayed." Certain it is that American theatrical film men have repeatedly volunteered their coöperation to educators, and they had done so long before Hays began to function and confirmed their pledges. Hay's first confirmation came in April, 1923, when the M.P.P.D.A. voted $5,000 to the N.E.A. to apply to the production of what the teachers would consider proper school films.

The Eastman officials before making commitments to the N.E.A. committee, decided to look into the matter for themselves. Over a period of approximately three years they consulted convenient private sources of information, and eventually obtained enough to warrant their decision to produce a few specimen school films with which really conclusive tests might be carried on. In their own words substantially they had found: (1), that few real school pictures had ever been prepared; (2), that school films and proper projection equipment cost too much for teachers to obtain; (3), that only large capital could develop the field on the ample scale required; (4), that sufficient experiments had been performed to prove the value of school films. So much for the general attitude reached by the Eastman Company.

It was now March, 1926. Not wishing to depend too far on their own judgments for further solitary action, and no doubt anxious, too, to stimulate the interest of the N.E.A. the members of which naturally would be expected to support any school plan, the officers had George Eastman call a conference of prominent schoolmen at his Rochester office and place the tentative project before them for criticism. They had announced the proposal briefly at the N.E.A. Washington meeting of its department of superintendence in February, but the real publicity came now in March, when Will Hays, of the M.P.-P.D.A., released to the newspapers a letter, from George Eastman to him, containing the information that the Kodak Company intended to produce pictures to implement class teaching.

However, there seems not to have been any representative of the M.P.P.-D.A. present at the meeting of the educators at George Eastman's office in March. The visitors on that occasion were: Thomas E. Finegan, of Harrisburg, Pennsylvania, chairman of the visual education committee of the N.E.A.; John H. Finley, of the New York *Times*, a director of Harmon's Religious Films Foundation; Payson Smith, Massachusetts commissioner of education; from Columbia University, Mary Pennell and Otis Caldwell, principal of Lincoln School of Teachers College and a director of Clarke's S.V.E.; William A. McAndrew, superintendent of Chicago schools, the same who was to attain a kind of international celebrity in later years when made a target of the political machinations of Mayor "Big Bill" Thompson; Howard Burge, principal of the Fredonia New York State Normal School; and, from Rochester, itself, Herbert S. West, superintendent of schools, Charles E. Finch, director of vocational schools, and Mabel Simpson, primary grades supervisor.

The visitors were naturally pleased



Thomas E. Finegan brought wide experience to the conduct of a broad enterprise. An exceptional man commanding an exceptional undertaking.

with the practical interest of the Kodak Company, and were gratified, too, to find a plan so intelligently and painstakingly developed. The proposal having been generally approved, therefore, the discussion turned, at George Eastman's request, to a naming of those teaching subjects where preliminary test films would probably be most valuable. The conclusion was reached, then, to make reels in geography, health and hygiene, civics, fine and practical arts and general science, concentrating on the fourth, fifth and sixth elementary grades and the junior high school level.

The scheduled time for the experiment was two years. During that period no sales either of films or proposed projection equipment were to be made to any of the schools concerned in the experiment, those items to be loaned by the Eastman Company for the purpose. The school systems chosen were situated in Rochester, Detroit, Chicago, Kansas City, Denver, Los Angeles, San Diego, New York, Atlanta, Winston-Salem and Newton, Massachusetts, utilizing, obviously the better known active visual instruction centers. The pictures were all to be on 16mm film and the projector in each case was to be the Kodascope.

It was a cause of satisfaction to educators generally that, in December, 1926, the Eastman Kodak Company further announced that it had engaged, to direct the project, Dr. Thomas E. Finegan, who already had served on the preliminary committee. Dr. Finegan, who thus then began his new duties in January, was an educator of recognized standing and a gentleman of exceptionally high principle. He had been born in upper New York State in 1866, had been trained as a teacher, admitted to the bar, and had received degrees, earned and honorary, from Hamilton College, the New York State College for Teachers, Colgate, the University of Maine, Temple University, Grove City College, Dartmouth, the University of Pennsylvania and Susquehanna University.

In 1919, when he was New York State deputy commissioner of education, he was taken over as State commissioner of public instruction for Pennsylvania. In his five years tenure of office there, he reorganized the State school system. But he finally declined reappointment because of what he termed "the unethical stipulations demanded by the Governor." His work thereafter, until he joined the Eastman enterprise, was essentially in making surveys of school systems in various large Eastern cities. When Eastman Teaching Films was incorporated in 1928, he became president and general manager. He remained there until he died, suddenly, in November, 1932.

When Dr. Finegan assumed command, the Eastman project had a little more than twenty films under way. There were ten on geography, five each on health and general science, one on the life of a New England fisherman, and one to show the effect of iron on the industrial progress of America. Approximately thirty more subjects were expected to be ready when the schools reopened after the 1927 summer vacation. To prepare the content of these additional ones, teachers of the various subjects to be presented were brought to a training school at the Rochester offices during the summer. There, under direction of experts in visual education and especially of film practices, they were able to hold frequent conferences and review each stage of the work as it proceeded. The technical supervision of all these films was referred to Herford Tynes Cowling, well known producer of travelogues, one-time cinematographer to Burton Holmes.

Eastman Teaching Films, Inc., did useful work in another place, namely, the department of medical and surgical motion pictures. Here again Will H. Hays acted as go-between, this time bringing together the Eastman Kodak Company and the American College of Physicians and Surgeons. The reader is aware of the early interest of the latter association in circumstances which produced Clinical Films, and in some other efforts in the line. A committee composed of eminent surgeons had been investigating the screen possibilities for the College over a long period. I have mentioned their conferences with Frank Tichenor. They also talked extensively with Visugraphic where Mariner was employed. Chairman of the committee, Dr. J. Bentley Squier, was rather an old hand at the work. His enthusiasm was tempered by much practical experience, and he was seconded strongly by an exceptionally clear-headed gentleman, Dr. Franklin Martin, director-general of the College.

It is due to Martin, principally, I am sure, that the film-making experience of the College has had no really serious pitfalls. The rest of the permanent committee, however, was composed of men of thorough penetration, including Doctors W. W. Chipman of Montreal, president of the College; George W. Crile, of Cleveland; C. H. Mayo, of Rochester, Minnesota, and Allan Craig, Bowman Crowell and Malcolm MacEachern, all of Chicago. And by no means should one overlook the intensive personal investigation of the very celebrated, indeed, Dr. Fred H. Albee, founding fellow and governor of the College.

The College held its 1926 convention at Montreal, and the committee on films, in making its report, introduced Will Hays as honorary chairman. Hays, in his address, hailed the great opportunity for these men of science to use the facilities of the silver screen, and pledged the coöperation of his own organization, the M.P.P.D.A., to promote the making of needed presentations in medicine and surgery. He then arranged a meeting of the committee with representatives of the Eastman Company, and a plan was formulated to produce a series of appropriate subjects with which the medical division of the non-theatrical field

Meet Mr. Maddock. Eastman Kodak took him on to sell a completed stock of Teaching Films. He did so well that they had to resume production.

could win its proper start and gain a lasting momentum. Actual progress was made that way, and in the next annual meeting of the College, at Detroit, members were shown the first two subjects, "Infections of the Hand," and "Nursing" and were told the glad news that these were but the beginning of a series.

It was intended, the committee explained, that the films should be made available, through sale and rental, to doctors, nurses and hospitals, the Eastman Company acting as physical distributor. The list of subjects had been compiled carefully out of the recommendations of more than two hundred recognized professional specialists, and production was being supervised meticulously by a new board of medical motion picture films. Called for on the schedule were pictures on anatomy, physiology, bacteriology, embryology, surgery — including studies of special operations, fractures, cancer and operating room techniques— experimental medicine, health examination, obstetrics, hygiene, sanitation, public health, neurology, hospital practice and, as mentioned previously, nursing.

(*Continued on page* 306)

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

ADMINISTRATION

Setting up a County-Wide Audio-Visual Aids Program—R. V. Braham, Charleston, West Va. *The School Executive*, 62:20 Sept. 1942.

A director of audio-visual aids should be appointed. He should know the mechanics and techniques of the field, should be a good organizer and a good teacher. Among his responsibilities are: 1) Surveying the county or school district for available equipment and personnel; 2) Selecting an accessible location for the library; 3) Arranging for prompt service; 4) Selecting films and equipment; 5) Directing and organizing audio-visual aids clubs in member schools.

As illustrative of a working program, the experience of the Lincoln Junior High School in Kanawha County is given. The principal was interested in promoting a visual aids department which he had established. He placed an enthusiastic teacher in charge.

The school owned a silent film projector and a lantern. The teacher gathered 10 dependable boys and girls about her. They organized a club with a constitution and a working procedure. All were taught to operate and care for a projector. The school soon bought a sound projector with microphone and turntable. The club collected and filed catalogs, and organized an advisory service for each curriculum field. It requisitioned materials and equipment and arranged for an operator for each showing. The club intends to prepare a listing of films for the county course of study.

Organizing Film Programs — S. J. Bernhard, Midwood High School, N.Y.C.—*High Points*, 24:34 Sept. 1942.

In a previous article (January, 1942) the author described the unified visual instruction in a large high school in New York City. This is a further elaboration, prepared as suggestive to those who are interested in doing likewise.

Administrative organization: The physical aspects of the program are in the hands of a squad of boys directed and trained by a laboratory assistant. The planning, selecting and teaching problems are under the Visual Instruction Committee. Almost every department of the school has a teacher member on this committee.

Supervisory organization: Each department has devoted part or all of a faculty meeting to a discussion of film usage, under a direction of the teacher who is on the Visual Instruction Committee. For each department there is available a listing of films to be seen, with a summary of contents for each. Classes see the films in the special room set up for projection. After the showings, teachers submit a report on the films and their use. A consensus of teacher judgment on each film used in the department is filed with the chairman of the Visual Instruction Committee.

Cost and sources: Many of the science films and a few films in other subjects are owned by the school. For the additional 87 films used in the school in one semester, the cost was $28 for rental and a small sum beyond this for express and postage. The article concludes with a listing of films found useful in the various departments.

Visual Education — Harry Norton — *Montana Education*. 19:6 Sept. 1942.

Report of the status of the Montana State Library of Visual Aids and Education whose first catalog is about to appear.

Success Lies in Organization—Alex Jardine, Director of Research and Secondary Education, Evansville, Ind.—*Nation's Schools* 30:49 Aug. 1942.

School systems just beginning an organized program of audio-visual aids should benefit from the experience of others. A representative committee should first survey the status and needs. Teachers should be especially active in this preliminary stage.

Make a careful search of all buildings for equipment that is obsolete and that can either be remodeled or traded in. Catalog all materials and place them in a central office for general use.

Proposals for the acquisition of new materials should be carefully considered, according to size of school system and amount of use. Often rental of films, slides, etc. is more economical than purchase, especially if the use is infrequent.

Prepare a definite annual budget to include purchase of new materials, rentals, postage and maintenance.

Classrooms should be surveyed for projection facilities. Begin with a minimum program and expand as need arises.

Leadership for such a program should be delegated to a dependable person, part-time in a small school system or full-time in a larger system. This person should be acquainted with curriculum problems throughout the school and should help wherever possible. Within each school building there should be a teacher in charge of equipment and materials.

SCHOOL JOURNEY

School Journey in the History Program of English and American Secondary Schools—Rosebud Solis-Cohen—*Texas Outlook* 26:13 Sept. 1942.

The school journey is especially valuable for understanding local history and national history that occurred near the school area.

Sometimes individual students visit a designated place, with study questions as a guide. It may be a shrine or museum.

Comparison is made with the English way of arranging walking or bicycle trips to important places, usually during school holidays.

UTILIZATION

Film Guide for Business Teachers—Clifford Ettinger, Wm. Howard Taft High School, N. Y.—*Journal of Business Education* 18:25 Sept. 1942.

A summary of interesting developments in the use of films for workers' education and in higher education.

Teaching by Bulletin Board—G. G. Starr, formerly Supt. of Schools, Arcanum, Ohio — *School Executive* 62:26 Sept. 1942.

A very thorough summary of the principles behind the effective use of bulletin boards. Excellent photographs illustrate the theme that bulletin boards should follow the precept of commercial billboard display. Posters should be made by students under guidance by teachers and will integrate the various departments of a school.

EVALUATED LISTINGS: RECORDINGS

Selected Educational Motion Pictures: A Descriptive Encyclopedia. Compiled by the Motion Picture Project, American Council on Education, Washington, D. C. 1942 372 pp. $3.00.

The evaluations of more than 450 films presented in this encyclopedia are the result of a five-year evaluation program in which the research staff of the Motion Picture Project sought the cooperation of classroom teachers and students. The book has been prepared to supply information on a number of films which have proved their usefulness in actual classroom situations.

Listing is alphabetical, including sound and silent titles chosen from educational, industrial and government sources. Complete information as to local distributors is also given. Wherever possible, the research staff has depended on teacher judgments of the effectiveness of a film. Extensive de-

scriptions are given of the contents of each film, while the "Appraisal" gives the educational rating of the film, primary purposes for which it may be used, and indicates other purposes for which it may be useful. A sentence on the quality of the photography tells whether it is "excellent, fair or good." Suitable grade levels are also indicated.

In addition to the alphabetical listing, the film titles are also classified by subject and curriculum areas. When a film may be used in several subjects, it is included under each.

Recordings for School Use: A Catalog of Appraisals, 1942. (Radio in Education Series)—J. Robert Miles, with special Appendix by R. R. Lowdermilk—World Book Company, Yonkers, N.Y. $1.24.

The evaluation of recordings was carried on in connection with the Evaluation of School Broadcasts Project, Ohio State University. Teachers and administrators in some fifty public schools assisted in the research.

The Introduction provides a basis for selecting and using school recordings. The Catalog is arranged according to the following subjects: Social Studies and Science, Literature, Foreign Languages, Elementary School, Miscellaneous.

The appraisals are constructive and very specific. Teachers everywhere will be greatly aided in their purchase of recordings by the excellent information contained in this book.

Appraisals are based on the findings of classroom tryouts and of expert subject matter judgment on over one thousand recordings. The notations comprise a general rating, school subject in which the recording has been found most useful, full technical specifications and a description of the program content.

The volume also includes helps on the selection and use of a record-player, and the addresses of producers and distributors.

SOURCES OF INFORMATION

Descriptive Catalogue of Sound and Silent Films (16mm); Classified Listing of Titles for Sound and Silent Films. M. R. Klein, Director, The Educational Museum, 4914 Gladstone Ave., Cleveland, Ohio.

These bulletins are in loose-leaf form for the use of the classroom teachers of Cleveland. The titles listed have been selected and previewed by various department heads and curriculum centers with the purpose of supplying a modern visual aid for instruction.

Basic Field Manual: List of Publications for Training, Including Training Films and Filmstrips. FM 21-6 Superintendent of Documents, Washington, D. C. 1942.

A listing of the films now available to the armed forces for training. Distribution and untilization of these materials are under the direction of Captain Charles F. Hoban, Jr. Although the manual is now available for public distribution, few of the films or filmstrips are generally available. However, the quality of the materials is outstanding and the manual is important for future reference.

Motion Pictures—Not for Theatres

(*Continued from page* 304)

Some of the reels were to be for showing to the general public in hope of teaching disease prevention to the citizenry.

The recent list of medical motion pictures under the *aegis* of Eastman Teaching Films numbers approximately eighteen, many of the items in three reels apiece. There are also half a dozen or so subjects produced by the organization "in coöperation with" the department of biology and public health of the Massachusetts Institute of Technology. On the whole, a very generous supply for purposes of testing a division of the field which, like the others, had not proved sufficiently interested to justify immediate continuance of the program.

Among the doctors who had been most interested in the medical films project of the American College of Surgeons before the Hays coöperation was accepted, and most anxious to get on with it, were Doctors J. Eastman Sheehan, eminent plastic surgeon, and Cherry, distinguished in another operating specialty. Individually and quietly, they carried on their private investigations of the field, and were surprised one day to discover that they had reached Carpenter and Goldman by different routes. Dr. Cherry was especially anxious to use a natural color process in his work, and Carpenter and Goldman, through an alliance with Charles Urban, possessed some Kinemacolor cameras. With one of these Dr. Cherry moved into New York's Post-Graduate Medical School and Hospital for some experimental shots. Dr. Sheehan also made some in plastic operations.

Sheehan and Cherry then decided to join forces to produce a series. But they presently quarreled and separated. However, Sheehan continued alone, and supervised the making of about thirty reels by Carpenter and Goldman. In the meantime the apparatus used was considerably improved, and an especial projector was built for Sheehan to use in a successful demonstration at Havana. The Post-Graduate board went on record as favoring production of surgical films by this method, and Sheehan embarked upon a still heavier output. The laboratory was busily editing approximately 9,000 feet more for him, while he himself had gone with completed reels to lecture at McGill University in Canada. He was awaiting the time to show those reels when the film caught fire and the precious special projector was wrecked in trying to extinguish the flames. After that Dr. Sheehan was discouraged.

In 1931, in preparation for the George Washington Bicentennial celebration the following year, Eastman Teaching Films produced the official motion pictures for the Government Commission so industriously headed by Representative Sol Bloom, purporting to show numerous scenes from the life of the Father of His Country.

Production of the original Eastman Teaching Films series ceased about the first of July, 1932, the Company feeling, reasonably enough, that, for that present, it had made sufficient contribution there. The subjects made previous to 1933, however, have been kept continuously available to educators. The school tests were faithfully carried out as promised, and, in 1929, Dr. Finegan described in various places the encouraging results. Yes, schools could use instructional motion pictures to advantage. The full report of the experiments were published during 1929 under the general authorship of Ben D. Wood, of Columbia University, in collaboration with Frank N. Freeman, of the University of Chicago, in a book entitled, *Motion Pictures In the Classroom.*

As said before, the selling of Eastman Teaching Films has continued. In order to extend their use, an especial sales organization was built with recruits from the book merchandising field—on the theory that salesmen trained there would be unusually familiar with the educational approach. The immediate source of such personnel was the G. & C. Merriam Company, of Worcester, Massachusetts, publishers of *Webster's Dictionary.* From the sales department there was taken a group headed by W. H. Maddock. In this manner the enterprise was rejuvenated. In 1933 Eastman Teaching Films, Inc. was absorbed by the parent company, Eastman Kodak Company, and became officially the Teaching Films Division of the Eastman Kodak Company. W. H. Maddock, who up to that time had been sales manager for Eastman Teaching Films, Inc., was made manager of the Teaching Films Division of the Eastman Kodak Company and has continued in that position since 1933.

New productions were made, some by arrangement with current exploring expeditions—the Thaw Expedition was one. Several recent geographical films have been photographed by that active American wanderer and lecturer, Julien Bryan. And there was a pleasant screen sojourn in the restored colonial capital of Williamsburg, Virginia. The latest Eastman catalog lists over three hundred films on Agriculture, Applied Art, Geography, Health, History, Nature Study, Science and Industry. Extra attention has been gained by the supplementary reels because they have been made as silent productions causing them to be cited in certain quarters as proof that sound films are not always to be preferred after all. It is certain though, that this interpretation was not intended by the Eastman Company, or by Ken R. Edwards, who has been in charge of the photographic end of this work.

(To be continued)

Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

To the Members of the Department of Visual Instruction:

FIRST of all, I should like to express to you my sincere appreciation for naming me your president for this year. It is my earnest hope that I may serve you well. In order to do this, I shall need your guidance and good counsel, and I hope that each of you will feel a personal responsibility for the furtherance of the affairs of the Department in this year which is filled with grave problems for us all. I hope that we may draw very closely together this year and have an exchange of suggestions and ideas at all times.

President Roosevelt has said, "We ask that every school house become a service center for the home front". In a few simple words he has told us that not only are we called upon to teach our boys and girls in the classroom to know and to mold a better world order, but beyond this, *and every educator must awaken to this fact,* we must open wide the doors of our schools and go out into the community to assist every agency in awakening our citizenry to the grim and stark reality of the world crisis in which we are struggling.

Mr. Paul Reed, Past President of the Department of Visual Instruction, who is now head of the Educational Division of the Bureau of Motion Pictures, Office of War Information, Washington, D. C., has recently sent me the letter which is printed below. It holds a message for each one of you interested in visual education. Please read it carefully and then resolve to search out every possible place where films of this kind can be used in your community. This is the greatest opportunity that visual education has ever had to prove its value. This is the greatest opportunity that you and I in the field of visual education on the "home front" have ever had, each one of us, to serve our country.

Fellow members of the Department of Visual Instruction, let us pledge ourselves as a group to bring the films of the Bureau of Motion Pictures, Office of War Information, to all members of our communities. Let us feel that this is a privilege extended to all of us in visual education work, to make our contribution to the great war effort of America.

Sincerely,

CAMILLA BEST, President

Dear Mrs. Best:

I should like to propose a practical way that members of the Department of Visual Instruction can make a real contribution to the war effort in their own communities.

As you know, the Office of War Information through its Bureau of Motion Pictures is carrying on an aggressive 16mm war film program. From three to five new subjects are being released each month and hundreds of prints of each subject are being distributed throughout the country through the facilities of existing established film libraries.

These are pictures for all Americans to see and if maximum results are to be obtained from the prints available, every time a print is ordered for showing it should serve several groups on the same day. This takes planning and organization in every town and community where war films are used.

There's the job for D.V.I. members.

Why shouldn't they take the initiative in their communities to see to it that all groups—schools, luncheon clubs, women's groups, church organizations, factory workers, Parent-Teacher Associations, and other organized groups—plan together for a systematic and shared use of all available projection equipment and war films?

An informed American people is essential to the winning of this war. We know the value of the motion picture as a medium for communicating information. D.V.I. members can aid in bringing about the most efficient use of war motion pictures.

Sincerely yours,

PAUL C. REED, Head
Educational Division
Bureau of Motion Pictures

New DVI Officers

Camilla Best, Director of the Division of Audio-Visual Aids, Orleans Parish School Board, New Orleans, Louisiana, is the newly elected president of the Department of Visual Instruction.

Other officers elected by the mail ballot sent to members shortly before the summer meeting in Denver, are: U. S. Burt, Oregon State College, Corvallis, First Vice-President; and James R. Brewster, Harvard University, Second Vice-President. James D. Finn, Colorado State College of Education, Greeley, and Paul C. Reed, Office of War Information, Washington, D. C., were elected to fill two vacancies on the executive committee.

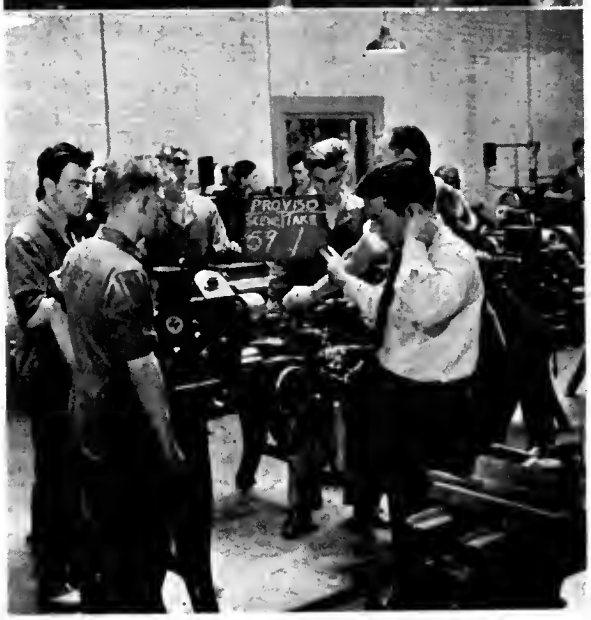
Lelia Trolinger, Secretary of the Bureau of Visual Instruction, University of Colorado, has been appointed Secretary-Treasurer of the Department for 1942-43. Miss Trolinger also continues as president of Zone VIII.

Two Requests to the Zones

(1) Many Zones have retained the same Officers for 1942-43. Any Zone which has changed its Officers, in whole or in part, please send at once the correct list, with addresses, to the address below.

(2) All Zones are requested to send data on their activities, meetings, programs, etc., direct to the magazine for use in the department "Among Ourselves," until the Editorial Committee can be reorganized and begin functioning for the current school year. Prompt action by the Zones will prevent omission of "Among Ourselves" in the next several issues.

THE EDUCATIONAL SCREEN
64 E. Lake Street, Chicago



A few of the pupil activities presented in the motion picture, "Backing Up the Guns."

Backing Up the Guns!

IN ANTICIPATION of possible moves to reduce school appropriations, under the pressure of rising Federal taxes, the Illinois Education Association has produced a sound motion picture, entitled *Backing Up the Guns,* to demonstrate the vital role our schools are now playing to help win the war, and to show that they are a "must" in the war effort.

The theme of *Backing Up the Guns* is "School Support for the War Effort." The film dramatically depicts the schools engaged in those activities suggested by the Educational Policies Commission such as:

Safeguarding and promoting health and physical efficiency
Training workers for war industries and services
Protecting the ideals of democracy against war hazards
Teaching the issues, aims and progress of the war
Sustaining the morale of children and adults
Conserving materials by prudent consumption and salvage
Increasing effective man-power by correcting educational deficiencies

Backing Up the Guns is a picture of, by and for our school children—greatest of all our national resources. They are the war workers, the soldiers, the sailors, the fliers of tomorrow. Their training for all these responsibilities begins in the school. These school children are also the citizens of tomorrow. Upon them falls the job of rebuilding a world that is worth living in. They have to live in it. They have to understand what democracy is, how it works. Who can best prepare them for this work? Most dramatic of all is the picture sequence which shows how teachers guard and develop those priceless ideals upon which our Democracy is founded.

The film tells a complete story of how closely our whole educational system has been tuned to the needs of the nation, and how the teacher is shown doing his or her part, performing many vital services not in the line of duty in normal times. It closes with a strong appeal for the voter to equip the schools better for their tremendous task, and urges stronger financial support for teachers.

All the "actors" are amateurs—the teachers and children themselves. Most of the footage was shot in classrooms without previous warning or preparation of the students. Cameras and lights were set up in advance, and when the students came in they were on the film almost before they knew it.

Backing Up the Guns was produced by the Chicago Film Laboratory under the personal supervision of B. I. Griffith, Director of Public Relations for the Illinois Education Association. The funds were contributed by the teachers of Illinois. Edward Schager wrote and directed the picture. It is available in a 16mm version that runs 16 minutes, and also a short 35mm version (6 minutes) for theatrical circulation.

The film was premiered at the Denver convention of the N. E. A. last summer and was well received by the educators. Prints have been purchased by many State Teachers and Education Associations.

The picture can be booked either through local school officials, or directly from the office of the Illinois Education Association, 100 East Edwards Street, Springfield, Illinois.

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

EDUCATORS who are interested in teaching pedestrian safety in the elementary school will find the account of *Do You Walk Safely*, a 350 foot Kodachrome reel produced by the Greenwich, Conn. Schools' Motion Picture Class, worthy of study. The film, sponsored by the National Highway Education Board of Washington, D. C., and directed by Miss Eleanor D. Child, Greenwich audio-visual director, is designed for use by individual classes in the primary grades. Facts regarding the film and its synopsis are quoted from a three-page guide furnished by Miss Child.

In the film, John, a grade school boy, encounters ten problem situations while walking home from school. After each problem, a question is asked. When the first half of the film has been shown, the projectionist stops the picture to permit a pupil discussion of what would be the safe solutions for the ten problems.

DO YOU WALK SAFELY?

Title: What Would You Do? (Superimposed on shots of pedestrian hazards.)
Title: We are going to see some of the dangers John meets on his way home from school.
Title: John has learned how to be safe. In the second half of the film he will show you how he avoids accidents. But first we want to know—What would You do?
1. (John and others are at a crossing with white lines evident.)

Title: What would You do here?
2. (John is at an intersection where police is directing traffic.)

Title: What would You do to cross this street safely?
3. (John is at a busy corner where there is a traffic light.)

Title: What would You do at this traffic light?
4. (John sees girl trying to cross street between two parked cars.)

Title: What would You do now?
5. (Older boy and girl accidentally throw ball onto the street between moving cars. John is asked to get the ball.)

Title: How would You get this ball?
6. (Boy riding bicycle offers John a ride.)

Title: Would You ride on this bicycle?
7. (Two boys riding on tailboard of truck offer John a ride.)

Title: Would You take a ride on this truck?
8. (John reaches a place where there is no path or sidewalk.)

Title: Where would You walk if there were no sidewalks?
9. (John is offered a ride in a car on opposite side of the road.)

Title: If you wanted a ride, how would You enter this car?
10. (The car that picked up John, stops to let him out.)

Title: How would You get out of this car?
Title: In a few minutes we will see what John did. Now we will stop so that You can tell what You would do.

After the discussion, the second part of the film, which shows what John did, emphasizes correct procedures.

Title: Walk between the white lines.
1. (John and other pupils walk between white lines.)

Title: Wait for police signal.
2. (Policeman who is directing traffic gives signal for John to cross.)

Title: Wait for traffic light.
3. (John waits for light to change.)

Title: Avoid crossing near parked cars.
4. (John sees girl about to cross street near parked car, stops her, and takes her down the street. He sees the policeman, who stops traffic for them to cross.)

Title: Look both ways while getting a ball.
5. (Boy and girl accidentally throw ball into street. John, looks both ways while he gets it.)

Title: Refuse rides on bicycles.
6. (John refuses to ride on a bicycle with his friends.)

Title: Keep off trucks.
7. (John refuses a ride on the tailboard of a truck.)

Title: Walk facing traffic.
8. (John shows the proper way of walking on the road.)

Title: Enter car on curb side.
9. (John shows the proper way to enter a car when offered a ride.)

Title: Leave the car on the curb side.
10. (John leaves car on curb side and crosses street.)

Handbook for Film Makers

A welcome addition to the reference library of the experienced school film maker is *The American Cinematographer Hand Book* and *Reference Guide* by Jackson J. Rose (publisher, American Cinematographer Hand Book and Reference Guide, 1165 North Berendo Street, Hollywood, Calif.). Packed within its 251 pages is the latest technical information on movie and still photography. 35mm., 16mm., and 8mm. equipment and accessories are included in the manual. When a problem in technique arises, the amateur needs only to use this reference text, and he will usually find the answer in a clear, understandable chart or table. Included in the book are sections on cameras and projectors, sound recorders, light and fog filters, photoflash and photoflood exposure tables, photoelectric exposure meters, filter factors, lens angles, hyperfocal distances, depth of focus, projection, and many other subjects. The price of the handbook is $3.50.

Horse Film Completed by University Extension

Another research film has been completed by the Visual Instruction Department of the Extension Division of the University of California.

The History of the Horse in North America, a 4-reel color motion picture, begins with archeological research and reconstructed prehistoric scenes, when the horse was no larger than a fox terrier, and follows through with a magnificent series showing the horse of today.

Great sires and dams, the famous Seabiscuit, the

(*Concluded on page* 312)

Bench Work: (left to right) "Scraping and Fitting Small Bearings;" "Reaming with Taper Hand Reamers;" "Centering Small Stock."

More Films to Train Millions in Industrial Skills

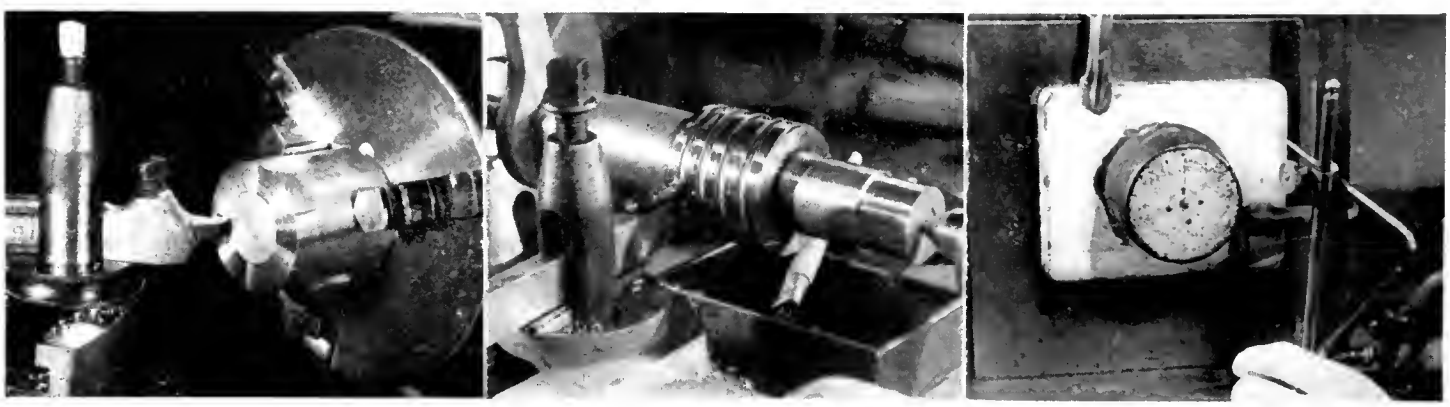
REMARKABLE results obtained with the vocational training films of the U. S. Office of Education, Federal Security Agency, in speeding the training of war-industry workers have caused the government to extend and greatly enlarge its Victory Training Film Program, and 140 new motion pictures, involving an expenditure of approximately $1,000,000, are now projected.

The purpose of these films is to accelerate the process of training new workers in the technical and semi-technical phases of war production.

Forty-eight of the original films, which marked an experiment in applying visual education to specialized skills required in war production work, were put into circulation almost simultaneously with the outbreak of the war, eighteen of them being ready a week in advance of Pearl Harbor. These initial films related in most instances to basic plant operations, such as precision measurement, bench work, the use of milling machines, cutting tools, and various other machine tasks. Ten of the films deal with shipbuilding operations. These have been used in training work by both the Navy Yards and private shipbuilding establishments and are regarded as one of the reasons why the shipyards have been able to develop greatly enlarged staffs of capable workmen and produce good ships so rapidly.

Distribution of the pictures, which have reached a total of more than 8,000,000 feet of 16 mm. films, exceeding many times what was expected when the program was inaugurated, has been made by Castle Films, Inc., of New York City. The films were made by a number of producing companies under the close supervision and direction of Dr. C. F. Klinefelter, assistant to John W. Studebaker, U. S. Commissioner of Education. Assisting Dr. Klinefelter were Floyde E. Brooker, who handled the technical motion picture phases of the work, and J. W. Barrit, formerly supervisor of apprentices of the Westinghouse Electric & Manufacturing Company and author of various textbooks on machine tools and machine shop operations. Assisting with each picture was a local advisory committee representing industry, labor and vocational education.

In the nine months following Pearl Harbor, the training films proved to be one of the important factors involved in the conversion of the country's peace-time industry to full scale war production. The enlarged film program is now being planned both because of the value and extensive use of the original pictures, and because it is anticipated that the nation's war industries will acquire many millions of new workers during the next twelve or fifteen months. They are especially adapted to the training of women who have had no industrial experience, and it is estimated that upwards of 5,000,000 women will be required by our war industries and shipyards during the next year. The subjects for the new program are now being selected, and



(Left to right) "Fundamentals of End Cutting Tools;" "Cutting an External Acme Thread" (from the Engine Lathe series) "Countersinking, Counterboring and Spot Facing" (one of the films on the Vertical Drill).

it is expected that a substantial number of the films will deal with additional shipyard operations and airplane manufacturing.

To cover the cost of the Victory Training Films for the current fiscal year, Congress has appropriated $1,000,000, which is, as far as Office Education officials could recall, the first instance in the history of the federal government of an appropriation being made specifically for motion pictures. Manifestly both the Budget Bureau and the House Appropriations Committee were impressed with the use made by industry and educational institutions with the first forty-eight films.

Dr. Klinefelter and his co-workers feel that the films have been exploring a new pathway in visual education, and are greatly pleased with the volume of letters reaching the Office of Education from the training departments of companies, from state departments of education and from vocational schools emphasizing the value of the pictures to both instructors and trainees. The principal advantages have been to shorten the training period in many skilled crafts, and to save money for the companies producing war materials.

One of the points in favor of this type of training is emphasized by A. F. Johnson, Coordinator of Shipbuilding, U. S. Maritime Commission.

"To show learners," he says, "how the structure and equipment of a vessel are produced and assembled, all this without interference of related trades and in proper sequence, would be impracticable on the vessel itself. These learners would get in the way of productive workers. On the other hand, these films, with supplementary animation and commentary, can be used repeatedly and quickly to instruct beginners away from the job and with the least delay in production.

"These films convey the knowledge of assembly steps, nomenclature, part identification, markings, and supplementary erection procedures, with equal clearness. They also show skilled manipulation which young apprentices may imitate to their advantage. No other process of visual training can so vividly portray the complete story of producing and erecting typical ship's parts. Nor is it possible to put the student into so many related shop or field environments with so little loss of time. The pictures permit, if necessary, the breaking down of complete shipbuilding trades into the component skills."

John M. Amiss, industrial education director of the Chrysler plant in Detroit, relates how the speed and efficiency of this type of instruction are producing unusual results. He said:

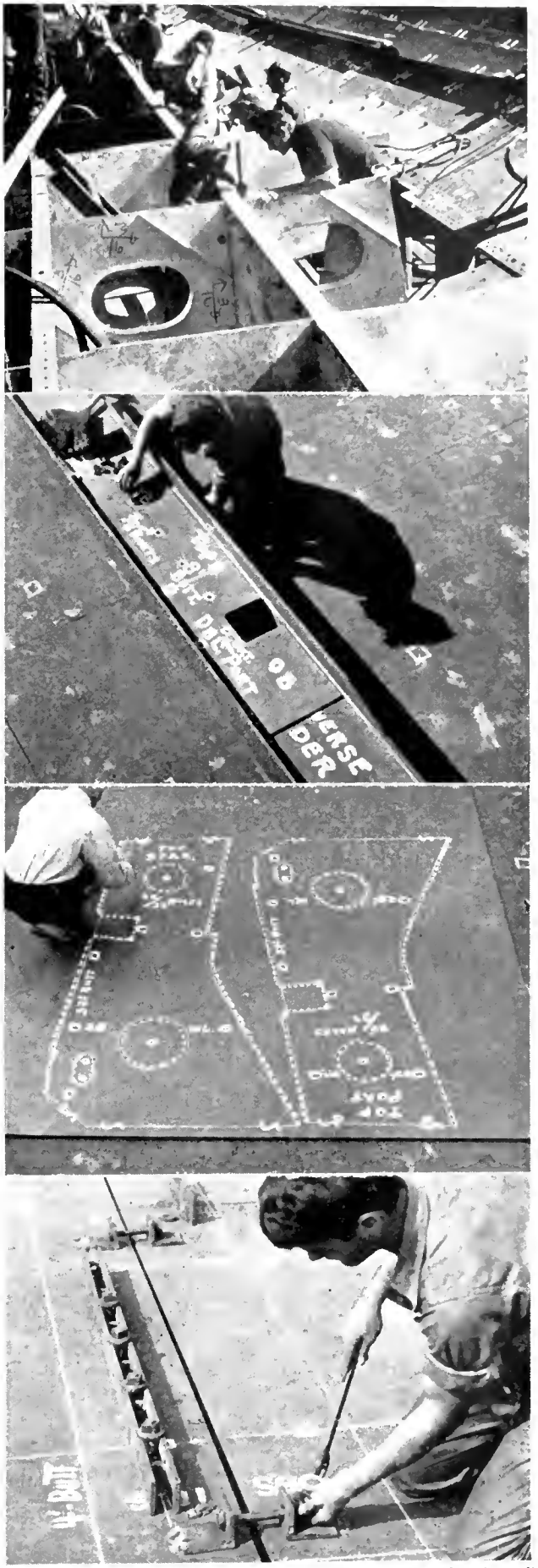
"Recently as an experiment, one of our instructors called in ten new apprentices who did not know how to read a micrometer. He merely showed the micrometer film twice to the group without any explanation or discussion whatever. He then brought in some micrometers and test blocks and had the group use the micrometers. Only one of the group tested was unable to use the micrometer as required.

"All of us acquainted with the films are as enthusiastic about them now as when we first used them. In fact, we are going out to the schools showing the films. In cases where the schools do not have a projector, we take along a projector."

William F. Cline, Projector Supervisor of Vocational Training for Defense Work, West Virginia Department of Education, writes:

"Comments of both trainees and instructors indicate that the films are extremely valuable. They speed up the rate of learning by presenting ideas in a concise, interesting way. They develop better comprehension by showing and explaining at the same time."

The forty-eight films now in circulation are being



Shipbuilding Skills: (Top to bottom) "Interbottom Sections;" "Side Frames—Sub-assembly of a Web Frame;" Deck Girders;" "Deck Plates—Regulating and Setting."

used by leading universities, such as Purdue, Tulane, Notre Dame, Kansas, Maryland; numerous trade and vocational schools; the Army, Navy and Coast Guard; arsenals, foundries and munition plants; shipyards and Navy Yards; automobile, tank and airplane manufacturers; steel and aluminum plants and a host of other industrial establishments. They have gone to forty-six of the forty-eight states. Inquiries or requests for the training pictures have been received from Great Britain, Canada, Australia, India, South Africa and Mexico.

Some of the larger companies have been so impressed with the role of visual aids of this type in employee training that they have made training films of operations distinctive to their own industries, while others are constructing auditoriums for the showing of the training films.

Dr. Klinefelter is enthusiastic over the success of the original films. He announces that the Education Office staff is being enlarged to handle the new operations planned and to give extra service to shipyards, vocational schools, war industries and industrial plants engaged in their own training programs.

School-Made Motion Pictures

(Concluded from page 309)

child's beloved pony, and groups of every recognized breed are color-filmed in action. Saddle and draft horses perform, as do the racing horse, the trotter, the pacer, the hackney, the rodeo pony, the hunter and the harness horse. There are scenes with the appoloosa, pinto, palomino and Arabian which will thrill every lover of horses.

The film was produced by the University of California Extension Division in cooperation with the departments of Paleontology and Animal Husbandry. Organizations, schools and others throughout the State may use the film by contacting the department of Visual Instruction, 301 California Hall, University of California, Berkeley.

A City School System Keeps In Step with the Emergency

HOW the Visual Education Department of the Providence, Rhode Island, schools has been expanded to take care of new curricular needs in the secondary schools occasioned by the demands of wartime, is told in a detailed report furnished by Henry E. Childs, Supervisor of Visual Education.

The Superintendent of Schools has endorsed a national program whereby high school pupils shall be trained with the expectation that they will soon serve in the armed forces or supporting services. Existing courses of instruction are being modified to fit wartime needs better. The time schedule is adjusted to allow time that may be used to provide additional information and stimulation so that the pupils will understand the demands of wartime, increased their usefulness to the community, and possibly provide direct training to qualify them for work in defense industries or for technical services with the armed forces.

Representatives from the twelve senior and junior High Schools in Providence have cooperated in planning a series of monthly auditorium programs of 45 minutes each for the entire school, emphasizing special themes particularly appropriate this year, such as women in wartime, ideals of American democracy, the importance of rubber, air raid warden and civilian defense work, youth training for war, and so on. Many of the schools are planning pupil participation in these auditorium programs. For instance, at Hope High School, pupil activity will take the form of brief comments on the theme of the picture, or of a dramatic skit on the same theme.

According to the plan worked out by Mr. Childs and a committee of teachers for Hope High, the large auditorium at that school will be used all day one day each month. Since all pupils in the school take English, they will be sent to the auditorium during their English class period on that day. The English teachers will train the pupils who will share in the program, which will be presented seven times in one day, aided by a teacher from the social studies, science or some other department particularly concerned with the content of the film of the day.

Other films will be shown to special groups. Boys will see many of the Army films showing training which will be valuable in various branches of the service. Girls will see films about nursing or other services open to women. Both boys and girls will see films about industry. Selected groups taking radio, aeronautics and other pre-service training, will be shown films on these subjects.

First aid films will be shown to all 11th grade pupils of the schools cooperating, who will take advanced first aid this year. Nutrition films will be projected in the classroom for pupils getting this important wartime learning. The visual education department also urges the use of more films which contribute especially well to learning. The visual education department also urges the use of more films which contribute especially well to current needs in the key subjects of science, social studies, health, citizenship, guidance, and home economics.

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Experimental Research in Audio-Visual Education

By DAVID GOODMAN

Title: WHAT ARE THE EDUCATIONAL VALUES OF THE SOUND-SLIDE FILM?

Reporters: Dr. F. Dean McClusky and Esther L. Berg

Purpose of Study

To determine the value of the sound-slide film as an aid to teaching, the National Research Council's Committee on Scientific Aids to Learning conducted an extensive investigation of five sound-slide films. These films were produced under the direction of the Executive Committee of the Metropolitan New York Branch of the Department of Visual Instruction of the National Education Association.

Objectives

The Department of Visual Instruction group, in accepting the project, decided that it would be desirable to produce films which could be used in teaching children from the primary school through the high school and furthermore selected as subject matter units those which would fall in areas not commonly taught at the various grade levels. As a second objective the Visual Instruction group determined to test out different types of presentation with the sound-slide film. In this way it was believed that not only would the investigation throw some light on the areas in which the sound-slide film could be used to best advantage, but furthermore that it might determine which type of presentation was peculiarly adapted to the sound-slide film type of presentation. Finally, if the potentialities of the sound-slide film as a teaching aid could be determined, the low cost of producing such films and the lower ultimate cost to the consumer was considered to be a major factor inasmuch as the standard sound-slide film is comparable in length of presentation to the 400 ft. sound-on-film motion picture. It was answers to such questions as these that the Committee on Scientific Aids to Learning wanted to know and this recently completed investigation helps to throw light on these problems.

Procedure

The Executive Committee of the Metropolitan New York Branch of the Department of Visual Instruction of the National Education Association appointed from its membership sub-committees to be in charge of each sound-slide film production. The areas in the curriculum into which each unit was to fall were determined and these in turn were assigned to the sub-committees. Sub-Committees were given the privilege of calling in others to assist them in their work.

Five units were determined upon: one in the field of Story Telling, applicable to children of the first and second grades; second, Safety, applicable to children of the third and fourth grades; third, the Teaching of Graphs applicable to children of the fifth, sixth, and seventh grades; fourth, Teaching of Vocational Guidance, applicable to junior and senior high school students; fifth, the Teaching of Human Relations, applicable to children of the senior high school.

After these areas had been determined upon, the search for suitable units of subject matter next was undertaken. It was determined that at the primary level the Story Telling film would present that well-known story "The City Mouse and the Country Mouse." The children in a Long Island public school were used as background subjects and an artist was employed to make miniature sets and figures to illustrate the story. The pictures were photographed in Kodachrome.

In the second aera, the teaching of Safety, the script was based on rhymes covering various types of hazards confronting children on streets. These rhymes were written by third grade children in one of the New York public schools. The photography was in Kodachrome color, miniature sets and dolls being used to illustrate the various safety situations.

In the third area, Graphic Representation, a straight lecture type of approach was used. The script was prepared by a teacher of mathematics in one of the schools in Staten Island. Inasmuch as most of the "pictures" used in this film were charts and graphs, they were drawn up by expert draftsmen and photographed. This film was produced in black and white.

In the fourth area, Vocational Guidance, a unit entitled "Your World of Tomorrow" was produced in cooperation with one of the large New York City junior high schools. Here a new technique was introduced; namely, that the guidance counselor and the individuals appearing in the pictures carried on a conversation. The person speaking had his back to the camera so that there would be little confusion created by conversation between people appearing in still pictures. This film was produced in black and white.

The fifth area, Human Relations, grew out of a class in sociology in a Westchester private school. The class prepared the script and served as the subjects for the photographs. This film was produced in black and white.

In producing these units the Department of Visual Instruction group took every possible precaution to create units which would be educationally sound and it was clearly understood that the measure of success would rest largely on the reaction of the students with whom they were to be used as instructional material.

The Committee on Scientific Aids to Learning proceeded to secure evidence as to the educational effectiveness of these several units. The first step consisted in sending three of them to a number of summer schools of education where the films were exhibited to teachers, principals, and students who were asked to answer rather elaborate questionnaires giving their opinions as to the educational effectiveness of the units. Following this collection of opinion, tests were prepared on each of the five units. The films were shown and preliminary forms of the test administered for the purpose of perfecting the measuring instruments which would be used later in the evaluation. These tests were carried out in a number of schools and no attempt was made to collect data concerning the children's reactions to the films. After the tests had been perfected the films were then shown under experimental conditions in three centers: first, in the public schools in New York City; second, in public schools in the Boston area; and, third, to children in the laboratory schools at the George Peabody College for Teachers in Nashville, Tennessee.

Results of the Studies

The summary of the opinions collected from teachers who used the films and those who reviewed them concerning the educational effectiveness of the five sound-slide films is as follows:

Name of Film	No. of teachers who used the film	Consider film effective and valuable		Doubtful about value of film		Consider film Ineffective	
		N	%	N	%	N	%
City Mouse and Country Mouse	248	155	62	69	28	24	10
Safety	199	135	67	50	26	14	7
Graphic Representation	15	13	87	2	13	0	0
Your World of Tomorrow	12	8	66	2	17	2	17
Teamwork	13	7	54	6	46	0	0

	Number of reviewers	Consider treatment satisfactory		Consider treatment unsatisfactory	
		N	%	N	%
Graphic Representation	134	106	79	28	21
Your World of Tomorrow	129	112	86	17	14
Teamwork	126	118	94	8	6

The significant general findings of this phase of the investigation are:

1. In the opinion of an overwhelming majority of the classroom teachers who used these sound film slides,

(*Concluded on page* 324)

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NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS and CAROLYN GUSS
Extension Division
Indiana University, Bloomington

Scrap for Victory

(Brandon Films, Inc., 1600 Broadway, New York City) 12 minutes, 16mm. sound. Sale price $25.00. Apply to distributor for rental sources.

With the words, "We are a nation of doers, not watchers . . . that's why we have the highest standard of living on earth," a series of shots shows workers on an assembly line of a great war materials plant, and workers entering a plant while one man looks on. Later, this man, who regrets that his job is not in actual war materials production, is shown at home where he reads about the campaign for the salvage of scrap. Glad of the opportunity to make a direct contribution, "Pa" and "Ma", daughter Mary, who is a typist but wishes she were a nurse; and little "Billy," who wishes he were old enough to be a soldier, all find a way to help America's war effort by collecting "scrap for victory." Wool for uniforms, rags for cleaning guns, metals and rubber for reprocessing are collected and put in boxes. The articles which this family collects include a loving cup, ash trays, keys, and a coffee pot; a hot water bottle, rubber heels, and a bathing cap; household furnishings, worn table linens and towels. Each item looks small; but when added to the community's salvage heaps, it helps swell the mountain of salvage. A sequence shows the reclamation of rubber and the commentator states that one old tire provides the rubber for 12 gas masks, while 125 old tires provide enough rubber for a Flying Fortress. The conversion of salvage into materials of war is followed by a flashback to the home where the family is aided in their salvage effort by the dog who comes in with his contribution, a rubber bone.

COMMITTEE APPRAISAL: This film is designed to assist in initiating campaigns for scrap salvage and to encourage every participant by convincing him of the value of even his small contribution. It should be valuable at all levels in schools and in community organizations. Some of the pictorial statistics, if not critically examined by the audience, might contribute to a dangerous optimism about America's supplies of vital materials.

The Battle Is in Our Hands

(United States Department of Agriculture, Washington, D. C.) 48 minutes, 16mm. sound. Sale price approximately $24.00. Apply to distributor for list of depositories.

This documentary film opens with scenes of Alabama — negroes picking cotton, mules turning the sugar cane press, negroes boiling sugar cane sap to make sorghum—all to an accompaniment of Paul Robeson's chant of "The Walls of Jericho." Then, amid rumblings of distant cannon, a battle field scene is shown, an air-raid warning is sounded, the battle comes closer to Childersburg, Alabama, and men line up for strange new war jobs. Plans are completed for a $75,000,000 powder plant, and men and machinery go to work. People leave their farms so that the private buildings can be razed to make room for the federal project. Again Paul Robeson chants "The Walls of Jericho" as soldiers, tanks and equipment come pouring into the town. A rapid change takes place. A whole new life mushrooms into existence, bringing with it open-air theaters, bunk houses, unions, trailer camps, lots of money, and boom times. This picture of prosperity is then compared with the events in 1917 when soldiers left for World War I, and mining and agriculture brought prosperity to the people of the valley. The period of depression following the first World World is then depicted with the mines closed, brush claiming most of the land, and farmers going from their farms to the roads. The commentary then explains that we do not want this to happen again; that every man's brain and muscle should be working for democracy; that a post-war prosperity won't just happen; that we must work for it. "The battle is in our hands."

COMMITTEE APPRAISAL: This film sets up socio-economic problems which may be expected to require solution when victory is won, and, if skillfully used, should provoke critical thought and discussion in both school and adult groups. The generalization in the commentary that, "the people have not changed—only their way of living", should have been more fully documented in the pictorial content. The last three reels of the film compare unfavorably with the first due to a lack of unity in the organization of the material.

Making a Clay Portrait

(Vanguard Productions, 6233 Calumet Ave., Chicago, Illinois) 12 minutes, 16mm. second. Sale price $35.00. Apply to producer for rental sources.

The essential techniques involved in modelling a water-clay portrait are demonstrated and explained in this film by Arturo B. Fallico, Ph. D., of the Chicago Teachers' College art department. The studio, materials, sculptor, and model are shown, and the sculptor explains the construction of the armature. The following scenes show the successive stages in modelling clay: forming a "basic head" on the armature with clay strips and a wooden mallet; transferring the model's measurements to the basic structure by means of calipers; carving the fundamental planes to these dimensions; changing the flat surfaces to curves by carving and adding clay; the smoothing of the forms and the working of detail into the contours; accompanied by the sculptor's verbal explanation of each technique, and by frequent comparisons with the model. The final scenes show the sculptor transferring to the generalized portrait the individual differences which characterize his interpretation of the model, and the texturizing of the finished portrait, which is then compared in closeup with the model.

COMMITTEE APPRAISAL: This is a skill film, and is recommended for use in all classes and groups concerned with the modelling of plastic materials into art forms. The film is characterized by exceptional clarity and pleasing tone values resulting from careful photography.

(*Concluded on page* 318)

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer, and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

(*Concluded from page* 316)

In Every Day

(Finer Films, Inc., 7936 Santa Monica Blvd., Los Angeles, Cal.) 12 minutes, 16mm. sound. Sale price $40.00. Apply to producer for rental sources.

The film follows Jack, a healthy boy of junior high school age, from the time his dog awakens him at seven in the morning until he retires at nine o'clock that evening. Upon rising, Jack drinks a glass of water, washes his teeth with up-and-down strokes on the outer surfaces and circular movements on the chewing surfaces, takes a shower, and carefully clothes himself. His breakfast consists of a glass of fruit juice, hot cooked wheat cereal, a glass of milk, boiled eggs, and toast. After bidding his mother goodbye, Jack is off to school. Here his good posture is a reflection of his mental and physical health. With other boys Jack enjoys his lunch out-of-doors. After lunch Jack has a semi-annual medical check-up given by the school doctor. As he rides his bicycle home after school, he observes the traffic rules and makes arrangements to meet the other boys at the public park after he has cut the grass. When he rejoins his pals, they play outdoor basketball. Jack returns home in time to wash his hands and comb his hair before his dinner of vegetable soup, broiled salmon steak, green beans, lettuce and tomato salad, whole wheat bread and butter, a glass of milk, fruit salad and cream. When his studies are completed, Jack enjoys his hobby, model airplanes. Then having petted his dog, he puts him out for the night, bids his parents goodnight, raises his window, takes several deep breaths, kicks off his house slippers, and retires.

COMMITTEE APPRAISAL: This film presents the ideal, or at least above average situation, and as such should be useful in setting up goals for physical fitness, mental health, and nutrition programs. For this purpose it is recommended for use in elementary and junior high school, and in parent-teacher and public health adult groups. Greater reality would have been achived in some of the sequences by a judicious use of indigenous sound rather than commentary.

Testing Preferences with 2" x 2" Slides

(*Concluded from page* 301)

floor, was placed in the center at the front of the room.

A 300 Watt 2" x 2" lantern slide projector, with an automatic cooling attachment, was placed in the center of the room about 15 feet from the screen. The projected image was about 36" high. The shades were drawn in such a way as to allow some light to come into the room so that children could see their answer sheets. However, no light was permitted to strike the screen directly.

All classes from the Second Grade through the Sixth Grade were tested in all five schools. The writer administered all tests, thus minimizing the possible influence of different experimenters administering the test. Each child recorded his preference for the traditional painting or the modern painting in each pair. This was done in pencil on a mimeographed answer sheet. On each sheet, name, school, class, date, and age were written. Since each sheet provided for only twenty answers, three sheets were used, and the remaining four choices were entered in four spaces on the back of the third sheet.

By using this 2" x 2" lantern slide technique, several thousand elementary school children were tested with maximum effectiveness and minimum waste of time, energy, and funds. With the demands of war-time economy, psychologists and educators may find a wide use for lantern slides in testing, especially where group testing is adequate for the purpose.

Following are a few of the findings of this study:

1. The test of preferences for traditional and modern paintings showed evidence of high validity and reliability.
2. Paintings which adults generally believe that children should be taught to like (that is, traditional paintings) constituted only in part the paintings which children themselves actually like.
3. The younger the child, the less is his spontaneous and primitive preference for traditional paintings, and the greater is his direct emotional preference for modern paintings.
4. If we are to give consideration to what children may be reasonably expected to like, then it would seem that modern paintings might well be included in picture study in elementary schools, at least to a greater extent than has been the case in the past.
5. Differences in preferences tended to be related to the socio-economic background of children attending different schools.
6. Imaginative treatment of the human figure ("distortion", as practiced by modern painters) appeared to be more disturbing to children than imaginative treatment of landscapes.

Darkening the School Auditorium

BYRON O. CULLY, Principal
Junior High School, Freeport, Illinois

FOR schools whose facilities and money for visual education are limited, the method of darkening an auditorium, described in this brief account, may be suggestive of a way of darkening larger rooms for use of visual aids with groups larger than a single class.

The problem in our school was to provide a room suitable for use by either a whole grade or by the entire student body of 630 pupils. The school had a room that would accommodate a single class but desired facilities for larger groups. The only room available was a large combination study-hall-auditorium, seventy feet wide by seventy-five feet long, equipped with regular old-type desks. It was capable of seating the entire student body if pupils for the most part sat two in each seat. The window space was large, for there were twenty windows—six on one side, seven on the opposite side, and seven in the rear. The glass space in each window was eight feet eight inches by three feet four inches. Various ideas were investigated, but the one described here proved the best from both a financial and an efficiency standpoint.

Each window is equipped with a dark green shade, nine feet long by four feet wide, mounted on a spring roller and fastened to the casing above the window. The casing on both sides and the top is five inches wide. Thus, the shade, when pulled down, is of sufficient width to extend well over the casing on each side of the window. On the casing along each side of the windows a strip of wood, eight feet long, three inches wide, and one-half inch thick, is fastened in place by two small spring hinges. The front of each strip of wood comes within one inch of the inside edge of the casing. The hinges are fastened to the edge of the strip of wood farthest away from the window, with one hinge about one foot from the top and one hinge about one foot from the bottom of the strip of wood.

To darken a window, the strips of wood are sprung back, the shade is pulled down, and then the strips of wood are snapped over the curtain. The strips of wood hold the curtain tightly against the casing. When not in use, the strips are snapped against the casing, thus making them inconspicuous. Staining them to match the casing makes them still more inconspicuous.

The only light that enters is the small amount near the top and near the bottom of the window where the strips of wood do not hold the shade down against the casing. The room is dark enough however, to show excellent pictures, eight feet by ten feet, on a glass-beaded screen, with a 750-Watt projector at the rear of the room, a distance of seventy feet.

Reliable boys are responsible for the equipment and for the shades. When a program is scheduled, the boys are notified of the date and the time. They see that the equipment is ready and that the room is darkened. When the program is over, they put the equipment away and raise the shades.

The cost of shades and all materials was slightly over one hundred dollars. The work of installing the shades and the strips of wood was done by the school custodian.

News and

Bureau of Mines Films in Demand

Reinforcing the efficiency of manpower in the factory and on the field of battle, Bureau of Mines free educational motion pictures are being shown in increasing numbers to men who are building ships, planes, guns, tanks and other weapons and to men who will maintain these implements of war on a dozen fronts, according to R. R. Sayers, Director of the Bureau of Mines. In Great Britain, South America, and throughout the North American continent, thousands of civilians and members of the armed forces are learning more about mining, metals, lubrication, gasoline and Diesel engines, abrasives, storage batteries, and similar subjects through motion pictures prepared under the direction of the Bureau of Mines.

Embarking on its busiest season in history, the Bureau's film library is receiving "bookings" months in advance for sound and silent films to be shown by the Army Air Force, the Royal Air Force, British Flying Training Schools, U. S. Naval Air Stations, industrial training classes in schools and factories, aeronautical schools, technical classes in colleges and universities, public and parochial grade and high schools, civilian defense classes, refineries, mine operators, and many other groups.

Dr. Sayers informed Secretary of the Interior Harold Ickes that the attendance at showings of Bureau films, which totaled more than 10,000,000 persons during the past fiscal year, is expected to increase at least 10 percent during the coming 12 months because of their wider use in vocational training programs now being conducted by many of the Nation's war factories and by the Army and the Navy.

During the 12 months ended June 30, 1942, Bureau films regarding the production and fabrication of aluminum were viewed by more than 600,000 persons, Dr. Sayers said. Keeping apace with wartime requests for more films regarding aluminum the Bureau soon will release three sound motion pictures explaining the welding, riveting and machining of this critical metal.

Another film which is expected to achieve a record circulation when it is completed is "First Steps in First Aid," a motion picture based largely on the Bureau of Mines' "Manual of First-Aid Instruction," the booklet which has been used in the training of more than 1½ million persons in the Bureau's first-aid methods.

In a recent four-months period, a Naval Air Station trade school used 36 different films furnished by the Bureau in instructing 4,000 young men in various occupations and familiarizing them with industrial processes and industrial areas. One was from the series "Through Oil Lands of Europe and Africa," a set of three films which shows in detail the principal ports and petroleum fields of the Axis countries. These films also are used frequently by teachers of current events and history classes in tracing the course of the war, Dr. Sayers stated. By stressing efficiency and safety in the mineral and allied industries, Bureau of Mines films have brought to millions of Americans and others a bet-

Notes

ter understanding of industrial problems, processes and activities.

During the past 26 years, the Bureau's film library has increased until it now has more than 6,000 reels in constant circulation. The motion pictures are distributed without charge by the Bureau to industries, schools and other groups. Applications for films are addressed to the Bureau of Mines Central Experiment Station, 4800 Forbes Street, Pittsburgh, Pennsylvania. The exhibitor is expected to pay transportation charges and for loss or damage other than normal wear.

College Film Courses Attuned to War

The pioneer course on the Motion Picture given for many successive years under the joint auspices of New York University School of Education and the National Board of Review of Motion Pictures, has been streamlined to the war, it was announced this week by Dr. Frederic M. Thrasher, who is in charge of the course. The course will present all the varied functions of films in war-time, examples of each function, and methods of using each type of film, and will explain under what conditions these films may be obtained.

In gearing the motion picture course to war-time needs, none of its regular features, which have become well-known during the past eight years, will be sacrificed. There will be the same presentations by well-known authorities in the field of varied topics covering the technical, the artistic, the educational and the social aspects of the movies. Again the course will be richly illustrated by film showings, many of them of pictures not to be seen elsewhere. The course meets Thursday evenings, 6:15 to 8:00 o'clock, in the School of Education Auditorium, at 41 West Fourth Street, New York City.

◆ ◆

The Institute of Film Techniques of the Evening Session of the City College of New York have inaugurated several new courses this autumn, beginning September 24th. Outstanding is the course on audience analysis to be given by Richard Ford, Film Officer of the British Press Service. The students, working in theatres, defense training centers, and air raid warden meetings, will conduct surveys of the effectiveness of public information and training films on local audiences.

In another new course, students will write and produce a short war film under the supervision of Irving Lerner, director of "A Place to Live".

Other courses will be: "The Film at Work," conducted by Irving Jacoby, the Institute's supervisor; "Fundamentals of Film Production," by Willard Van Dyke, and "Trends of Film Progress," by Theodore Strauss of the New York Times.

◆ ◆

A class of students in the Hunter College evening division (New York City) this term are studying the impact of the war on the development of the motion picture as an art.

School Exhibits to Show Wartime Services

This year the schools of America will have an opportunity to tell the full extent of their wartime service through the nation-wide Schools at War program which has been launched. Sponsored by the War Savings Staff of the Treasury Department in cooperation with the U. S. Office of Education and its Wartime Commission, the program is designed to intensify and unify the war activities of every school.

Through local and state exhibits of all Schools at War activities and demonstrations, the entire nation will see the splendid work of the teachers and students of America. Through a tremendous national exhibit —"America's Schools at War"—the outstanding displays and reports from schools throughout the nation will be brought together.

To every school which enlists in the Schools at War program—and reports a well-rounded schedule of wartime activities—will be presented a special certificate of service signed by the Secretary of the Treasury. To each state, in recognition of the part its schools play in the national war effort, will be awarded a "Liberty Brick"—an original brick from historic Independence Hall, mounted in an electrically lighted glass case before a colored bas-relief of Independence Hall.

To show its progress in the Schools at War campaign, each participating school is asked to make a report on its program of work in a sixteen-page scrapbook to be provided by the Treasury Department. Through clippings, posters, photos, stories, written reports, and actual samples of student work, a school may give a bird's-eye view of its wartime program. To be really effective, the school program should show unity and evidence of having lasting significance. Scrapbooks are to be completed by Jan. 7 and displayed at local, state, and national exhibits.

In remote country schoolhouses and in the most modern city schools, these exhibits will display dramatic evidence of the vast school army helping on the home front. From local community exhibits the best material will be sent to the state and national exhibits. If they tell their stories vividly enough, these schools at War Exhibits can help to strengthen, unify, and motivate the morale of each community—can put to work its will to win. They will include varied programs of music, pageantry, activity demonstrations, student club work, and, if possible, parades illustrating what military equipment and war materials have been paid for by the student purchase of War Savings bonds and stamps.

The whole Schools at War program is planned about these three great commands issued to the civilian army fighting on the home front: Save! Serve! Conserve! By saving, serving, conserving, and by learning why these habits are wise and patriotic, students will be training today for their responsibilities as citizens of the United States and the United Nations.

(*Michigan Education Journal*, September)

Movie Engineers Convention

A world-wide view of how motion pictures are being used to spot Axis weak points, speed up the training of United Nations fighting units, and aid the war effort will be presented when the Society of Motion Picture Engineers opens its 52nd Semi-annual meeting at the Hotel Pennsylvania in New York City October 27. The foremost technical and research men in the country's entertainment industry, representing the 1200 members of the Society, will attend the three-day convention.

Advances in engineering phases of the motion picture industry during the past year will be revealed through the presentation of seventeen papers at four general sessions. One symposium will be devoted to a discussion of 16mm motion pictures.

One of the sessions will take place at the U. S. Army Signal Corps Photographic Center in Astoria, L. I. where the group will be welcomed by Colonel M. E. Gillette, Commanding Officer. The session will include presentation of papers concerned with motion pictures and the war effort and an exhibition of army training films. A tour of the center will follow the session.

Tours also have been arranged at the Museum of Modern Art Film Library and Radio City Music Hall. There will be a showing of pictures selected for their importance in the development of the art at the Museum, with addresses by John Abbott and Miss Iris Barry.

On the international scene, talks will be made by representatives of the Soviet Union and the Chinese National government. The Russian speaker will be Gregory L. Irsky, of the Soviet Cinema Committee at Washington, who will talk on "The Documentary, Scientific and Military Films of the Soviet Union." T .Y. Lo, of the Chinese Military Affairs Commissions' Film Section, will tell about "The Underground Motion Picture Industry in China."

48 School Specials!

We asked several of our best school customers to select a list of our pictures that they could unhesitatingly recommend for school use. Their judgment must be based upon the following facts.

1. Each picture must be absolutely free from any objectionable subject matter.
2. Each picture must contain material for curriculum enrichment.

From the list selected the following 48 received the most votes, and we unhesitatingly recommend these features to our discriminating school accounts.

Scene from "Her First Romance."

Abraham Lincoln
Auld Lang Syne
Barefoot Boy
Black Beauty
Blockade
Boy of the Streets
Boys Reformatory
Breaking the Ice
Call of the Wilderness
The Challenge
Crooked Circle
Daniel Boone
Edge of the World
Escape to Paradise
Everything's On Ice
Fighting to Live
Fisherman's Wharf
Fit for a King
Flying Deuces
The Gang's All Here
Gangster's Boy
Gentleman from Arizona
The Gladiator
Glory Trail
Haunted House
Hawaii Calls
Her First Romance
Her Uncle Sam
Hoosier Schoolboy
Let's Sing Again
Make a Wish
Man of Aran
Father O'Neil
(Mutiny in the Big House)
Old Swimming Hole
Orphans of the North
Peck's Bad Boy
Peck's Bad Boy with the Circus
Rainbow on the River
Skull and Crown
Son of the Navy
Streets of New York
There Goes My Heart
Tomboy
Topper Takes a Trip
Tundra
Way Down South
Wolf Call
Zenobia

Send for descriptive catalogs

SAVE MONEY

In booking these special School releases

1. Most of these subjects renting for $15.00 or more are available to schools on "Your enrollment determines your rental" plan. If your school enrollment is under 251 and you book 6 or more you will pay only $10.00 a program.

2. Schools with large enrollment, and schools with small enrollment booking pictures on which the rental is $12.50 or less may save $2.50 by booking 6 or more pictures at one time.

From "Son of the Navy."

IDEAL PICTURES CORPORATION

Address nearest office:

IDEAL PICTURES CORP., 28 E. Eighth Street, Chicago, Ill.
IDEAL PICTURES CORP., 18 S. 3rd St., Memphis, Tenn.
IDEAL PICTURES CORP., 2408 W. 7th St., Los Angeles, Calif.
IDEAL PICTURES CORP., 1739 Oneida St., Denver, Colo.
STEVENS-IDEAL PICTURES, 89 Cone St., N. W., Atlanta, Ga.
OWENS-IDEAL PICTURES (Drawer H, Milwaukee Branch), Portland, Oregon.
IDEAL-SOUTHERN 16MM PICTURES CO., 172 N. E. 96th St., Miami, Florida.
IDEAL-SOUTHERN 16MM PICTURES CO., 705 Exchange Bldg., Jacksonville, Florida.
IDEAL-HAYES 16MM PICTURES CO., 2244 Park Ave., Richmond, Va.
BERTRAM WILLOUGHBY PICTURES, Inc., 1600 Broadway, New York City.

Red Cross Photographic Contest

Appealing to photographers and camera enthusiasts to help record the wartime work of the American Red Cross both at home and abroad, Chairman Norman H. Davis has announced a national photographic competition with 122 prizes consisting of war savings bonds with a total maturity value of $5,125. The competition will continue through October, November, and December, and two classes of awards will be made: for the best photographs submitted each month 36 prizes will be awarded, to be followed with 14 grand prizes to selections from among the monthly prize-winning entries.

"Red Cross activities at home and abroad have expanded greatly in the war effort," Chairman Davis said in announcing the competition. "This story must be told if the vital services entrusted to the Red Cross are to reach their greatest usefulness. We believe that pictures offer one of the most effective means of informing Americans of the great organization which has been developed through their generosity and hope that the photographers of America will respond to this patriotic call."

Entrants may submit as many pictures as desired at any time during the contest, but no photographs which hertofore have been published are eligible. All entries must portray an activity of the American Red Cross or be symbolic of the spirit of the American Red Cross.

The competition will be known as the "Red Cross National Photo Awards." Headquarters are at 598 Madison Avenue, New York City, and all entries must be sent to that address. Under the rules of the contest, which is being directed by Louis C. Boochever of Cornell University, both amateur and professional photographers are eligible to take part.

Any photographs picturing military or naval activities or equipment must bear the stamp of approval for release and publication by the proper military or naval authorities. No print or enlargement more than ten inches in the longest dimension may be entered. They should be mailed flat and unmounted. On the back of each entry should be printed the name and address of the competitor and a brief title or description of the picture.

Each month's entries will be judged by men and women prominent in the photographic and art world. Men in the military and naval service who wish to submit entries may obtain printed copies of the rules governing the contest. and suggestions of subjects, from Red Cross field directors working with the armed forces. Civilians may obtain these from photographic supply dealers.

Experimental Research

(*Concluded from page* 314)

as well as in the opinion of several hundreds of graduate students and professors of education who served as reviewers, the medium of the sound filmslide is suitable for classroom use and is valuable as a teaching aid.

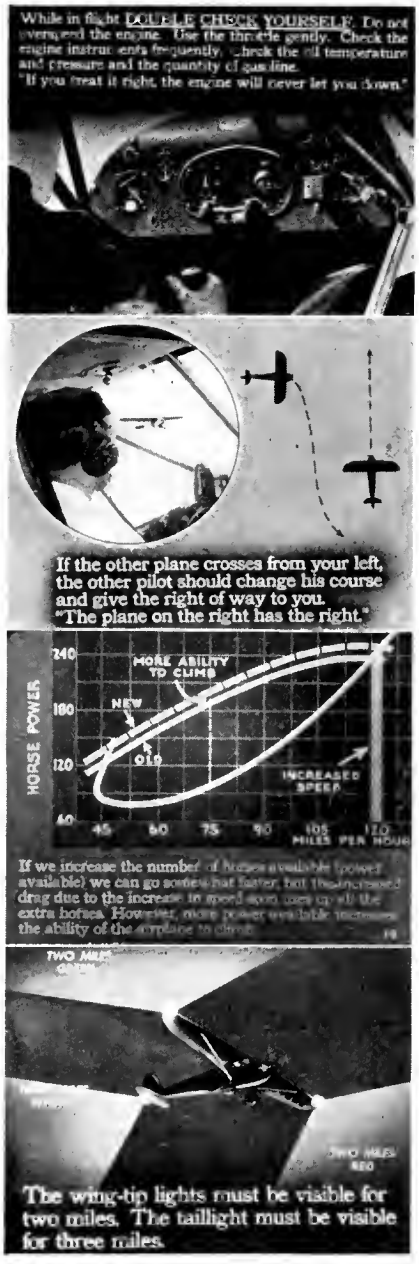
2. The majority of the persons who rendered judgments in connection with each of the filmslides felt, in each instance, that that particular filmslide was a valuable and effective aid to instruction. In connection with some films, however, there was a greater agreement than in connection with others.

3. In connection with the filmslides developed for use with the lower primary grades, a majority of the teachers believed that the filmslides should be shown two or more times. This feeling also holds true in connection with the remaining three filmslides, but the number of teachers rendering this judgment in connection with "Graphic Representation," "Your World of Tomorrow," and "Teamwork" is so small that the conclusion cannot be stated with the same degree of reliability as it can be in connection with the other two filmslides.
4. All of the filmslides did stimulate discussion and activities in some of the classes which participated in the experiment. The evidence indicates that each of the sound filmslides can readily provide a basis for useful discussion and activities if the teacher has the inclination and wishes to spend time with the class in this manner.

Summary and Conclusion

The results of the testing phase of the experiment simply show the mean, range, and standard deviation of scores obtained on the tests accompanying "Graphic Representation," "Your World of Tomorrow," and "Teamwork," and which were administered directly or shortly after the pupils had seen these filmslides. Scores indicating pupils' standing on these tests before seeing the filmslides are not available; it is, therefore, not possible to judge whether the seeing of the filmslides helped the pupils in understanding the problems on the tests. If there were significant gains between pre-test and re-test, such gains could, under certain conditions, be interpreted as evidence of growth in understanding after seeing the filmslides. In all cases, and especially in the case of the Teamwork Test, the mean scores obtained were considerably below the highest possible score which could have been obtained on the test. If the tests call for important information connected with the subject-area of each of the filmslides, then the majority of the students had not satisfactorily mastered that subject-area immediately after seeing the given filmslide.

Filmslide Kit on Aircraft Mechanics.



Illustrations from the pilot training series of film slides.

Filmslides Speed Aviation Training

THE long history of the development of visual teaching has been dotted with major impulses that speeded progress for the visual movement. Currently giving strong impetus to the movement are the various visualized aeronautical courses among our schools and colleges. These courses have two main purposes, one, to make the youth of today air-conscious in preparation for the vast changes that flying is expected to make in every phase of life and living when peace comes; two, to provide a reservoir of pilots for the flying arms of the war services.

In this work, the high schools of the nation as well as the colleges, technological and vocational institutions are taking a leading part—combining the use of films with practical shop work in the case of future mechanics, and preparing the embryo pilot for intensive specialized basic training in the case of future fliers.

As a result of this national movement, which acts for the present and looks to the future, a wide variety of visual aids have been devised and made available which offer the instructor practical and effectual help, and serve to greatly shorten the period of pre-training. The series of slidefilms for Aviation Training produced by The Jam Handy Organization, Detroit, have proved to be of great value in this work.

While procedure in visualized aeronautics instruction varies somewhat in the various school systems and colleges, the science instructor in the case of the former, and the civilian pilot training coordinator in the case of the latter, are shouldering the job in most instances. Because aviation involves so many of the sciences, many of the films now available are broad enough in scope to be of use in teaching in the science field.

Broadly speaking, the program may be summed up as follows:

a) Preflight pilot training, which is elementary in character, basic "back-ground" information designed to make the beginner air-minded.
b) Aviation mechanics instruction, (plane servicing).
c) Supplementary subjects: airplane engine mechanics, metalsmiths, and aircraft metal skills.

Filmslides are available on all these subjects as well as on other related ones, such as basic electricity, oxyacetylene welding, etc.

The pre-flight pilot training series are 24 in number, all of the discussional type, consisting of 1,742 photos, drawings, diagrams and exhibits. All material used is based upon the official ground school material of the Civilian Pilot Training Program, checked and approved by the Civilian Pilot Training Service of the C.A.A. The mechanics training series consists of 41 slidefilm productions, totalling 1,078 individual pictures. There are 22 subjects, with a total of 1,316 pictures in the aircraft engine mechanics series. The metalsmiths series has 404 individual pictures in the group of nine subjects, and so on.

Much enthusiasm has been shown by instructors who have enlisted the services of these filmslides in this phase of war-time training.

Here are a few comments from experienced users:

J. H. Clouse, coordinator of Civil Pilot Training, University of Miami: "Each instructor, and there are five of them here, have used the films. The men in the primary course are more enthusiastic about these films than those in the secondary course. However, this does not mean that they are not of considerable value in the second course because they have been used there also."

Dr. W. A. Buckner, State Teachers College, Cape Girardeau, Missouri: "The series of pictures for pilot training is very effective. We have used them in the courses on civil air regulations, airplanes and engines. We are now using them in the course on navigation. We have found that we can use them most effectively by studying first our text-book, and then using the films as a sort of laboratory review."

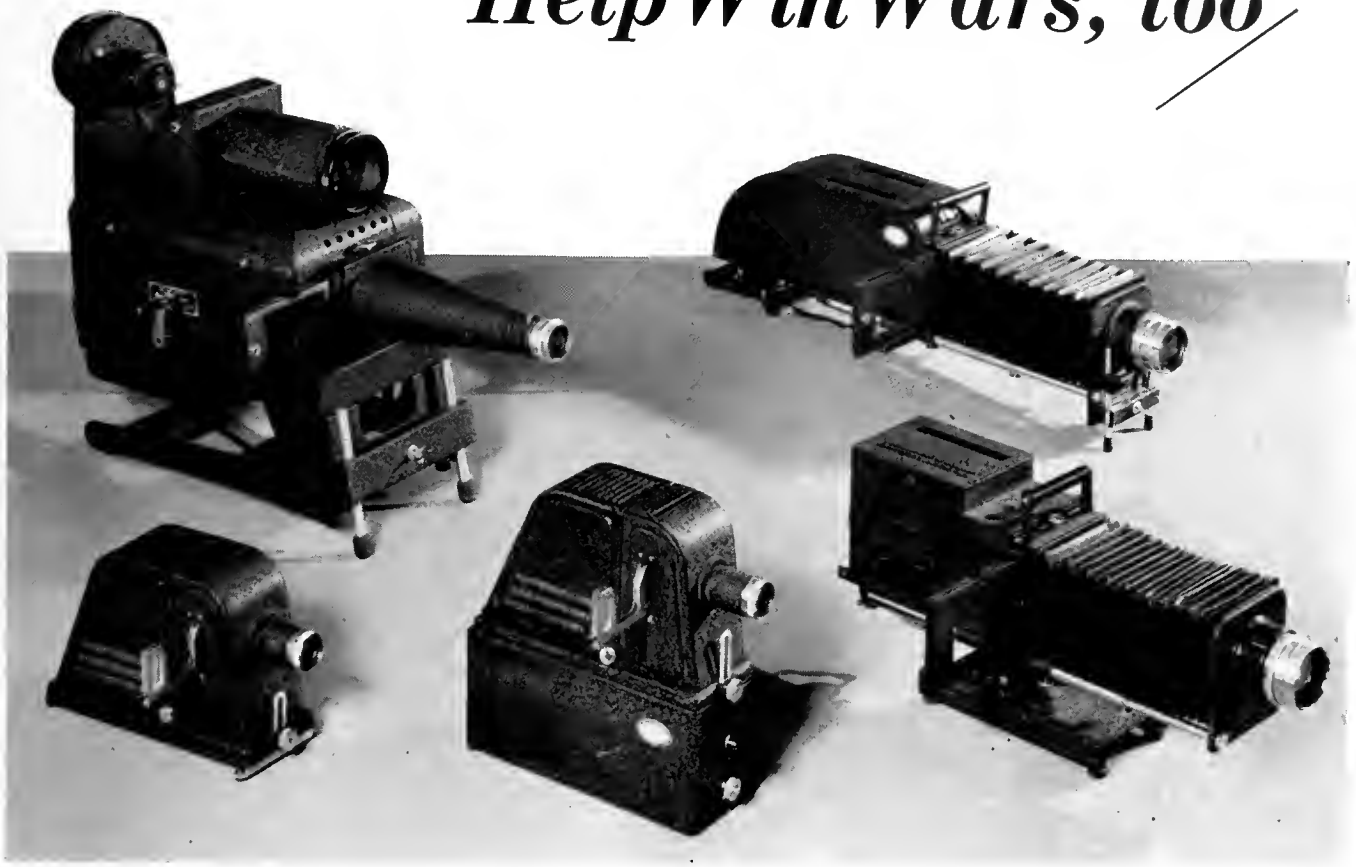
W. E. Wayman, Jr., Civilian Pilot Training Coordinator, Rensselaer Polytechnic Institute, Troy, New York: "We are more than pleased with the material and the method of presentation. In fact, we go so far as to say that the films boosted our secondary students out of the doubtful class into the certainty class as far as examination was concerned."

All of these subjects are written and produced in a manner to insure maximum help to the instructor in the accompanying discussion which must continue to rest upon him or her. Each individual picture bears a printed caption elaborating on the point the picture shows. Films may be held for general class discussion of the subject. It is not expected, of course, that films alone will make a pilot, but they do prepare a student quickly for the intensive, practical training that follows.

The use of the various mechanics or service filmslides are tied in closely with practical shop work and physical demonstration, though it is customary to give classes in aircraft mechanics the pilot training series as background material. For example, in the case of the study of welding, students first see on the screen what is to be done or to be avoided and then move on to the welding shop for practical application of what they have learned through the eye.

LYNE S. METCALFE

Delineascopes *Help Win Wars, too*



TO TRAIN a million civilians in the techniques of war; to inform fighting men of the enemy tactics, to build morale in the ranks, projection methods are used.

Yes, Delineascopes help win wars, too. They are indispensable as a means of visual communication for imparting vital information to large or small groups.

Spencer, the recognized leader in still projection, manufactures a wide range of Delineascopes to meet every need.

"Optical instruments are so vital to war and public health that the Nation's needs absorb practically all of Spencer's greatly increased production."

Spencer Lens Company

BUFFALO, NEW YORK

Scientific Instrument Division of

AMERICAN OPTICAL COMPANY

Sales Offices: New York, Chicago, San Francisco, Washington, Boston, Los Angeles, Dallas, Columbus, St. Louis, Philadelphia, Atlanta

Current Film News

■ Eastman Kodak Company, Rochester, New York, has just released a 16mm sound Kodachrome motion picture depicting the progress and applications of color photography, and its place in family life.

The Cavalcade of Color—15 minutes running time—opens with a series of scenes which show how photography is being used in such diversified fields as medicine, commercial photography, news gathering, and scientific investigation. It points out how photography is serving humanity through progress, and how it has broadened the world we live in.

Then there is a change of tempo. And the applications of photography to our personal lives are shown. Step by step the film shows how photography keeps pace with the growth of children, the beginnings of romance, the marriages, the vacations, and the happiness of every family. And how it provides a life-like record for the family to glance back on in time to come.

And too, *The Cavalcade of Color* shows how photography helps us capture beauty—such as the grandeur of our National Parks, sunsets when the sky is aflame, and the delicate grace of a flower. A patriotic note given to the closings scenes, makes it appropriate to the times.

This full-color motion picture has background orchestral music by Ferde Grofe. It will be loaned without charge to organizations such as Service Clubs, Camera Clubs, Junior and Senior High Schools and Colleges.

■ Father Hubbard Educational Films, 188 W. Randolph St., Chicago, reports the addition to its library of the following one-reel 16mm sound films:

Men For the Fleet—following the life of a Naval recruit from boot training to sea duty.

Canada at War—Life and activities in Canada in wartime.

Dutch Guiana—Native life, customs and ceremonials, and industries. Made since the war began.

Heart of Mexico—a revealing picture of the life and customs of our neighbor.

War in the Desert—recent release showing activities of the British Army in Africa and General Wavell in Egypt.

Hub of the World—Washington in Wartime.

Father Hubbard Educational Films has also been added as a distributor source for the war information films released by the U. S. Government—*Bomber, Building a Bomber, Tanks, Building a Tank, Democracy in Action, Lake Carrier, Ring of Steel, Men and Ships, Aluminum, Power for Defense, Women in Defense, Safeguarding Military Information.*

An additional feature is being added to Father Hubbard's school services—an Eskimo travel exhibit which will include a miniature oomiak, ceremonial masks, and other Eskimo paraphernalia and curios, together with representative photographs of Alaska. This ethnological travel exhibit is available to schools without cost, except that of transportation. Additional information can be obtained by writing Father Hubbard Educational Films.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, announces the release in 16mm sound of the following subject:

This Is India—a timely film of the land of Ghandi — of castes, taboos, unique customs, and political upheaval. This interesting picture presents a clear insight into the complex pattern of humanity that is India, and provides an understanding of the present situation that confronts both the United Nations and the Axis powers in their "tug of war" over this vital country.

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, has acquired another reel in its series of film studies of other lands, namely:

The Real Caribbean—1 reel, 16mm sound, color or black-and-white. The importance of the area in the defense of both North and South America, is stressed. The film presents the resources, life of native population, social differences based on economic rather than color lines, and evidences of European colonization—by Spain, Britain, France, Netherlands, Denmark. Nazi warship snooping at Aruba, and the American Navy on guard are also seen.

Similar subjects in this series include Puerto Rico, Hawaii, Poland, Liberia and Mexico. Still others are in work. The purpose of the series is to bring out not merely the surface aspects of a country, as a tourist would see them, but the economic and social background and resources that give so distinct a character to each of our neighbor peoples.

■ Brandon Films, Inc., 1600 Broadway, New York City, has issued a new comprehensive catalog of 16mm sound and silent films entitled, *Movies to Help Win the War,* which will be sent free of charge to all who write directly to the distributors.

The catalog has been prepared to help meet the needs of visual education directors and others who are interested in obtaining all important films bearing on the War, from one central source. The catalog describes films dealing with: The Protective Services, Civilian Defense, Children and the War, People of the United Nations, Theatres of War, Production for Victory, War Time Recreation, Pre-Flight Aviation Training, Songs of Americana, Inter-American Relations, U.S. Office of War Information Films, Films From Britain, Canada, Netherlands, Czecho-Slovakia, China, Soviet Russia, Poland, and Fighting France, and War Newsreels. Rental rates are listed as well as outright sale prices.

Among the new releases is:

The Fighting French Navy—1 reel sound—a heartening picture of the brave Frenchmen who left Nazi dominated France to fight on the side of the United Nations.

■ Castle Films, Inc., 30 Rockefeller Plaza, New York City, is distributing twelve of the government films at approximately laboratory print costs, as one of their contributions to the war effort. The subjects that are now ready for outright purchase through Castle are: *Aluminum, Bomber, Building a Bomber, Tanks, Building a Tank, Power for Defense, Ring of Steel, Lake Carrier, Women in Defense, Anchors Aweigh, Keep 'em Rolling, Caissons Go Rolling Along* (the last three are patriotic song shorts).

Other late Castle releases include:

Fun Cartoons in Color, based on favorite childhood tales—1 reel each—*Little Black Sambo, The Headless Horseman, Sinbad the Sailor, The Big Bad Wolf.* Also available in black and white.

Here Comes the Circus—the thrills of Cole Brothers circus photographed during actual performance, containing all the excitement of "the greatest show on earth."

Sport Spellbinders—presenting daredevil stunts in a variety of sports.

The new Castle Films 1943 catalogue is now available, listing more films than ever. Printed in two colors, it describes more than 125 releases on World News, Sports, Adventure, Civilian Defense, Travel, Old Time Movies, and Cartoons. A free copy can be obtained by writing Castle Films, Inc.

■ Princeton Film Center, Princeton, New Jersey, has been assigned the production of two films on activities of the U. S. Army, designed for both 16mm and 35mm distribution in the film program of the Coordinator of Inter-American Affairs.

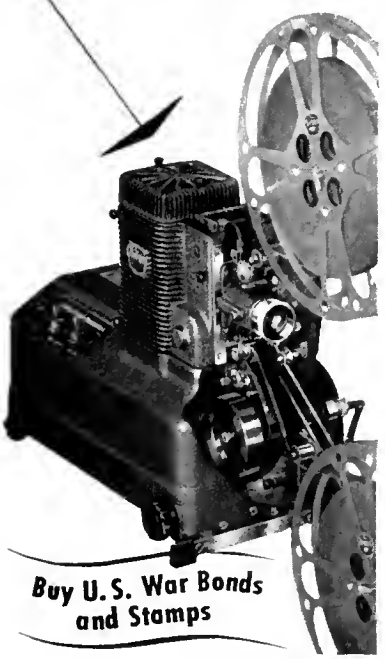
An Army of Specialists will amplify the recent statement of Lt. Colonel Somervell that out of every 100 Army inductees, 63 are assigned to duties requiring specialized training.

The Army Medical Corps will delineate organization and efficiency of the Army's Medical Department. Particu-

(*Concluded on page* 330)

GUARDING AMERICA'S OUTPOSTS

Yet, Almost Every Night They See *Movies*



IT'S twilight on the Caribbean . . . the day patrol is ended . . . "Chow" is over . . . and the boys are eagerly awaiting the evening movie show.

"It's a real tonic to see movies after a hard day's work," writes a sailor on a seaplane tender from somewhere on the submarine patrol. "and we see them practically every night we're at anchor."

From the Aleutians to the Solomons, from the Caribbean to Iceland—our sailors, marines, airmen and soldiers are entertained, their spirits buoyed up, their morale maintained with frequent 16mm. showings of the latest Hollywood releases. The government considers these movies so vital to the war effort that the films are given the right of way on transport planes!

In addition, 16mm. motion pictures are widely used as aid to training in all branches of the service—and as such have done a great job to speed up learning and increase the effectiveness of military teaching.

In this connection—thousands of Ampro precision projectors are serving for both training and entertainment in the U. S. armed forces—and many more are on the way. Ampro is engaged 100% in the production of precision war equipment.

Ampro engineering skill is being continuously utilized to provide our government with the most efficient projectors possible. All that this experience teaches—plus the greatly accelerated Ampro developmental work—will be available for civilian users of Ampro projectors when the war is over. In the meantime, you can plan for the future by keeping up with the latest developments in 16mm. projectors. Write today for the latest Ampro catalog.

THE AMPRO CORPORATION, 2839 N. Western Ave., Chicago, Ill.

★ AMPRO ★

PRECISION CINE EQUIPMENT

Among the Producers

Covarrubias Reproductions

An outstanding feature of the Golden Gate International Exposition was the Pageant of the Pacific depicted in six great mural-maps executed by the artist Miguel Covarrubias. At the same time beautiful, large full-color reproductions of these amazing murals were offered and bought by thousands of Exposition visitors. Due to continued interest and demand for these reproductions, the publishers have provided a further large edition which is offered through Schwabacher-Frey Company, 735 Market Street, San Francisco, at very modest cost.

Educational authorities have recognized in these reproductions excellent visual teaching material on a vital world area. To give them maximum value as visual education, compilation of the maps was done with the utmost thoroughness. Literally thousands of sources and authorities were consulted, their essence distilled into the maps. The result is Pacific ethnology, economy, art, botany, zoology, native housing, transportation—in short, an artistic, scientifically-accurate, pictorial encyclopedia of the entire Pacific Basin. To a remarkable extent they are completely self-explanatory, but in order that the vital pictorial message might be supplemented by words, and to supply authoritative answers to questions, an explanatory text pamphlet accompanies the reproductions.

The complete set of six consists of "Peoples of the Pacific," 38 x 25 inches, "Flora and Fauna of the Pacific," 38 x 25 inches, "Art Forms of the Pacific," 38 x 25 inches, "Economy of the Pacific," 38 x 25 inches, "Native Dwellings of the Pacific," 25 x 19 inches, "Native Means of Transportation," 25 x 19 inches. For further descriptive details and information on special price offer write to Schwabacher-Frey Company.

Bausch & Lomb Advertising Expanded

With its entire instrument manufacturing facilities devoted to war production, Bausch & Lomb has been telling instrument users a broad institutional story of the progress of optical science in many fields.

In the past year some 76 scientific, professional, technical, and trade magazines have been carrying this campaign. The company's position in the optical industry has laid upon it the obligation of showing the interwoven pattern of peacetime achievements and wartime contributions.

Up to the present, this campaign has been directed to the professional and technical groups who use optical instruments in their work. Now, this campaign will be expanded to include a large cross section of the public whose knowledge of the importance of optical science in their daily lives is very meagre. To reach this group, Bausch & Lomb will employ full pages in *Life, Saturday Evening Post, Time, Newsweek, Fortune, Business Week*, and the *United States News*.

Some of these advertisements have already appeared. While they are devoted to the theme of optics, they will necessarily mention many fields of research in science and industry in which optical instruments are used. It is thus hoped that they will convey a sense of the importance of science in our daily lives and trace some of the benefits of American progress to the industries which use it to create our enormous resources.

Filmslide on Protection Against Gas

Visual Sciences, Suffern, New York, have prepared a timely filmslide unit for science teachers, doctors and defense groups who have been assigned the difficult task of educating the public regarding the practical aspects of Chemical Warfare. The set consists of eighty frames which are self-explanatory. The first forty are especially for the layman and are intended to clarify some of the popular misconceptions of gas warfare. This is followed by sixteen charts of the more common war gases, their properties, effects and first aid measures. The last part deals with gas mask drill, protective clothing and gas shelter.

The unit may be obtained in 35mm single frame size for $3.00, or double frame size, mounted in 2" x 2" glass slides, with indexed carrying case, for $25.00.

Da-Lite Screens to be Available

The Da-Lite Screen Company, Inc. of Chicago, according to information submitted by Mr. Fred P. Heck, Vice-President and General Manager, is no longer able to offer a complete line of projection screens to the civilian trade due to restrictions incorporated in the War Production Board's General Conservation Order M-126 pertaining to the use of iron and steel.

Prior to August 3rd, which was the expiration date for completing the assembly of projection screens for civilian use, Da-lite was unable to build up a large stock of screens due to the great demand for their products and restrictions set forth in the Conservation Order forbidding the purchase of iron and steel in excess of 75 per cent of the aggregate weight used monthly during 1941.

Most dealers and distributors of Da-Lite products still have substantial stocks on hand for sale to the civilian trade. Additional stocks will be sent them in the near future for Da-Lite has recently been authorized by the War Production Board, to complete the fabrication of certain materials left on hand after the expiration date, August 3rd. After completion of these items, a rather substantial part of the inventory of finished products will be available for civilian use.

Information as to which products are and will be available to dealers and distributors of Da-Lite Screens will gladly be submitted on request.

Each and every officer and all employees of Da-Lite are contributing a minimum of 10 per cent of their salaries for purchasing War Bonds under the payroll plan and the Company has been flying the Minute Man Flag for a considerable length of time. Da-Lite has also been awarded a Certificate of Honor by the Commission on National Defense in recognition of services rendered to that worthy cause.

Current Film News

(*Concluded from page 328*)

lar emphasis will be given to United States-South American collaboration in matters of military medicine.

■ DeVry Films and Laboratories, 1111 Armitage Avenue, Chicago, has available for rental, new 16mm. sound films which will be particularly valuable to History, Health and Geography classes.

Washington In Wartime—1 reel, 16mm sound—describes the chief executives of various departments in the Nation's capitol, including the President and his aids. Shows function of wartime activities, and the buildings where war programs are originated and plans carried out.

Mystic India—1 reel, 16mm. sound—a timely film portraying cities and towns teeming with festival-bound devotees; bathing ceremonies in the Sacred Ganges; royal elephants on parade; fakirs; loveliness of Taj Mahal.

Our Teeth—1 reel, 16mm. sound—a comprehensive film treatise dealing with the growth and structure of our teeth, placing particular emphasis on their organic vitality.

■ Y.M.C.A. Motion Picture Bureau, 347 Madison Ave., New York City, has arranged their library of motion pictures into the following twelve Classified Film Lists for convenience in selecting appropriate films for particular programs: Civics and History, Fine and Industrial Arts, Health and Safety, Inter-American Affairs, Music, The Sciences, Sports and Athletics, Transportation and Communications (including Aviation), Travel and Adventure, Vocations, War, Religion.

The groups on Inter-American Affairs and War include a large number of official government films. Three of the latest government films to be acquired are *Men and the Sea, Western Front*, and *Winning Your Wings*.

The Y.M.C.A. urges schools to cooperate with the government by making their projectors available to civilian defense groups, churches, clubs, and industries to give the widest possible number of showings of government films.

Additional Valuable Literature —

"1000 AND ONE"—The Blue Book of Films

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The **NEW EIGHTEENTH EDITION** lists and describes over 5,000 films, classified into 176 different subject groups (including large groups of entertainment subjects). A valuable feature is a complete alphabetical list of every film title in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

132 pp. Paper. Price **75c.** (**25c** to E. S. subscribers)

FILM EVALUATION SUPPLEMENTS TO "1000 and ONE" under The National Film Evaluation Project

A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 500 teachers after actual use of the films with classes.

Each Supplement consists of 50 standard-size library cards carrying detailed evaluations of 50 films, based on combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid if cash with order.)

VISUALIZING THE CURRICULUM
By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price **$2.75.** (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK (4th Edition)
By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."

212 pp. Illus. Cloth. Price **$1.75**

AUDIO-VISUAL AIDS TO INSTRUCTION
By Harry C McKown and Alvin B. Roberts

A practical volume which shows the teacher and administrator how to select, organize, and utilize audio-visual aids of all types, in all subjects, and at all levels, from kindergarten through the twelfth grade. Primary emphasis is on actual practice and every effort has been made to include specific information and advice which will be most helpful in the classroom. 384pp. Cloth. Illus. Price **$3.00**

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A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution. 48 pp. Paper Illus. Price **50c.**

PRODUCING SCHOOL MOVIES
By Eleanor Child and Hardy R. Finch

Based on first-hand experiences of the authors and those of many other teachers and movie enthusiasts. Chapters are "Organization (of a Club); Choosing the Idea; The Scenario; Buying Equipment; Using the Equipment; Filming the Picture; Advanced Techniques; Final Preparation and Showing. A welcome book to those who want movie-making explained in simple terms. 151 pp. Paper. Illus. Price **$1.50.**

SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production date, producer, sale and rental price and grade level suitability, are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation.

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Brief, clear, concise, authoritative. An attractively printed manual of procedure for all visual aids in teaching, with stimulating suggestions for the inexperienced teachers as well as for the veteran.

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The most comprehensive discussion yet published.

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ES-11

MOVIE NEWS

Published in the Interests of

DeVRY — 29 Years of Progress

Educational Visual Aids to Victory

Buy War Bonds and Stamps

VICTORY DeVRY

Save and Salvage For Victory

When King Meets King—A De Vry Was There!

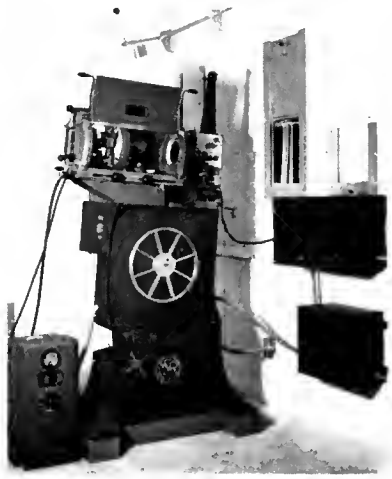
When young King Peter of Jugoslavia visited Buffalo, N. Y. aircraft plants recently, Frank King, Movietone News Cameraman was on hand with his DeVry 35mm. camera to film the tour. In the picture above, (left to right), Larry Bell, President of Bell Aircraft Company, Burdette Wright, Vice-President of Curtiss-Wright Corp.; King Peter and Cameraman King are shown as they visited together on that occasion. King Peter, a "regular guy" according to Frank, was deeply interested in his camera work, heard in detail about King's difficult assignments "shooting" test flights, etc., where his DeVry performed with unfailing perfection.

MOBILIZE YOUR PROJECTOR FOR WAR SERVICE

Serve your country and your profession by loaning your projector for Civilian Defense Meetings, War Production Training, First Aid Showings. Keep 'em running for Victory.

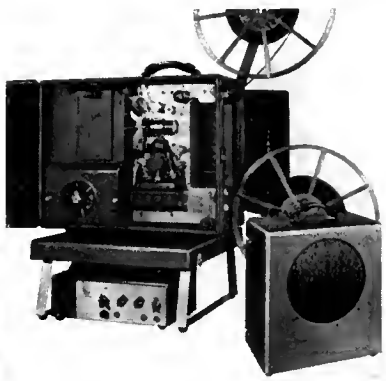
De Vry Camera Performs Outstanding Feat!

Another famous first for DeVry. Five miles up in the clouds, over Mt. McKinley, Alaska, with the temperature 20° below zero inside the plane, the first pictures ever taken from above the highest mountain on the North American Continent were recorded by the DeVry Model "A" 35mm. Automatic Movie Camera, shown in the above illustration. The scenes recorded on this history-making flight, as well as others portraying glacier gold mining, are available to you through a new 16mm. sound motion picture called ALASKA. This film, one reel in length, is obtainable for rental or outright purchase from DeVry Films and Laboratories.



De Vry 16mm. Arc Projector

as installed in the auditorium projection booth of the Lynwood Junior High School, Lynwood, California. Complete with high fidelity sound reproducing system, the DeVry "Arc" permits an uninterrupted one and three-quarter program. When Victory comes, install a DeVry 16mm. arc projector in your auditorium.



The De Vry "Freedom" Projector

The new DeVry "Freedom" Model 16 mm. sound-on-film projector conserves vital war materials without sacrificing and in many respects improving the high quality, dependability, durability and portability that has made DeVry famous.

Choice of two sound systems, 12 watt amplifier and 12 inch speaker (Model Z-12 as shown in cut) and 30 watt amplifier and 12 inch speaker (Model ND-30). In separate cases for use as P. A. Systems.

Every Student Should See This Stirring Film

The Story of Our Flag is just one of the hundreds of superb 16mm. sound and silent educational films available at low rental rates or purchase from the DeVry Film Library.

Six Films on Electricity For War Training Classes

Subjects: Principles of Magnetism; Current Magnetism; Electro-Magnetism; Current Electricity; Electrical Measurement; Electrostatics and Current Generation. Each two reels, 16mm. sound. Rental or purchase.

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DeVRY CORPORATION — DeVry Chicago Motion Picture Equipment — Symbol of Quality — **1111 Armitage Ave., CHICAGO**

The EDUCATIONAL SCREEN

VOLUME XXI NOVEMBER, 1942 NUMBER NINE
WHOLE NUMBER 206

Contents

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Address communications to The Educational Screen, 64 East Lake St., Chicago, Ill.

Scene is one of the Curtiss-Wright Airplane Division classrooms for training U. S. Army ground crews.

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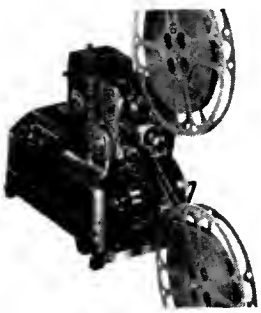

Today there is an urgent need for 16mm. projectors for industrial training, vocational schools, civilian defense work and service groups.

If you have an Ampro projector that needs servicing to put it back into first-class operating condition—you can give the war-program a real lift by taking care of your projector now.

Remember: Every Ampro projector that is serviced and put back into first class condition relieves just that much of the load of producing new machines for the war effort. There is ample opportunity for using every Ampro for projecting 16mm. films for Civilian Defense, War-time training and the circulation of important information.

The Ampro Corporation maintains a complete service department staffed by experts in reconditioning and rebuilding used projectors. Ampro service will make your projector as good as new—at surprisingly reasonable rates. Visit your nearest Ampro dealer *today* — for projector inspection, cleaning and adjustment.

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They came to see a movie.

The film of the Midway battle which they saw, was a government film. What it told of the deployment of forces, of maneuvers and combat action, helped these men plan the future strategy of the war.

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From the picture producing units of the Signal Corps, Air Corps, Navy and other branches of the armed services, come hundreds of films designed to acquaint our men with war weapons . . . films that prepare our men for combat conditions . . . films that instruct our officers in operational techniques . . . films that help our army and navy impart more thorough, more accurate speedier training to thousands of men simultaneously.

In this war, films and projectors are strategic weapons . . . forces for victory.

RCA is proud that its projectors, its film recording and reproducing facilities can be of such good service in the greatest of all causes.

In the meantime—while RCA 16 mm. sound projectors are available only for war purposes—keep your equipment in good running order. Make it last until you again can secure these topnotch projectors for your educational work.

BUY WAR BONDS EVERY PAYDAY!

RCA VICTOR
Audio Visual Service

Educational Department, RCA Manufacturing Co., Inc., Camden, N. J.

The Leisurely Pace in Education — An Editorial

FORMAL education has always been a slow-moving process. Leisurely pace has been one of its proudest traditions, and there is basis for the pride. Down through the centuries and up to the twentieth, formal education has consisted essentially of absorption and meditation, concerned more with the abstract than the concrete. The primary end sought was the attainment of an able and cultured mind, not the achievement of any tangible result or product. Time is the essence of such a process, "time to think." The longer the process, the finer the outcome. The deliberate tempo of traditional education was logical.

This characteristic pace befitted the study, the classroom, the lecture hall, the library. Acquisition of truth and reflexion thereon, not experiential reality and reaction thereto, were the ends desired. There is no time pressure upon seekers after these goals. It is education of this kind that produced the poets, thinkers and philosophers of all the ages in all the nations. From it has come the total literature of the world and that literature is the supreme, almost the only, source of all our knowledge of the world's past. Without that knowledge our present world would have been impossible. Such education is still essential if there are to be such things as art, philosophy and literature in civilization's future. Yet education, at the start of the twentieth century, had vastly to expand its range and multiply its aspects if it was to serve the modern day. This change in education is well begun, but it is by no means completed.

At the turn of the century marked transformations in the world way of life were in full swing. Advances in communication and transportation were taking place which are steadily shrinking the world into a single neighborhood. Increase in material production, in bewildering variety and staggering amount, was bringing about a vastly more complex, efficient and comfortable way of life for all mankind (and the present achievement is small to what lies just ahead). The older education, at its established pace, could not have kept the nation even conscious of this new day and age. It could not have given the rising generation any adequate understanding of the new world it must meet and master for a happy and effective living.

But at the turn of the century also came so-called "visual education," the priceless means for speeding, expanding and enriching educational procedure so as to keep man in touch with his own achievements, in harmony with his fellows in all lands, fully aware, in short, of the marvel and magnitude of twentieth century progress.

The picture opened the way to nearly instantaneous communication between informant and informed, between builder and buyer, between teacher and pupil. Commerce and industry recognized it promptly as a *supplementary tool* in their great task of production and merchandising. Later, haltingly and gradually, education began to use the picture but without recognizing it, even yet, as the *primary tool* for its great task in lower education. Slowly, over three decades, the educational field achieved visual equipment—some tens of thousands of stereopticons and motion picture projectors (but several hundred thousand should have been acquired in the same time). The leisurely pace still functioned! What moves slowly can change only slowly. But then came Pearl Harbor!

The country faced the greatest educational challenge of all time. The educational meander had to become a torrent. Millions must be taught countless things in briefest possible time. Speed and effectiveness must supplant deliberation and routine.. And the means to that end? The picture! The nation seized upon it unanimously. The screen began its mighty work for Government, Army, Navy, Business, School and Community. Dusty, rusty projectors were brought out of hiding, cleaned, repaired, set to work. Bed sheets, backs of maps, blank plaster walls are ekeing out the screen shortage. Visual teaching seethes today. Production, distribution, projection of slides, film-slides and motion pictures are many fold greater than ever before. Yet the full possibilities are still choked by lack of equipment that could have been ready. It is the same old "too little and too late".

But we are catching up fast. The democratic hare has not slept too long to catch the tortoise. Projectors are keeping hot throughout the length and breadth of the land. Picures are pouring from the studios—American, British, Canadian—in an unprecedented stream. An awakening educational field is digging more and wider and deeper channels to bring to the eyes of a nation what it needs to see and know in such times as these. Thousands of schools are doing it now for themselves and their communities. Many more are starting. Let the remaining schools—large or small, in towns, villages, or at rural crossroads—get into action to complete the national distribution. It will be a record in the swift enlightenment of a nation and what a spectacle for totalitarian eyes! The job will be done, and the picture will have done it.

N. L. G.

Hemispheric Solidarity Through Films

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The dominant role of Latin-American films in making the Good Neighbor policy a reality in the western Hemisphere.

Courtesy Julien Bryan

Mexico Indian of the Otomi Tribe tapping the maguey plant.

IF ever the nations of the world beat their swords into plowshares and definitely establish a lasting peace, such will probably not come as a result of force of arms. Rather, it will evolve through a gradual tolerance and understanding developed by individual nations for all other nations. And one of the heartening things in the world today, notwithstanding that it is torn by the bloodiest war in history, is the fact that never before have widely separated races and peoples had the chance to become acquainted with each other as they have now. The world is smaller. Distances have become negligible. Instant communication with all parts of the world is no more difficult than dialing a telephone number or turning on the radio. The vicarious experience of an educational tour of Paris or Turkey or Hong Kong or Venezuela is no farther away than the closest theatre or motion picture projector.

We are sure that there will never be another war between the states; not that the states in one section of the country will not come to violent disagreement with those in another, but such a war would now be too much like a feud, too much like shooting one's next door neighbor. We in this country know each other too well; we understand each other, and we have developed a tolerance each for the other's peculiarities and weaknesses. Overnight a sister in San Diego can be transported to the bedside of a sick brother in New York. In a matter of moments a connection can be made so that a mother in Seattle can talk with her son in the armed forces in Jacksonville. The other day I heard a former student of mine talk to his mother living only a few blocks from me. He was in Australia. And yet, despite all this, nations are today fighting because they do not understand each other, because they have not learned to be tolerant. But tolerance will eventually come, we hope, and the world will see the only peace that it can ever know —a peace that is bound to exist between peoples that understand each other.

Every educator in America is aware of the profitable and successful experiment being conducted throughout the country to establish good will and understanding between the various nations of the Western Hemisphere. New textbooks are being written for special Latin-American study. New courses on Mexico, Central and South America are being introduced in schools. Educational radio programs are acquainting adults as well as children with our neighbors to the south. New motion picture films are being produced at the rate of more than one a week designed to make Latin-America and its peoples vivid and real to us in the United States and Canada. Our government itself is doing no small part in maintaining its Office of Inter-American Affairs which spends all of its time and effort in promoting friendliness and understanding between the nations of the Americas.

The power of the motion picture in developing hemispheric solidarity has been recognized, not only by the Office of Inter-American Affairs, but by film producers and educators all over the country. No one doubts this power any more. Even the theatrical thirty-five millimeter sound film is making a commendable contribution in educating the

millions of theatregoers on aspects of Latin-America. But with the continued upsurge of the use of sixteen millimeter sound projectors in schools, organizations, clubs and homes, the possibilities for a real development of the Good Neighbor Policy becomes limitless. This one project becomes possibly the greatest challenge that the field of visual education has ever received.

Binding reeds for a balsa boat—from the Eastman classroom film, "Bolivia."

No longer is it necessary for the child merely to read and discuss the natural resources of Brazil in the classroom and then adjourn to his algebra with only a vague, smattering of facts that he has studied. With the motion picture he can actually visit the coffee plantations; he can really see great mahogany giants being felled, sawed and shipped to the far corners of the world; he can be conducted personally through a newspaper plant in San Paulo and will probably be amazed to learn that it is just as modern as any in New York or Chicago or London. Facts like these are usually pretty dull to the average student who merely reads them or listens to them discussed by his teacher. But they become real, live and vital when he sees the coffee beans being stripped from the branch, the giant mahogany trees crashing to the ground, the newspapers being flipped at the rate of three hundred a minute from great presses.

Courtesy Julien Bryan

A scene from one of the films on Mexico, released by the Office of Inter-American Affairs.

Already we can begin to see the fruits of a few years of concentrated study of Latin-American countries and peoples. It is working. We are beginning to understand that the folks between the southern Texas border and Cape Horn are just as much Americans as we are. Of course, as the narrator in the excellent film *Americans All* says, these people may have never heard of the New York Yankees or Mickey Mouse, but they are Americans just the same—Americans whose ancestors blazed a path to the western hemisphere long before ours did. A large portion of this better understanding is coming through the use of films in schools. And with the advent of more and better film material, motion pictures are going to play an even larger part in this business of developing hemispheric understanding.

Reliable statistics inform us that there are now over twenty thousand sixteen millimeter sound projectors in the United States and that over eighty per cent of these are in schools. Those of us in the business of educational film distribution have seen the mushroom growth of the use of films in schools during the past ten years. We know that education by motion pictures is now available to millions of school children. And we know further that educators no longer scoff at the power of the film as a teaching tool. From these facts it is evident that when teachers know that proper Latin-American film material is available, they will use it.

Many fine new Latin-American teaching films are now being released and distributed, both from Governmental sources and certain other independ-

Llamas in an Inca village street—from the Castle release, "Land of the Incas."

ent film producers. Hundreds of film libraries all over the nation now have films ready for distribution. The Office of Inter-American Affairs, in particular, only recently made available about twenty-five new films from many distribution points including state university libraries and commercial distributors.

Films now released by the government at its many distributing agencies are available at negligible cost plus transportation charges. Too, no limitation is being put on the length of time that the films may be kept by the users at this low rate. It is necessary only for the exhibitor to determine in advance the time that he will need the material and state same on his order for films. Of course it is naturally expected by the distributor that the film will receive continued and concentrated use while in the possession of the exhibitor, even to the extent of giving it from one to six showings a day, every day.

This easing of limitations should now make it possible for the sixteen millimeter school projector to do a bigger job than it has ever been able to do before. More students are going to be able to see films. More showings of the same films can be given to the same groups, thus making for a more careful and concentrated study of the material at hand. With the privilege of retaining the films for a longer time will come the possibility of taking them out of the schools and showing them before adult groups, service clubs, and other organizations that have never before realized the value of the educational film.

The wide-awake principal and visual education director are going to realize these facts too, and, as a result, the school projector is going to become an educational tool to be used by the entire community. Here we see a practical application of the most modern educational methods in the broadest sense. It is true that projectors, lamps, tubes, and repairs are costly, but all this becomes negligible when we take the broader view of the objective that can be obtained in letting the whole community share these things that are primarily acquired for the student in school.

In communities of one progressive state, film committees are being organized for the express purpose of seeing that this new opportunity for film use is not ignored. Members of the committee are made up of community leaders as well as teachers, and one of their first duties is that of making a survey of all projectors in the community and securing pledges from their owners that the machines can be used throughout the entire community for the showing of films. The committee then books programs of films and sees to it that they receive full and concentrated use while available, not only in schools, but in adult groups and organizations as well.

Through programs like this the film is soon going to prove itself the most powerful instrument we have in developing the hemispheric solidarity toward which we are all aiming. Although the job would be easier if there were more projectors, there are at least enough machines to make a sizeable contribution.

After Western Hemispheric solidarity through a development of understanding and tolerance has been attained, there will come larger tasks. We shall have only begun. If such a thing can be done for this half of the world, then why not the world itself. Berlin and Rome are about as close to us in miles as in Buenos Aires. Narrow reels of celluloid may conceivably prove more powerful than guns and planes and ships and tanks. And in the not-far-distant future.

A Film to Demonstrate the Principles of Teaching

The complete filming of actual classroom procedure for use as observation material in teacher-training classes.

By GAROLD D. HOLSTINE
Director, Teacher Training
State Teachers College, Minot, North Dakota

ONE application of the sound motion picture film to teacher education is as an instrument for directed observation of the principles and methods of teaching. So used, the film avoids many of the inconveniences of the usual observational procedures. By narrator and titles, the observer can be guided throughout the demonstration lesson. The film permits intensive and critical study of the teaching procedure by repeated showings; and makes it possible to focus the attention of the observer on any specific part of the lesson. However, films of this nature should be used principally to enrich the usual observational procedures, rather than to supersede them. The film is effective for presenting desirable practices and procedures in teaching and making simultaneous interpretation.

A sound motion picture film has been constructed at the State University of Iowa under the sponsorship of the College of Education for this express purpose. The film pictures an extemporaneous classroom demonstration of the cooperative planning of an assignment for the unit *The Historical Development of Certain Basic Institutions of Freedom in America.* The three major parts of the film are the introduction, the demonstration lesson, and the summarization.

The film project, submitted by the writer in partial fulfillment of the requirements for the Doctor of Philosophy degree, consisted of four parts: (1) the construction of the sound motion picture film, (2) an analysis of the problems involved in the construction of the film, (3) the preparation of a manual to accompany the film showing, and (4) an analysis of subjective judgment of the value of this film for the pre-service and in-service training of teachers. The film was produced by the Bureau of Visual Instruction of the State University of Iowa. It was organized and directed by the writer. The general procedures used in the production of this film were adapted from those discussed by Devereux.[1]

First Step. This project was arbitrarily limited to the construction and evaluation of a sound motion picture film, for the training of teachers, to serve as a directed observation of the process of teaching. One of the principal weaknesses in teacher education results from the difficulty of providing effective observations of teaching. It was decided to concentrate upon three basic principles of teaching, formulated from authoritative sources, and to delineate them during a single lesson.

I. *Formulation of Immediate and Ultimate Objectives* for each learning enterprise, that are consistent with desirable educational outcomes.
II. *Selection of Content and Activities* that are suited to the interests, abilities, and needs of the learners.
III. *Adaptation of Method* to the nature of the learners and the learning experiences to be provided.

The social studies area was selected for the film demonstration because it was especially favorable for the utilization of the principles formulated.

Second Step. The following major objectives were set up for the film.

1. To arouse the pre-service and in-service teacher's interest in effective teaching.
2. To point out the use of objectives, subject matter and activities, and method in the teaching of a single lesson.
3. To show how a teacher utilizes certain basic principles for teaching.
4. To enable the teacher to see the interrelation and interaction of two or more of these principles.
5. To make the teacher more critical in his analysis, observation and application of the principles involved.

Third Step. The selection of the personnel included (1) advisory committee, (2) demonstration teacher, (3) pupils, (4) film technicians, (5) methods instructor, and (6) student teachers. Ryland Crary (staff member of the University High School, teacher of Social Studies and critic in student teaching) was selected as demonstration teacher because of his ability to present good demonstrations with his class. Nineteen eleventh grade pupils from one of his classes in American history were selected for the demonstration. Voice-quality acceptable for sound recording was considered in the selection. The average intelligence quotient of 118, ascertained from standardized tests, was definitely above that of the mean of the typical class. However, it was not considered wise to attempt the filming of a less well qualified group because of the many hazards involved in filming an unrehearsed and extemporaneous classroom recitation.

The Bureau of Visual Instruction of the State

[1]F. L. Devereux, *The Educational Talking Picture,* Chicago: The University of Chicago Press, 1933, pp. 2-20, 154-157.

An eleventh grade social studies class at work on a study unit in American History.

University of Iowa under the leadership of Lee Cochran, director, supplied the camera, lighting, recording equipment and the film technicians. The sixteen millimeter Berndt-Maurer camera used was the Sound Pro, silent type, 503B; the sound recorder was the semi-portable, model D, designed to accompany the above mentioned camera. A single Western Electric unidirectional microphone was used. All lighting came from artificial sources. The picture and sound recordings were made on negative type film in order that additional prints could be made after editing. The total cost of the project was $339.49. There was no charge made for the use of the equipment, the locations, or the services of the technicians.

Fourth Step. An analysis was made of the interests, abilities, and needs of the pupils, and the cooperative planning method was selected. It was also decided that the demonstration should be extemporaneous, as a prepared script would lessen the naturalness and value of the film.

Fifth Step. A training program of eight meetings in the studio was administered to the teacher and the pupils so that extraneous factors of equipment and production personnel, would have less distraction at the final filming. Trial sound recordings were made of the regular classroom work for three preceding meetings. These were played back to the class so that obvious imperfections in speaking could be pointed out and, in so far as possible, corrected. Two previous class periods were given to a discussion of the cooperative planning procedure, which had been used previously in the normal course of instruction. Some test films were made.

Sixth Step. A crew of twelve persons was used in the filming process—director of the production, a cameraman and three assistants, a sound engineer and two assistants, an electrician, two doorkeepers, and a time-keeper. The double system of recording was used. The class discussion was halted only for reloading cameras every eleven minutes. The film was made on December third, 1941.

Seventh Step. When the film was returned from the laboratories, it was checked carefully, matched, edited, cut, titled, and synchronized. Only the inarticulate parts were actually removed from the film, not exceeding one hundred feet. The combined positive print was made.

Eighth Step. A manual was prepared to supplement the film by providing certain information about its preparation, content, and possible uses as an instrument in teacher education with suggestions for studying.

Ninth Step. This last step, the evaluation of the film, resembled the pattern followed by Gray[2] for the sound motion picture film *Navajo Children*. The evaluation was made by securing ratings and criti-

[2]H. A. Gray, "Evaluation and Use of Sound Films," *The Elementary School Journal*, 42; 97-104, October, 1941.

cisms from administrators, high school teachers, teacher training personnel, student teachers, and analyzing the results. The Devereux Rating Scale[3] was used in rating the film as a medium in the pre-service and in-service training of teachers. A total of 476 judges from eighteen different educational institutions participated, in seven groups as follows: undergraduate students in education, 378; graduate students in education, 12; elementary teachers, 17; high school teachers, 18; school administrators and supervisors, 13; instructors in teacher education, 29; and directors of teacher education, 9. A six-page, mimeographed "Rating Scale for Evaluation of Sound Motion Picture Film," and a five-page, mimeographed "Observation Guide," were supplied to all cooperating in the evaluation project.

A mean rating of 1.741, on a five point scale, was given by the 476 judges. The range of the seven group means was between 1.461 and 2.000, with no significant difference in variation from group to group, indicating general agreement. The rating tended to be higher than would probably have been the case if the judges had had more experience in evaluating educational films and if there had been some specific standards of comparison with other films. The results do indicate that the film apparently meets a need in teacher education. The objectives and content of the film were ranked highest in the five point scale. The judges tended to be more critical of the audio-visual elements. This was undoubtedly due to the greater objectivity of these physical elements, and to the fact that the judges could make comparison of such elements with commercially made films. Tables I and II give a summary of the ratings made.

Table I

Distribution of Ratings by 476 Judges:

Item (Devereux Scale)	*1	2	3	4	5	Total Number Ratings
I. Objectives	258	200	17	1	0	476
II. Content	204	244	25	3	0	476
III. Development of Content	197	217	57	5	0	476
IV. Technical-audio elements	61	194	174	40	5	474
V. Contribution to other curriculum materials	177	220	66	8	0	471
VI. Overview of general effectiveness ..	188	241	38	8	0	475
General ratings (averages)	181	220	63	11	1	476

*The rating scale is: 1—Excellent; 2—Good; 3—Fair; 4—Poor; 5—Objectionable.

There were 258 out of 476 judges who gave this film a rating of "1", or excellent, on the item "objectives." Each of the numbers in this table should be read in this manner.

[3]F. L. Devereux, op. cit., pp. 204-210.

Table II

Summary of Ratings Made by the Seven Groups

	Group	Number	Mean Rating
I.	School administrators and supervisors	13	1.461
II.	Directors of teacher education..	9	1.555
III.	High school teachers	18	1.666
IV.	Undergraduate students in education	378	1.751
V.	Instructors in teacher education	29	1.757
VI.	Elementary school teachers....	17	1.823
VII.	Graduate students in education	12	2.000
	Total number rating.....	476	
	Mean rating		1.741

Approximately sixty per cent, or 290, of the judges gave additional reactions in writing. These comments ranged from certain objections and suggestions for improvement to a whole hearted endorsement of the film in its original form. Suggestions for improvement of the pictorial elements related to the arrangement of lighting to prevent eyestrain, more artistic transition from scene to scene, and insertion of titles. Suggestions for the improvement of the sound elements dealt with the elimination of extraneous noises and further training of the voices of the participants. For the improvement of the educational aspects of the film, it was suggested that a more typical group of pupils should be used, with the teacher demonstrating the utilization of the principles in a more normal situation. There were 258 individuals who wrote that the film was definitely good for the pre-service training of teachers, and to a large degree for in-service training. Reasons given were that the film provides for critical study of the teaching performed, that it introduces the teacher to a more meaningful observation, and that it portrays a very good use of the cooperative planning procedure.

A Concluding Statement

There is apparently a great need of and a strong desire for films designed as directed observations of different principles, methods, and factors related to education. A large proportion of the written and oral comments expressed this point of view to the extent of suggesting specific subject matter fields, grade levels of pupils, and types of pupils suitable for future film demonstrations in teacher education. Certain of the institutions offering teacher education with very limited demonstration and observational facilities seem to be especially interested in the production of a series of films designed for training teachers.

Orders for prints of this film should be sent to Lee Cochran, Director, Bureau of Visual Instruction of the State University of Iowa, Iowa City, Iowa. The title assigned to the forty-five minute film is *Principles of the Art and Science of Teaching.*

Amateur Construction of Sound-Slide Films

Detailed account of a procedure becoming steadily more frequent among teachers.

VIRGINIA F. MATSON
Wells High School, Chicago

SEVERAL years ago, while visiting the home of a friend who manufactured talking-picture equipment, I was introduced to a new type of talking picture. This new visual technique has come to be called sound-slide film and differs considerably from regular talking pictures. For example, on the screen a single frame presents an interpretative but non-animate picture, and a record running on a portable victrola beside the slide projector carries an oral or musical description of the picture. On this evening, as slide after slide unrolled and the recorded story unwound, the effectiveness of this new presentation was most striking and numerous potentialities were apparent. These first pictures were for safety instruction and commercial advertising; but soon churning about in my head were a half dozen other possible presentations. Here was a medium for foreign language instruction *par excellence*. Still objects described in simple foreign phrases would rapidly impress upon the eyes and ears of the student the correct and properly pronounced verbal symbols in the new language.

While I was impressed with the extensiveness of the possibilities of this new technique, I was also aware of its simplicity and easy adaptability to home production. A 35 mm. camera and a home recording outfit were all that were needed to go into production of illustrative materials of one's own choice. As I possessed both, I proceeded to experiment. In 1937, when several friends and I had planned our picture taking for an European tour, we had discussed taking with us a miniature camera for color film and planned to develop a separate talk, perhaps on a record to go with it. While this idea had never materialized, it gave me a point at which to start. Though I preferred to experiment in the foreign language field, I lacked the necessary knowledge so I cast about among pictures I had on hand. For a period of months I had been collecting pictures of my students doing characteristic work in the biology laboratory.

Wells High School, where the pictures were made, is often described as a progressive or experimental school. Actually, a realistic school would describe it better, as the school functions under normal educational conditions and is revolutionary only in that it tries to adapt its materials for study and the techniques of learning to the problems of young people living in an industrial area of a huge city. The school has won fame and recognition for its work throughout the country, but often in attempting to describe the school's program, I found people skeptical that our students really did things in the way we claimed they did. As I mulled over the idea of making a sound-slide film, it seemed that here was a place where the film could really be used to demonstrate to the incredulous, by showing students dynamically carrying out a phase of our school program.

I found upon going through my file of 35mm. film that I already had 40 pictures in color and in black and white. These were put in sequence and then 15 more pictures were taken to complete a continuity of thought for the script. In taking all of the pictures I was careful to photograph the students while they were doing normally the types of work to be illustrated. This resulted in unposed, natural scenes that told an effective story. Around each picture a short script was developed telling the educational significance of the scene. Later parts of the script were rewritten to assure continuity throughout the description.

When all the pictures were assembled they were taken to a photographic laboratory and each black and white negative was converted into a positive slide. The color slides were already positives. The entire set was then imprinted upon Kodachrome film. This move eliminated troublesome and costly splices. While this was the more expensive way to make the film, it gave a highly satisfactory result and the few dollars extra cost was not regretted.

From the script a recording was made upon ten-inch records at 78 r.p.m. on my own recording machine. Aluminum-base acetate records were used and a better than average cutting needle. A friend assisted in cutting the records and timing the script to fit on each of the six ten-inch sides used. (In commercial machines and recordings records run at 33⅓ r.p.m. are generally used to obviate numerous turnings of the records during the program.)

During the making of the records, a musical introduction was tapped in from the radio. The customary tone beat to signal the next slide was not used as it has been found annoying to audiences. Only a voice-pause was used.

When the entire production was completed, the result was more than satisfactory although as a first attempt it was hardly professional. The pictures and script unfolded an effective story which showed the school program at work as it had not been shown before. Shown are examples of the script and the matching pictures from the slide film.

The completed sound-slide program was named *Biology and Social Living*. It was shown when completed at school to the faculty and to the students. It was submitted at the university as a semester project in an educational methods course and was used as a part of my master's degree oral examination. Requests for information about other programs and how to construct similar programs have followed every showing of the program.

(*Concluded on page 353*)

The community is largely industrial. Many of the parents are engaged in industrial work, usually as laborers. They are masons, carpenters, factory workers, unskilled laborers, janitors, mechanics, metal workers, domestic servants, barbers, laundresses, and truckers. In past years as many as 51 per cent have had to rely on relief and W.P.A.

When the problem is broad enough to provide a tempting choice of topics and activities, students work individually and summarize their findings in oral reports to the class. In their work students use for sources of knowledge, books, pamphlets, clipping-files, reader's guides, reference shelves, card catalogues, expert authorities, and commercial and civic organizations. Activities for learning include: tours, experiments, class debates and discussions, notebooks and reports. They evaluate their own work by marking committees chosen from the class.

The aquaria present a fascinating glimpse of underwater life as snails and guppies vie with one another to produce the greatest number of progeny. Thus in this sunny modern laboratory filled with an abundance of living plants and animals, the student's projects, hobbies, and work grow out of meaningful experiences related to life. To anyone accustomed to a conventional classroom, the atmosphere of a Wells workshop would be disconcerting, but the students are busy, absorbed, and going about their work like the employees of a busy firm.

MOTION PICTURES—NOT FOR THEATRES

Part 41.—Starting a new chapter on the devious ways of the non-theatrical market and some historical reasons why it is what it is.

By **ARTHUR EDWIN KROWS**

Chapter X—Marketing Problems

Beacon Films

ONE may not proceed far into the purlieus of New York's stage or motion picture business without coming upon younger members of wealthy families who are seeking to learn "from the ground up" the secrets of a fascinating profession. As long as I can remember there have been interesting instances of this, but there is one outstanding recent case, a reference to which may fittingly end this chapter on the preliminary lessons learned in this field by Big Business.

In 1930 Major H. C. S. Thomson, a 49-year-old Scotsman who had been president of Film Booking Offices of America in Los Angeles and had just sold out to J. P. Kennedy, became interested in seeing what he could do by introducing Big Business methods into non-theatrical motion picture distribution, came to New York and there organized Beacon Films. The main offices were in the Pathé Building, 35 West 45th Street. The prospective first market was to be constituted by churches and schools, and, as the churches seemed easier to handle on the mass basis, immediate attention was concentrated on them.

First, however, it was necessary to finance the undertaking. Thomson therefore made acquaintance with several of these aforesaid wealthy beginners and persuaded them of the high merit of his plan. Among others he contacted were W. Douglas Burden and John Hay ("Jock") Whitney, particular cronies, at the time, of Merian C. Cooper, who had lately returned from the spectacular experience of producing "Grass." Cooper became vice-president of Beacon, and his friends, I understand, both invested. Then there was De Witt L. Sage, of Narragansett, Rhode Island, who had backed an African expedition under auspices of the American Museum of Natural History, and had just completed a trip with the Martin Johnsons. He became secretary of the corporation. Also, Roy P. Gates, born in Texas, known as a sportsman-pilot in aviation and with a brief picture experience as "producer." He became vice-president and general manager. Mrs. Elizabeth Richey Dessez, who had been head of the non-theatrical department of Pathé, situated in the same building with Beacon during the time Jeremiah Milbank was the power behind Pathé, joined Beacon as director of public relations.

The new outfit started out bravely, and the field was suddenly impressed with stories of abundant wealth and probable achievement. The group even put forth a Beacon portable projector. But, so soon as February, 1932, Major Thomson, disgusted with the meager response of the market, and a few lesser circumstances of adverse nature, resigned. He promptly started up another concern, however, called Lumatone Productions, and took Mrs. Dessez with him as editor. Roy Gates succeeded to the presidency of Beacon and carried on. But it seems that the glamor was gone.

In 1933 a Beacon high spot was the assembly, in seven reels, of a Catholic feature called "Through the Centuries," the indefatigable churchlady, Mrs. Rita McGoldrick, supervising the work. But quiet soon descended again. Thereafter one could obtain about fifty subjects from Beacon Films by applying to the concern at 729 Seventh Avenue. One could also obtain prints of most of the items from other, independent rental agencies, including the church pictures produced by the Harmon Foundation. Beacon's main standby, though, apparently was the non-theatrical release of "The King of Kings," in twelve reels, "scored" with a sound accompaniment.

A SMOOTH-RUNNING MACHINE requires many smooth-running parts, working in unison. That observation was never truer than when applied to the non-theatrical field of motion pictures. One may have excellent films and an eager audience there, yet be frustrated in bringing them together by having no reasonable system of distribution; or the distribution may exist without proper reels; or the audience itself may be unable to appear. It is difficult to say which of these factors is the most important, but certainly, in this period of expanding uses, market considerations deserve a long, separate scrutiny.

John Hay Whitney, later to become a factor in Hollywood production, gained some original motion picture experience with Beacon Films.

The celebrated public relations counsel, Ivy Lee, discussing films one time in a Visugraphic house organ, went so far as to say that pictures are worthless unless they may be shown. This emphasis upon exhibition factors was supported by history, for it is a truth well established that discoveries and inventions are of virtually no importance until the world has place for them. That is why there was no especial gain for the pre-Christian Greeks in having steam engines (which they had), or to the ancient Norsemen in finding North America (which they probably reached), and why the rewards for those achievements awaited respectively the days of James Watt and Christopher Columbus. Possibly it follows, too, that the time for non-theatrical pictures has not yet arrived. I know many conscientious observers who sincerely believe that it has not.

A Market Philosophy

THE non-theatrical market is represented, of course—is personified in large sense—by the user of pictures. All the production, all the selling, has him in view. But he does not stand alone; he is not self-sufficient. With all of his natural importance he is but one piece of a mechanism having many other parts. Resembling the central character in Aesop's famous fable of the Belly and Its Members, he cannot get along without the others. Together with his advantage of position, therefore, he has certain obligations to them, the fulfilment of which also represents his function in the smooth-running whole. In return for the privilege of having proper films, he is expected to pay the costs of supplying them, which is to say, the expenses of producing and providing not only the picture but projector, screen, place of exhibition, and so on. And, beyond mere costs, to make the provision of these factors worthwhile to those who create and offer them, he should pay a profit in addition for *their* benefit.

Thus, as far as the user of pictures is concerned, there is constituted a tacit, major understanding which never wavers, an operating principle. The ultimate consumer is expected, and should expect, to pay for what he receives. Upon that *prima facie*, age-old contract, written or unwritten, verbal or unspoken, those who cater to the consumer's wishes establish and maintain their several lines of business.

As to where the schoolman, or the churchman, or the club woman, obtains the funds with which to acquire his or her films, I have preferred—outside of a few casual references to striking cases—to consider that a problem outside the scope of this history. It is my belief that, if visual instruction is a desirable factor in our classrooms, for instance, the expense of procuring it is an obligation of each school community, comparable with the duty of providing teachers, schoolhouses and textbooks. Many other observers will not agree. None will deny the fact of cost; but opinions differ over who should be obliged to pay it. In some quarters it is held that the professional motion picture industry should bear this burden—as doctors maintain clinics, one supposes, for practice. In others, the view is that it should be sustained by textbook publishers on the ground that classroom films are only textbooks in another form, supplementary apparatus. Still others, not so particular, are careless where the money comes from, as long as it is not sequestered from funds possible to appropriate for teachers' salaries.

In simple justice I, (but as one person not speaking for a group or sponsor), object to these contentions. At the same time I know, emphatically, that school boards generally will not provide money in sums adequate for films of their own, while privately I incline to believe that this widespread refusal is the real obstacle to the whole-hearted use of motion pictures in education. So, idealistically, school boards which subscribe to the complete concept of visual instruction should, in my opinion, dig down into their official resources and foot the bill for putting it into practice; realistically, I am sorry to report, the teacher who wants the facility must usually sharpen and apply his wits to ways and means to obtain it, arrogating to himself a duty that the school board has shirked.

These realistic circumstances have nothing more interesting to show than the example in the State of Ohio where, for many years, visual instruction in public schools has been supported mainly, if not altogether, by theatrical exhibitors. State authorities there censor theatrical motion pictures, requiring a fee for the examination of each reel. Fifty per cent of the sum so obtained (in excess of operating expenses and salaries paid in the division of censorship) is assigned to the State Department of Education, which is directed to use it to publicize advantages of Ohio, and to create, maintain and administer a suitable collection of visual aids for loan to the educational institutions of Ohio. The education board therefore has a considerable sum available for the purchase and distribution of reels, and even for a reasonable amount of production, without having to apply for funds in the customary way to the State treasury.

That seems to be quite a happy solution for the schoolmen, and especially so in Ohio, where the funds evidently are well applied. But for the educators elsewhere to seek a similar arrangement in all their situations might be less felicitous. The schoolmen of Ohio can say with free conscience that, as the money reaches them from the proper source—namely, the people's government (which is responsible for support of the educational system)—it is not their concern whence it has been derived before that. The origin might, however, be a matter for study by the government itself. A citizen without professional interest in schools and contemplating the free play of the democratic spirit over the broader scene, might object to circumstances in which theatres are singled out through what might be called a discriminatory legislation, to support a school apparatus which is not their direct concern.

B. A. Aughinbaugh, of Ohio's Department of Education, met a problem of funds for classroom pictures by making theatres foot the bill.

"Oh, yes," the government would retort, "but these theatres are not paying for classroom shows; they are paying for a maintenance of moral standards in their own product, and the money therefore belongs to the State with no further obligation to the payee." And thus would open the line of argument that these theatres are paying much more than the assurance of their moral standards actually costs—else there would be no surplus left for school expenditure. However, I do not pursue this particular discussion further, leaving it to opinions more authoritative than mine to define the essential justice of the case.

In the Ohio situation the commanding figure, sharing place with other heroes who, when things "could not be done," girded their loins and did them anyway, is B. A. Aughinbaugh. About the autumn of 1915 B. A. Aughinbaugh was superintendent of the public school at Mingo, Champaign County, Ohio. The population was 183 and there was no regular local form of public entertainment for the approximately one hundred pupils drawn from over the surrounding countryside. Mr. Aughinbaugh conceived the idea of establishing a community picture show in the schoolhouse itself, enlisted the aid of a friend who loaned money with which to purchase a used film projector at Urbana, and operated the machine until the enterprise had grown to lasting success. In 1920 eleven outlying villages were doing the same thing, and a writer in *Leslie's Weekly* deemed the example of sufficient importance to report the facts and to recommend a similar course to all other country villages in America. Shows were booked and handled in the regulation theatrical way, and sometimes kept on for "runs" of ten or more days. But most significant to this narrative was the circumstance that the profits enabled school boards to erect modern buildings and to equip them with approved facilities.

It was doubtless the close relationship of schoolmen and theatrical men in Ohio that induced William Fox, in furtherance of one of his many educational film plans, to choose the Buckeye State as the test area in which to make the use of classroom motion pictures compulsory. That particular effort did not succeed; but the outcry against the manner of its doing did not deter the continuing development of Aughinbaugh's remarkable pioneer work. In shifting political administrations his salary as a State official was stopped for two years, but he went on with his chosen labor undeterred, supporting himself by lecturing on Ohio's scenic and historic places. In this activity he travelled some 400,000 miles through the State; but there he acquired the precious familiarity with Ohio that enabled him to produce, with the assistance of his devoted wife, the twenty-four reels of his well known "Ohio Travelogs."

But the storm, as prolonged and as devastating as it was, eventually blew over. Mr. Aughinbaugh resumed as supervisor of the Slide and Film Exchange of the State of Ohio Department of Education at Columbus. There, at this moment of publication, he distributes an average of 800 reels a day out of what is frequently called the largest film and slide library of its kind in the country. The supply goes without charge to 2,500 schools in all cities, counties and villages of the State, the volume of bookings reported to exceed that of the State's ten leading theatrical exchanges. In his direct organization he employs twenty-eight persons to operate a film and slide collection of 8,000 titles, having an estimated value of $350,000. He buys all subjects outright or obtains them on lease.

His eleventh catalogue, in 1942, emerged as a stout, illustrated, 12mo book of 310 closely printed pages. Apart from its clear and well-keyed descriptions of the available motion pictures and slides, it provides an opening article on the function and aims of visual instruction, differentiating between approaches to understanding through the pupil's eye, ear and touch. There are also extended answers to the more frequently asked questions from the field concerning school uses of films; detailed, illustrated instructions on film care; advice on the purchase of projectors and screens; a description of the most direct way to apply for bookings; and reprints of A. P.

Hollis's "Film Prayer" and "I Am the Motion Picture," Arthur James's popular paraphrase of the late Bob Davis's "I Am the Printing Press."

Under the rules, "educational institutions of Ohio," which the Lowery Amendment to the Zoul-Carey Act (*Sec.* 871-48*a*) specifies as those which are to enjoy the borrowing privileges, are explained as "public, private or parochial schools holding regular daily school sessions of eight or more months a year and following the usual accepted curricula for secular educational institutions. This definition definitely *excludes* schools known as Sunday schools, adult schools, study clubs, W.P.A. and C.C.C. schools, and all similar organizations or groups."

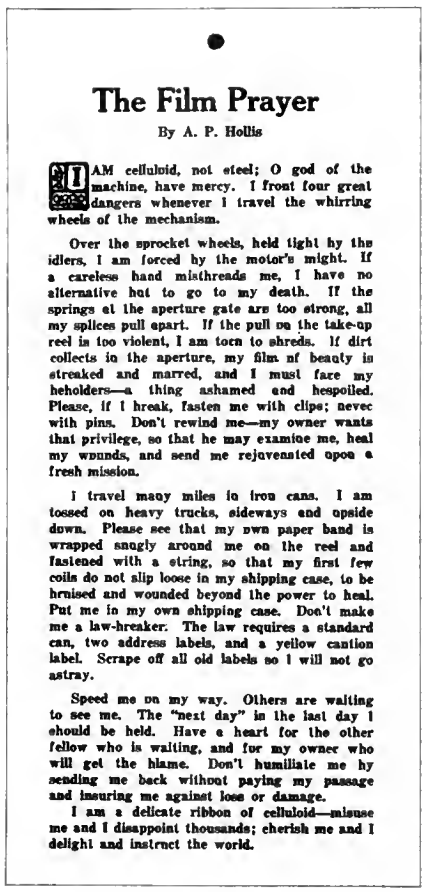
I have never encountered a more ardent believer in the visual idea than B. A. Aughinbaugh. In him it burns with the clear, intense fire of a crusader's zeal, kindled years ago in circumstances that he explained to me in a recent letter:

> "I first became interested in the use of motion pictures to supplant words as a means of communicating information while teaching in the Philippines in 1911. The incident that brought my attention to the matter was the use a missionary made of a one-reel motion picture made on the life of Christ to persuade the natives to buy gospels. He had an old calcium arc projector. The natives could not read and, if they could, they could not all read the same leaflet because they spoke different dialects. The natives paid five centavos for a leaflet (naming in advance of the purchase the dialect spoken). The purchased leaflet was the admission 'ticket' to the tent where the pictures were exhibited.
>
> "I went in. There I found all the natives interested in the pictures—their expressions indicated understanding—something not aroused by the pamphlets. I saw at once that the motion picture was the Eye's answer to the Ear, and the Eye had some things the Ear never had. It had universality and, therefore, knew no race or Babel of tongues. It was not artificiality and therefore, required no instruction before it could be used—but people must learn to read. Reading is artificial—viewing is natural. Reading is audio—viewing is visual.
>
> "Well, let's stop. But I swore I would put motion pictures to work in education at my first opportunity. The Mingo school offered that opportunity."

No—B. A. Aughinbaugh did not acquire his belief in motion pictures vicariously; nor did he permit that belief to remain as a mere static conviction. His active State film establishment at Columbus and large numbers of well equipped Ohio schools attest the continuing force of his great impulse.

His essay on the psychology of visual instruction, in his latest catalogue, reveals his still passionate interest. Like al those other constructive souls who have endeavored to blaze new upward trails for the human race to follow, he has become impatient with terminology, and has sought new words and word combinations to state the truths as he sees them. For years he has been searching for a term to replace what is to him a thoroughgoing misnomer—"visual education." In lieu of a more satisfactory substitute he himself has used it reluctantly many times, inclining, though, toward "visual instruction;" but he is quick to deny the allegation, made now and then by over-zealous admirers, that he invented it or was the first to apply it. His patient researches into its origin have traced "visual education" back to a possible first occurrence in a Keystone View circular, copyrighted in 1906. About 1919 he fixed provisionally upon his own form, "visual communication."

However, as an error of Columbus has branded our aborigines "Indians" for all the centuries since, Mr. Aughinbaugh can only force himself sadly to understand when he finds a teacher "herding her class to the school auditorium to have, as she says, 'their visual education lesson'." But, when he sees "the colleges over the country goose-



The Film Prayer

By A. P. Hollis

I AM celluloid, not steel; O god of the machine, have mercy. I front four great dangers whenever I travel the whirring wheels of the mechanism.

Over the sprocket wheels, held tight by the idlers, I am forced by the motor's might. If a careless hand misthreads me, I have no alternative but to go to my death. If the springs at the aperture gate are too strong, all my splices pull apart. If the pull on the take-up reel is too violent, I am torn to shreds. If dirt collects in the aperture, my film of beauty is streaked and marred, and I must face my beholders—a thing ashamed and despoiled. Please, if I break, fasten me with clips; never with pins. Don't rewind me—my owner wants that privilege, so that he may examine me, heal my wounds, and send me rejuvenated upon a fresh mission.

I travel many miles in iron cans. I am tossed on heavy trucks, sideways and upside down. Please see that my own paper band is wrapped snugly around me on the reel and fastened with a string, so that my first few coils do not slip loose in my shipping case, to be bruised and wounded beyond the power to heal. Put me in my own shipping case. Don't make me a law-breaker. The law requires a standard can, two address labels, and a yellow caution label. Scrape off all old labels so I will not go astray.

Speed me on my way. Others are waiting to see me. The "next day" in the last day I should be held. Have a heart for the other fellow who is waiting, and for my owner who will get the blame. Don't humiliate me by sending me back without paying my passage and insuring me against loss or damage.

I am a delicate ribbon of celluloid—misuse me and I disappoint thousands; cherish me and I delight and instruct the world.

"The Film Prayer" of A. P. Hollis did blessed work in promoting a better physical handling of non-theatrical reels. Reduced from one of the originals made in 1920.

stepping into offering 'visual education' courses," he rebels violently. "It is time to call a halt and get back to common sense," he wrote me when he made that comment. "Use text films just as we would use text books, and there is no more to the whole story than that. The only reason for making more of it is plain unadulterated perfidity. It's a scheme to coax students into teacher colleges by baiting the hook with a snap course. Look over these courses and see if I am not right."

Exchange of Values

USING a flat, literal interpretation of the aforesaid principle, that the consumer should pay out of his own funds for what he receives (while realizing that he hardly ever will do it), most commercial producers of "educational" films have decided eventually that there's nothing in it. Schoolmen generally, churchmen generally, cannot or will not pay sufficient money for what the service costs.

Nevertheless profits, benefits and compensations are not always to be rated in dollars. John Patterson, at the National Cash Register plant in Dayton, and many other industrialists after him in other large factories, put on first class motion picture shows for the free enjoyment of their employees at noon hours, and entered the expense on the credit side of the ledgers because the employees were then happier and worked more efficiently. Notice that these capitalists felt that they were gaining equally with their employees. With the same honest profit motive the International Harvester Company produces and supplies, without appreciable expense to the user, films containing valuable agricultural information. The wide audience, in return, supposedly becomes interested in the Company's machines above those offered by competitors. Even the pictures produced and distributed by the National Government are circulated in the hope of a profit in terms of better citizenship.

So there really is no such thing as an absolutely free film. In the interests of healthful human progress, probably there never should be. The person working in non-theatricals should not forget the fact. No more should the reader forget it, if he wishes to see this field with clear detachment.

The side of the situation which supplies films to non-theatrical users is frequently willing to compromise in its terms of exchangeable values by accepting something other than money, but these modifications are not always acceptable to the users. Many a teacher has refused to show even well made school films in class because they bore the stamp of some industry. But, so long as the teacher demands motion pictures, and at the same time will not pay their cost, through his educational system, he has no right to insist thus unfairly upon getting something for nothing. When, on the other hand, he recognizes the service upon some other, reasonable basis—other than a financial one that is—a clear understanding of the actual relationship is maintained. In the circumstances, naturally, if there are compromises on one side, there must be compromises on the other to keep the trade even. The system explains how recently, in the space of an hour, I could encounter, and recognize as legitimate, two distinct cases of non-theatrical bookings one of which called for $2.50 per day rental, and the other for only twenty-eight cents expended in postage for "free films".

(To be continued)

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

INTERNATIONAL RELATIONS

Films in International Relations—Blake Cochran, Division of Cultural Relations, Department of State—*Teachers College Record,* 44:21-27 Oct. 1942.

In 1938 the Department of State's Division of Cultural Relations was established for the purpose of encouraging and strengthening cultural relations and intellectual cooperation between the United States and other countries. It was soon recognized that informative and educational films could be useful for the Department. By July 1, 1942 more than 500 films had been distributed all over the world.

The State Department, though not actually a member of the international agreement to facilitate the exchange of educational and cultural films, does issue certificates attesting to the international educational character of films which may be admitted to the country without duty. Distribution of American-made films is now being carried on through embassies, legations and consular offices in the various countries.

American films sent abroad include subjects on sports, home life, industry, surgery, engineering, national parks, children, agriculture, health and science. Adult groups are also served. Technical and professional films are shown to students of dentistry, surgery and the like. Many of the U. S. Department of Agriculture subjects have found interested audiences in Egypt, Canada, Australia, Brazil, etc. Industrial subjects have been eagerly used, including films on training skills as well as those showing American industry at work.

Films that are to be used are very carefully selected. When the State Department personnel learn of a new film in production, they invite the producer to submit it to them for review. A committee reviews it and it is either accepted in its entirety to be distributed in English or the producer is notified of changes that would be necessary to receive State Department approval. If translation to another language is needed, the film must be submitted again to the committee with a member of the Central Translating Office present.

Distribution of 16mm. films in foreign countries, though still weak, is growing. The Coordinator of Inter-American Affairs has done much to increase the number of good intercultural films. Other government agencies cooperating are the Department of the Interior, the War Department, Navy Department, Department of Agriculture and Office of War Information.

One of the subjects that is most often requested abroad is American education. A film is needed that shows the school experience of an American child as he goes from kindergarten to college. If an authentic film on American education existed it could be shown from South Africa to Greenland through the Division of Cultural Relations.

ADMINISTRATION

A Study of Audio-Visual Education in Onawa (Iowa) Public Schools, Supt. John P. Weisensee and Faculty—1942.

This excellent outline indicates that the entire faculty of Onawa, Iowa has engaged in a fruitful study of the place and possibilities of using audio-visual aids. The study group has assembled important statements from the books in the field and has applied them to their own curriculum. The format of the printed bulletin is very effective for pointing up important statements. For example: "What It Is Not" tells us that audio-visual aids are not: motion pictures only, either silent or sound; a separate school subject; a substitute educational device; entertainment only; something new; or a device to eliminate work. In the section on methods of teaching there are sample units of work to indicate the use of a variety of audio-visual aids for a variety of purposes.

From the experience of other communities, the committee recommends that the Onawa schools should plan their materials far in advance and send copies of the schedules, with other teaching aids, to the classroom teachers. It is recommended that one teacher be appointed as visual aid director, but that all teachers cooperate in evaluating and keeping records on films and other aids used.

For follow-up study of audio-visual education by the Onawa faculty it is recommended that: further study should be made of audio-visual education; that experimentation and research be conducted; that experts be called in to aid in improving the program; that film schedules be made on a semi-annual basis; that there be centralization of information; that a card system be set up for reference; that a file of information be set up on a museum or exhibit; that more rooms be equipped for projection; that there be a survey of available materials with reference to the Iowa Course of Study; that a reference file of industrial and commercial firms be made; that teachers take courses in this subject in summer school; that requisitioning of audio-visual aids from the superintendent's office be continued; that a picture file be started; that a budget be allocated for audio-visual aids; that professional books in the field be bought, and other good suggestions that indicate careful study.

Visual Aids Help Wartime Teaching—Lelia Trolinger—*Colorado School Journal,* 58:9 Oct. 1942.

The Bureau of Visual Instruction of the University of Colorado has 500 silent films, 300 sound films and 400 sets of slides. They also have recordings made available with the cooperation of the Rocky Mountain Radio Council. The Bureau is now a government depository for South American films distributed through the Coordinator of

Editor's Note—In our June (1942) issue we quoted from an article in the March (1942) issue of "Social Studies" (on the making of slides by schools from pictures in newspapers and magazines) the following: "So long as a school does not intend to sell these materials there is no danger of infringing upon Copyright Laws."

A leading firm in the visual field took emphatic issue with the statement because of the implied suggestion to teachers that Copyright can be safely dodged. Investigation showed that lack of intention to sell does not in itself constitute a defense in an infringement suit.

The statement in question was not, of course, by the EDUCATIONAL SCREEN nor by the editor of this department. This department is wholly reportorial and its sole responsibility is to reproduce accurately in condensed form what appears elsewhere in the educational press.

Though our reporting was accurate in the present instance, we are glad to affirm unequivocally our stand on the question at issue. The American Copyright Laws are and must remain inviolate. They are one of the foundational rights in the American way of life. The educational use of pictures in newspapers and magazines has been and long will be an almost universal practice in schools because of widespread, often blanket permission granted by the copyright owners for such purposes. *Without that permission, however, no picture should ever be reproduced.* We are opposed, above all, to any recommendation or suggestion for evading the Copyright Laws and to any implication that such evasion can be justified under any circumstances. N. L. G.

Inter-American Affairs. Thus schools in Colorado can keep pace with the growing need for films on the war effort.

UTILIZATION

Practical Hints for the Use of Motion Picture Films in Vocational and Technical Education—Gilbert G. Weaver, Supervisor, Industrial Teacher Training, New York State Department of Education—Hamilton Co., 225 Lafayette St., New York City. 1942 44 p. mimeo. $1.00.

This monograph appears at a most opportune time. Industrial teachers everywhere are faced with a greatly accelerated program and are eagerly putting to use the hundreds of new shop films that are now being produced. But, it may be asked, how well are these films put to use?

Mr. Weaver is thoroughly familiar with the possibilities of the motion picture in technical and vocational education, as evidenced by the list which he published in 1934: "Bibliography of Technical and Industrial Motion Picture Films and Slides." Now he turns to the important aspect of film use, the planning, utilization and follow-up of a film.

Among the teaching advantages which may be expected from the use of these audio-visual aids are: mental retention of visual impressions, time saving in use and student understanding, an interesting manner of presentation, and flexibility in use. For each of these, examples are cited in the specialized field of technical education.

By far the greatest contribution of this bulletin is the section on suggestions for effective use. The author lists six steps related to the use of every film: explain the purpose of the film to the class; review information already known to the students; direct the observation of students to specific things in the picture; show the film as many times as needed; discuss the film immediately and repeat the showing; assign activities which may have been indicated by the film. These procednres would, of course, be adapted to the type of film used: occupational, industrial, technical, scientific or skill film. For each of these types a sample lesson procedure is outlined in a very helpful manner. The section ends with some helpful hints and cautions, helpful to all teachers everywhere.

Do Not Use

1. Films that are 'interesting' but present little or no useful information for your particular use.
2. Films that may be technically correct but which have no specific application to the problems of your training schedule or course of study.
3. Films of considerable length with a small proportion of useful information.
4. Films that may be considered as 'dessert' or entertainment only.
5. Films at the close of the class period if no time remains for discussion.

Do Use

1. Films with simple, direct treatment
2. Films that challenge the students' thinking
3. Films that show basic principles and operations
4. Films that present clearly the technical facts or information
5. Films in short series that may he alternated with discussion
6. Films at such times when students are mentally alert to absorb the instruction.

There is an excellent chapter on preparation for the showing, which includes the teacher's own preparation for the preview and use of the film, and the best arrangement for good projection in a classroom or auditorium. After describing some of the factors to he considered, the author reviews the "recurring steps" that should be noted each time. Showmanship is needed during each presentation and some good pointers are here given. Use an assistant to operate the film or slide projector, vary the technique of use according to the subject, and combine the various types of audio-visual aids without over-emphasizing any one.

It is important, according to the author, for teachers to note the results of film and slide use. Some guide questions for observing results are: Did the students show greater interest than with other means of teaching? Did they learn faster the information, operation or skills? Did

(*Concluded on page* 365)

News from Zone II of D.V.I.

Zone II Officers for 1942-43

The names of Officers and Executive Committee of Zone II for the current school year has been received from Dr. E. Winifred Crawford, Director of Visual Education, Public Schools, Montclair, New Jersey. Miss Crawford continues as President, and other officers are as follows: *First Vice President,* James W. Brown, Acting Supervisor of Audio-Visual Education, State Board of Education, Richmond, Virginia; *Second Vice-President,* Dr. F. Dean McClusky, Director of Scarborough School, Scarborough, New York; *Secretary-Treasurer,* Dr. James S. Kinder, Director of PCW Film Service, Pennsylvania College for Women, Pittsburgh.

Members of the Executive Committee are: H. E. Stahl, Superintendent of Schools, Baltimore, Maryland; William R. Flowers, Assistant Superintendent of Schools, Baltimore, Maryland; Dr. Paul Reed, Bureau of Moton Pictures, Office of War Information, Washington, D.C.; Miss E. J. Dwyer, Director of Visual Education, Public Schools, Washington, D.C.; Harold Antrim, Principal, Point Pleasant Beach School, New Jersey.

New York Metropolitan Branch Program Series

The Metropolitan Branch of Zone II of the Department of Visual Instruction has arranged a series of four meetings to demonstrate to the teachers of New York and the metropolitan area, the new visual aids that have been developed to supplement subjects in the curriculum which are receiving particular emphasis as a result of the war. "Air-mindedness" was the topic of the first of these programs, held October 28, at the Central High School of Needle Trades, 225 West 24th Street, the meeting place also for the subsequent three programs on December 1, January 13 and February 16. Topics of these forthcoming programs will be, respectively, "Pan-American Relations," "Our Allies," "Training for the Emergency."

Outstanding authorities will discuss ways and means of securing visual aids and adapting their use to different age levels, from senior high school students to primary-grade children. There will be showings of films, slides and filmstrips, as far as possible, for all grades and levels. "Nothing can make this information as vivid as the aids to teaching which the department of visual instruction plans to present," said Dr. Grace Fisher Ramsey, curator of school relations of the American Museum of Natural History and president of the Metropolitan New York branch. Material will be presented to all teachers attending these meetings, giving sources for visual aids and grade level curricular allocations.

The program has been arranged by a committee headed by Dr. Charles G. Eichel, principal of Public School 202, Brooklyn. Lists of pertinent visual materials, with sources, have been prepared for these meetings by Esther L. Berg, Chairman of Curriculum.

For Wider Distribution of Government War Films to School and Community Groups

THE United States Government recognizes the motion picture as an important method of educating and inspiring the American people. The motion picture is an excellent means to portray the History of our Country and the sacrifices made by those who preceded us to establish and preserve "The American Way of Life." The "movie" pictures vividly the sacrifices our boys are making in the present battles.

The need for the support from the home front must be emphasized. The importance of scrap metal, the urgency for saving waste fat and grease, the need for intelligence in what to buy to prevent using that which is needed by the armed forces, making plain the necessity for the financial support of the war by taxes and by the purchase of bonds, what to do in an air raid, how to apply first aid to the injured, the opportunities for service in the production line and on the farm, how to operate a drill or lathe in the factory, educating our people for better inter-American relations—these vital lessons are easily taught through the motion picture.

There are many motion pictures already produced for this purpose by the Office of War Information and by the Coordinator of Inter-American Affairs. These sound motion pictures (some in color) are being made available through many film distribution agencies at a service charge of fifty cents for the first subject and twenty-five cents for each additional subject used the same day.

These excellent pictures produced at great expense as a vital part of the Government program are not reaching a large proportion of the people. What can be done about it? Every meeting place in the community should be turned into a WAR INFORMATION NEWS THEATRE. Every group should include the showing of these films as a regular part of its program. Schools should use these films as a part of the school program and should serve as centers for the use of these films in the community.

The films, projectors, screens, and operators are available on a non-profit basis from Boston University School of Education, Division of Teaching Aids. This service is available to homes, schools, and to all other groups who wish to co-operate with the Government in its educational program for Victory.

ABRAHAM KRASKER

Editor's Note—We are glad to print the above communication from Abraham Krasker, describing the service of the Division of Teaching Aids, Boston University School of Education, in supplying Government Films, projectors, screens and operators on a non-profit basis—and earnestly inviting home, school and community groups to avail themselves of the opportunity to serve the national educational effort.

Dr. Krasker's urgent invitation to the New England territory is typical of others that could be printed from the other educational centers distributing the same films. They are equally eager to serve their own areas. Obviously economy dictates that users address the nearest distribution center. Some 46 State educational libraries, and numerous commercial film libraries now distribute the Government's War Information films.

On the industrial side of our national war effort production is still far ahead of transportation. Solution of that problem is a matter of rail, road, air, and water transport. On the educational side of our national effort, Government film production is still far ahead of circulation to our national citizenry. The solution of that problem rests primarily with the schools. Every school can bring these vital films to its own community. It is merely a matter of making a start—right now!—by writing to your nearest distribution center.

N. L. G.

Amateur Sound-Slide Films

(*Concluded from page* 347)

Sound-slide film pictures, while without animation, can be nevertheless dramatic enough to imply action vividly. The watcher has the restful sensation of looking long enough at a picture to have it thoroughly explained. The record can be stopped at any point to permit supplementary explanations. Also portions can easily be played back or reshown with the minimum of distracting effort. The simplicity and inexpensiveness of the equipment for both production and presentation make the technique more available for small schools and clubs than motion picture materials. Color film, which may still be prohibitive in cost for some school use, can easily be employed in this type of presentation.

The possibilities for programs are limitless. As yet nothing has been done in the foreign language field. A few travelogues have been made, numerous commercial programs, and recently an excellent series of Kodachrome reproductions of great paintings with an accompanying lecture by a famous art lecturer has been released. As a market there are hundreds of women's clubs, Red Cross units, Pan-American clubs, teacher's colleges, Sunday schools, sales forces, citizenship classes, university extension schools, 4-H clubs, etc. that are awaiting enrichment programs about travel, how to do things, consumer education, foreign cultures, Bible stories, experiences from the field, appreciation of art and music, local history, and first aid demonstrations. For as little as ten to fifteen dollars, to as high as thirty to forty dollars, these programs can be turned out by amateurs or professionals. They can be used dozens of times over and will shortly pay for themselves outright and give bonuses too. With the increased emphasis upon visual presentations for education and entertainment and with the desire to hold costs to a minimum, many groups can well look to sound-slide films to aid in putting over their ideas to a visual and sound conscious public.

SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

TWELVE school-made films on safety are listed in "Visual Aids in Safety Education; Supplement I," recently published by the National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C., under the direction of Frank W. Hubbard, Director of the Research Division of the N.E.A.

Safety films made in South Bend, Indiana, Appleton, Wisconsin, and Cleveland, Ohio, which have not already been reported in this column, are noted in the visual aid booklet. Following are film summaries based on the N.E.A. data:

School Safety, a four reel, 16mm silent production of the Board of Education, Cleveland, Ohio, is a color film reviewing all phases of the safety program in Cleveland Public Schools. Included are shots of the clean-up squad, the safety patrol, safety broadcasts, the safety council, safe play activities in the gymnasium and on the playground, and proper handling and care of tools and equipment in industrial laboratories and classrooms. Also shown are experiments in science classes showing what materials are inflammable and what causes a short circuit. Other shots present inspection of fire-fighting devices and equipment and school fire drills. The N.E.A. committee recommends the film as valuable in the teaching of the correct usage of equipment.

When Traffic Moves is a 16mm silent color movie, developed by the Wilson Junior High School, Appleton, Wisconsin. This four-reel film gives a review of the safety work being carried on in the Appleton schools. In the film story, Bill, a school boy, tells his father that adults violate the rules of pedestrian safety more than school children. After Mr. Smith consults the chief of police and the superintendent of schools, he becomes convinced that his son is right. With the superintendent of schools, Bill and his father visit several schools and observe the traffic safety program in action at each grade level. Safety rhymes are effectively used in titling the film.

A film that should be very effective in emphasizing traffic safety is *Safety Through Education,* made in the South Bend, Indiana, Public Schools. The color film (16mm silent, 4 reels) with a narrator's script, shows "correct and incorrect behavior of South Bend school pupils, primarily in street and highway situations. Such scenes as youngsters crossing streets diagonally and from behind parked cars, playing too close to the curb, walking in the road, and jay walking, as well as the school patrol in action, are shown. Final scenes illustrate positive safety habits."

The N.E.A. booklet, which lists not only films but also many other visual aids available for safety education, is available from national headquarters at twenty-five cents per copy.

Other School-Made Films

California

Humboldt State College of Arcata keeps a file of all of its graduates filmed in action. This film serves not only as a record for the present but also may be used as a reference in future personnel work. Librarian Graves of the college is the producer of this 16mm file. George E. Murphy reported the project.

Connecticut

George E. Shattuck, principal of Norwich Academy, Norwich, reports that his school has made and is making 8mm and 16mm films that document current activities—athletics, special events, etc. These films will be used in the development of a film history of the academy in the future.

Two 16mm films completed by the photography class of East Hartford High School in June, 1942, are unusual in subject matter. One, on *Geometry* (300 feet) shows geometric figures and construction and gives examples of these found in various parts of the town. *Photography* (200 feet) depicts the process of photography, the class members taking pictures, developing, printing, and enlarging.

Ohio

Edgar Dale, who is now with the Bureau of Motion Pictures of the OWI, notes a new safety film produced at Ohio State University, Columbus. The film, *Safety with Small Tools,* (one reel, 16mm silent) pictures the various hazards faced by young boys in the handling of small tools and indicates how they might be avoided. A University class in Visual Instruction produced the film.

REPORTS WANTED!

This Department aims to cover, in succeeding issues, ALL school-made motion pictures. Our readers can make this possible.

If you know of a film that has been, is being, or is to be made

(1) In your school, or (2) In any other school kindly inform us as below:

Name of School.....

Title and Subject of Film.....

No. of ft.?....Color?....16mm silent?....or sound?...

Other data.....

(If your knowledge is incomplete, please name above a person who can tell us)

Many thanks!

Your name.....

THE WORLD AT WAR

Document your current-events discussions with authoritative Eastman Classroom Films

COVERING a wide range of war-related subjects, these films "review" the geographical, historical, and topical facts needed for an understanding of today's headlines. More vital than ever is the help they offer every teacher. . . . Unless otherwise indicated, titles listed are on 16-mm. (silent) safety stock. Price, $24 per 400-ft. reel; shorter reels priced in proportion.

WAR FRONTS OF THE WORLD
Russia (3 reels)
Germany (3 reels)
India (3 reels)
Japan (2 reels)
The Philippine Islands
Manchukuo
The Dutch East Indies
Turkey (2 reels)
Glimpses of the Near East
Finland
Hungary
Bulgaria
Denmark
Yugoslavia
Siberia (2 reels)
Poland
Alaska
The Panama Canal
The Hawaiian Islands
Washington—the Capital City
London

HEMISPHERE SOLIDARITY
The Continent of South America
Argentina
Bolivia
Brazil (2 reels)
Chile
Peru
Central America
Mexico
From the Bahamas to Jamaica
Puerto Rico
From Haiti to Trinidad
Coffee

WAR INDUSTRIES
Aluminum
Iron Ore to Pig Iron
Pig Iron to Steel
Copper
Tin
Producing Crude Oil
Refining Crude Oil
Rubber
Anthracite Coal
Bituminous Coal

Mechanical Training
Elementary Operations on the Engine Lathe (2 reels, sound . . . $36 per reel)
Principles of Flight
Four-Stroke Cycle Gas Engine

ON THE HOME FRONT
First Aid
Care of Minor Wounds (¼ reel)
Carrying the Injured (¼ reel)
Control of Bleeding (¾ reel)
Life Saving and Resuscitation

Home Nursing
The Bed Bath (½ reel)
Routine Procedures
Special Procedures (¾ reel)

Fire Protection
Fire Prevention
Fire Protection
Fire Safety

Nutrition and Health
Vitamins (2 reels)
Child Care (2 reels)
Cleanliness (4 half reels)
The Eyes (2 reels)
The Feet
The Teeth (3 reels)
Posture

Education
Free Schools—The Hope of Democracy

Safety
Safety at Home
Safety at Play
Vacation Safety
Street Safety (2 reels)

Many other timely films also available.
Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Eastman Classroom Films

NEW FILMS OF THE MONTH

As They Look to A Teacher Committee

Conducted by L. C. LARSON
Instructor in School of Education
Consultant in Audio-Visual Aids
Indiana University, Bloomington

Assisted by LLOYD F. EVANS and CAROLYN GUSS
Extension Division
Indiana University, Bloomington

Westminster Abbey

(Post Pictures Corporation, 723 Seventh Avenue, New York City) 10 minutes, 16mm. sound. Sale Price $30.00. Apply to distributor for rental sources.

The film first shows the most ancient and sacred precinct of Westminster Abbey, the crypt where the original foundations were laid by Edward the Confessor. In Henry VII's Chapel, the burial place of England's kings and queens, stands a beautiful high altar which replaces the one destroyed over three hundred years ago. Next are shown some of the ninety-five statues of saints which comprise one of the most remarkable groups of medieval imagery in the world. The tour through the cathedral next proceeds to the tomb of Mary Queen of Scots who, beheaded by Elizabeth and separated from her in life, here lies beside her in death. Westward down the nave the inspiring height of the vaulted roof canopies the tomb of England's Unknown Soldier, who lies among kings because he laid down his life for others. An exterior view shows the decorated flying buttresses and a further view shows them floodlighted at the time of the Silver Jubilee of the late King George V. In the north transept are shown the beautiful illuminated windows; the tomb of Chaucer, the father of English literature; and the shrine of Shakespeare, the immortal bard of Avon. Lastly is shown the famous coronation chair where all England's kings since Harold have been crowned. In front of the altar is a mosaic representing the Last Supper, behind the chair is the tomb of Edward the Confessor, and nearby is the Bayard tapestry depicting incidents from the reign of King Harold, who was the first monarch crowned here.

COMMITTEE APPRAISAL: An excellent film for use by groups studying English history, English literature, Gothic art and architecture. Picture and commentary build an atmosphere of tradition which is indigenous to an understanding of English art and letters. The film would have contributed more to an understanding and appreciation of the architecture of a cathedral and the reality of the experience if the camera had also been used to convey the continuity of progress through the building.

Great Lakes

(National Film Board, Ottawa, Canada) 20 minutes, kodachrome, 16mm. sound. Sale price $90.00. Apply to producer for rental sources.

The one-hundred-thousand square miles of fresh water lakes—Superior, Michigan, Huron, Erie, and Ontario—which form a friendly and utilitarian boundary between the United States and Canada provide the theme for this color subject. The multifarious activities of the great industrial area on the shores of the Great Lakes and the diversified cargoes carried by the ships that ply them are shown. Maps locate the lakes as a unit, and show the position of principal cities such as Winnipeg and Toronto and of the locks at Sault Ste. Marie. The shipping theme links together short sequences on steel production, pulp manufacture, shipbuilding, grain storage, and the working of the locks and canal systems. Freighters carrying millions of tons of cargoes each season, tankers moving petroleum products, and steamships with passengers participating in various deck-activities are shown as they pass up and down this inland waterway where lake boats know no boundaries.

COMMITTEE APPRAISAL: An unusually effective film for the study of Canada as an industrial nation, the influence of water transportation upon industrial and economic development, and the geographic significance of the Great Lakes to North America. The general usefulness of this film is limited only by the failure to include the complete lake system. The importance of Lake Michigan is minimized. The pictorial presentation is of high quality and makes what might have been a prosaic subject, an especially interesting one.

Western Front

(United China Relief, Inc.) 21 minutes, 16mm. sound. Apply to Office of War Information, Washington, D .C., for list of depositories. Produced by Wilding Picture Productions, Inc.

Opening with a scene of the Statue of Liberty facing the Europe which Hitler's marching legions have trampled, the film suggests that the United States, in becoming the arsenal of democracy and furnishing war material to England, Russia, and other European nations had overlooked the new threat to freedom in the West. Japan, an Axis nation, through the selling of children to industrial bondage and the consequent cheap production of manufactured goods, had been competing successfully with goods produced under free enterprise; but until December, 1941, with the invasion of Pearl Harbor and the Pacific outposts, she had been considered a second-rate military power. On the "Western Front", the second world war actually began ten years ago with the invasion of Manchukuo. China, in resisting the Japanese during the last five years, has lost over four million in dead, wounded, or missing. Chunking is the most bombed capital in the world. The Honorable William C. Bullitt is shown making a radio address in which he states that China has rendered a far greater service to the United States and Britain than we have rendered to them. The new China, which was developed under the leadership of Chiang Kai-Shek, is based on the United States pattern of free government, free enterprise, and free labor. The contrast between culture for the few and poverty for the many was being reduced by the development of a modern industrial system which was providing jobs and manufactured goods for the Chinese people. Japan, realizing that an industrial China would block her imperial designs in the East, struck in 1937. Japan initiated the modern system of aggression by destroying cities, ravaging the country and subjugating the people to slave labor. The Chinese dismantled factories and transported them into the interior. Even though thousands of refugees contributed their best efforts, the present production is not adequate to meet the military and civilian needs.

The commentator states that unless China is maintained as a fighting ally, Japan can use her full might to invade India, Australia, Mexico, Canada, or even California. China needs not only planes, tanks, and armaments, but also food, clothing,

(*Continued on page* 358)

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write L. C. Larson, Indiana University, Bloomington, Indiana, giving details as to length, content, date on which the film was issued, basis of availability, prices, producer, and distributor. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Bloomington. *This Cost Must Be Borne By The Producers.*

and medical aid. The commentator suggests that people of the United States in helping China are helping the United States to win the war.

COMMITTEE APPRAISAL: A convincing presentation of the importance of China as our fighting ally on the "Western Front", and a strong appeal for a substantial increase in United States' aid to China. Teachers will find it inspiring material for initiating discussions of the development of a national spirit in China. Some will question the inference that Japan invaded China because of China's threatening growth and development on the basis of evidence submitted in the film.

Origin of Mathematics

(H. W. Allers, 1027 North Highland Avenue, Hollywood, California) 11 minutes, 16mm. sound. Sale price $45.00. Apply to distributor for rental source.

With an appropriate musical background, the film shows scenes of the dawn of civilization in the Orient, where the beginning of simple barter and trade forced man to invent crude methods of recording numbers of units. Then the cumbersome numerical symbols of Egypt's complex civilization are shown, and the difficulty of manipulating these symbols is compared with the facility of manipulation of the symbols of today's system. The Babylonian sexagesimal system is demonstrated, and the derivation of today's circular and time mensuration units from the Babylonians is explained, together with some of the reasons why a transition to the decimal system in these fields would be difficult. The contribution by the Greeks of the principles of geometry applied to architecture and of the Pythagorean Theorem is recognized and illustrated with modern examples. The Roman system of numeration, with its impossibly difficult manipulation problems is compared to the modern Hindu-Arabic system. How the pondering of the Hindus over the abacus resulted in the innovation of the "place-value" idea and the invention and use of zero is shown, and the gradual fusing of these Hindu discoveries into the early Arabic system is exemplified. The film closes with the superseding of the older systems by the modern adaptation of the Hindu-Arabic resulting in the acceleration of the development of science, invention, and commerce to the levels of today.

COMMITTEE APPRAISAL: The emphasis of this film is upon the indispensability of a satisfactory system of numeration and mensuration to human progress, and upon the elements in the present system which excel all previous devices. In this manner it is good material for motivation of the acquisition of mathematical knowledge, and as a part of a study program calculated to develop an appreciation of the contribution made by science to modern civilization. In this connection, it suggests how the contributions of individual scientists and of civilizations form a foundation upon which other scientists may build new systems and theories.

Experimental Research in Audio-Visual Education

By DAVID GOODMAN

Title of Thesis: THE COMPARATIVE EFFECTIVENESS OF PICTORIAL TEACHING MATERIALS.

Investigator: DAVID J. GOODMAN

Thesis completed 1942 for the degree of Doctor of Philosophy, New York University, New York, New York.

Purpose of Study

The purpose of this study was to determine the comparative effectiveness of certain diverse forms of pictorial teaching aids when used in teaching certain topics in safety education to pupils of the sixth grade of the elementary school. The pictorial teaching aids used in this study are the sound motion picture, silent motion picture, silent film slide, and sound film slide. The four subjects on safety selected for use in the investigation were: Automobile Safety, Fire Safety, Pedestrian Safety, and Bicycle Safety.

Two distinct problems were being investigated in this study. One pertained to the effectiveness of the media when compared with each other in the teaching of safety; while the other pertains to the comparative effectiveness of the teaching of different phases of safety by means of the same media.

Stated in other words, the problems were:

1. How do the different visual media compare in effectiveness in the presentation of factual information on the several safety subjects? Is there any real difference between them to justify the setting up of special criteria for their use?

2. Can the four safety subjects be comprehended and mastered equally as well by students through the use of the visual media employed in this study—or do any of the subjects lend themselves particularly well to study through the use of the pictorial aids?

The problem was to determine differences in the instructional outcomes for the media used, and the degree to which the differences are significant, rather than to determine whether pictorial aids are effective in teaching.

Need for Study

The value of pictorial teaching materials as aids to learning is no longer contested. Not only educators but practically all government branches, both military and civilian, and business organizations have recognized their effectiveness in an educational program.

Since teachers and others are using the various pictorial media in many cases indiscriminately, it is desirable that they have a basis of reliable research upon which to determine the most suitable medium for use in a given situation, to discover whether real differences do exist among the media and, if so, where those differences lie.

Some research evidence exists regarding the comparative effectiveness of two or three pictorial media, e.g., the motion picture and the still picture. However, in these studies, the pictorial material appearing in the two media was seldom the same or even equivalent. This is, the still pictures were not "lifted" from the film. Yet no real comparison can be made unless identical or equivalent materials appear in the media being compared. In the present investigation the media have been made equivalent in terms of pictorial and textual content. The investigation attempts also to throw much needed light on the effectiveness of the "new" media—sound film slide and silent film slide—as tools of instruction.

Procedure

In organizing and setting up the investigation, one problem above all others required special consideration, namely, that the four different visual aids comprising each set of materials on a specific safety subject contain equivalent factual information. Since a comparison was made

between the different media within a set, it was essential that the set of media on each subject contain the same photographic and textual data but differ only in the physical form and characteristics inherent in each medium.

The basic medium used to determine the organization and development of the other materials was the sound motion picture, since it was possible to produce the other media working from a sound film but impossible to prepare a sound motion picture from the other media used in the experiment.

Four different films were obtained, each on a different subject, each one reel in length, each for approximately the same age level, each available in 16mm and 35mm size, and with the 16mm size of each available in both sound and silent versions, so that the condition that the materials of all the media be equivalent could be met.

To prepare the film strips, the investigator selected from each sequence in the 35mm motion picture the specific frame which in his judgment most directly effectively illustrated the safety concept being prescribed. In this process approximately twenty-five photographic frames were lifted out which presented the safety story of the film. Approximately twenty textual frames were then selected from the film which related specifically to the photographic frames previously selected.

Each of the individual frames, photographic and textual, was framed, mounted and bound between 2″x2″ cover glasses, producing a set of 2″x2″ lantern slides. The "textual" slides were inserted in their proper sequence among the photographic slides, and this lantern slide set was a "still" copy of the motion picture in which only the essential photographic and textual frames were used. In essence the lantern slide set was a continuous story exactly comparable to a silent film strip except that it was not on a single strip of film. The same procedure was followed in preparing the four different lantern slide sets (or silent film slides).

The sound slide film was prepared by recording all the textual frames of each slide set on a special disc which was synchronized with the photographic frames of the slide set. Picture for picture and word for word—one written and the other spoken—the two film slide media were identical.

A committee of three experts viewed the materials to determine whether the most essential safety concepts of each film had been selected for use in the slide set, and whether the frames selected on the basis of safety content were also the most effective visually in each film sequence used. The tests were validated by administering them to several classes of 6th grade students of New York City schools. The questions were also checked by 6th grade teachers for suitability of vocabulary and sentence structure for that grade level. Two different forms of each test were prepared. Form A was to be used in the pre-test part of the actual experiment. Form B was to be administered in the post-test (immediate recall) and thirty-day (delayed recall) portions of the experiment.

Eight 6A classes in four elementary schools within adjacent districts in the Borough of Brooklyn in New York City, numbering 240 students in all four schools, participated in the experiment. Approximately 130 of the students were from classes of high I.Q., while the remaining 110 students were from low I.Q. classes. Each school had one class of low I.Q. and one class of high I.Q. pupils. The range and mean I.Q. scores of all classes within the I.Q. groups were fairly comparable.

A special schedule allocating the showing of each set of media was planned so that each class in each school was exposed to a different visual medium on a different safety subject of each of four consecutive days. There was no repetition either of the medium or the safety subject; that is, no class saw more than once any one type of medium or more than one type of medium on one subject.

The regular classroom teacher did not enter into any phase of the experiment. The investigator himself conducted the experiment in every one of the classes, going from school to school. Thus the entire factor of teacher contribution in the use of visual media in a lesson was eliminated from the experiment.

One regular class period of forty-five minutes was devoted to the presentation of each medium. The period was broken up into three parts: part 1—first fifteen minutes, students answered pre-test; part 2—second fifteen minutes, presentation of medium (no student or teacher discussion), part 3—third fifteen minutes, student answered post-test. Thirty days after presentation of the media, again without any teacher or student preparation, the students in all the classes answered the post test a second time.

Although 240 pupils took part in the study only 144 students answered every one of the tests. Only these 144 sets of scores were used for calculating all results and as the basis of all conclusions. The data were treated statistically in terms of three groups: all groups of I.Q., a group of high I. Q. and group of low I. Q. The statistical treatment dealt with two specific problems. The first problem was to determine whether the gains registered between two sets of scores—the pre and post test, and the pre- and 30 day test scores—were significant or reliable, and second, to determine if there existed any differences between the media or any superiority of one medium over another in gains registered by two groups exposed to two different media. The statistical treatment was both detailed and comprehensive as was found necessary to arrive at the required results.

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News and

Southern Conference on Audio-Visual Education

"Audio-Visual Aids in the War Effort" was the theme of the sixth annual Southern Conference on Audio-Visual Education held in Atlanta, Wednesday, Thursday and Friday, November 4, 5 and 6, at the Henry Grady Hotel.

Leaders in the various phases of production, distribution and utilization of the teaching materials in these fields in the training of men in the armed forces and those employed in war industries, as well as for the defense and protection of the homes and industries of the country, addressed the Conference and led panel discussions of adaptations of these materials to the various purposes for which they may be utilized.

Representatives of the Office of the Coordinator of Inter-American Affairs, the Office of War Information, the Office of Civilian Defense, the United States Office of Education, and other Government departments and agencies gave the story of the Government war film program. Notable current releases were screened at all sessions of the Conference, giving those attending the opportunity of seeing the latest motion pictures pertaining to world conditions and war activities suitable for use in the schools.

Among the topics discussed were: "Visual Aids in War Training," "The School—A Service Center for the Home Front," "American Education from the Business Man's Viewpoint," "From Civilian to Soldier—The Part Visual Aids Play in the Transition," "Filmstrips and Miniature Slides as Aids to Better Teaching," "The Function of Audio-Visual Aids in the War Effort," "The Implications of the World War for Education," and "Fighting for Freedom With Films."

Speakers included Floyde E. Brooker, Director, Visual Aids for War Training, U. S. Office of Education, Washington, D. C.; Mrs. Camilla Best, Supervisor, Special Division of Audio-Visual Aids, Orleans Parish School Board, New Orleans, Louisiana; E. E. Shumaker, President, Erpi Classroom Films, Inc., New York, N. Y.; Colonel A. E. McKenney, Visual Aids Committee, The Infantry School, Fort Benning, Georgia; W. L. Goette, P. K. Yonge Laboratory School, University of Florida, Gainesville, Florida; L. C. Larson, Consultant in Audio-Visual Aids, Extension Division, Indiana University, Bloomington, Indiana; Willis A. Sutton, Superintendent of Public Schools, Atlanta, Georgia; C. R. Reagan, Educational Advisor, Office of War Information, Washington, D. C.

A demonstration of the production and classroom use of a radio and recorded program was conducted by Miss Vaidee Guerry, Fulton High School, Atlanta. A demonstration of the use of visual aids in classroom teaching, with junior high school students participating, was conducted by G. A. Milton, Visual Education Director, Bass Junior High School, Atlanta.

Specialized group forums on the use of audio-visual aids, organized according to grade levels, from the primary grades through college and university, with additional forums to include community and adult groups,

Notes

religious education, and civilian defense, occupied the entire afternoon session on Friday, November 6.

On Friday morning, November 6, the Southern Conference held its session jointly with the Georgia Association of School Administrators, affording opportunity for the discussion of mutual problems of the school administrators of this state and many from neighboring states.

The proceedings of the Conference will be published, and copies may be had on order from the Southern Conference on Audio-Visual Education, 223 Walton Street, N. W., Atlanta, Georgia.

Training Films on Vocational Program

A vocational visual aids section meeting is being inaugurated this year in connection with the National Conference of the American Vocational Association at Toledo, December 5th. Mr. Eldon Robbins, Supervisor, Vocational Visual Aids, Michigan State Board of Control for Vocational Education, will be chairman of this meeting which will be concerned with "Films for Skills."

A tentative program gives the following addresses: "Training Films Keep 'Em Flying," by Norman Mathews, Bell Aircraft Corporation; "Producing Films for Fighting Men," by Colonel Gillette, in charge of Training Film Production, Army Signal Corps; "Training Films for War Production Workers," by Floyde E. Brooker, U. S. Office of Education. The speaking program will be followed by a panel discussion on "Using Films for Skills", led by Maurice Trusal, Williamsport Technical School, Williamsport, Pa. Participants will be William P. Loomis, Special Representative, Trade and Industrial Education Division, U. S. Office of Education; Lyle Stewart, Oak Park, Illinois, High School; and Emma Green, Supervisor Training Films, Fifth Service Command, Fort Hayes, Columbus, Ohio.

Tennessee Holds Second Annual Conferences

During the week of September 28 the University of Tennessee Division of University Extension sponsored its second annual series of one-day, two-session audio-visual conferences at five different colleges across the state of Tennessee. The colleges co-sponsored the conferences in that they provided all publicity for each meeting. Conferences were held at Murfreesboro State College, The University of Tennessee Junior College at Martin, Tennessee Polytechnic Institute at Cookeville, The University of Chattanooga, and Johnson City State College.

The afternoon and evening sessions at each place were devoted to discussions and screenings of films released by the Office of War Information and the Office of Inter-American Affairs. In fact, all of the meetings were devoted to a promotion of the use of war and Latin American films.

Visiting speakers who toured the state, taking part at each of the sessions, were L. C. Larson of the Visual Aids Bureau of Indiana University, C. R. Reagan, Field

Representative for the Bureau of Motion Pictures of the U. S. Office of War Information, and Oscar E. Sams of the University of Tennessee Division of University Extension.

Nutrition Film Released in 16mm

Hidden Hunger, an official film of the National Nutrition Program, starring Walter Brennan, is now available for non-theatrical showings in 16 mm. size with sound track. A reel of straight nutrition material has been added to the film for the educational showings. The additional reel, prepared especially for nutrition classes, tells exactly what foods make a balanced diet; how to choose them; how to store them and how to prepare them. Specific information on meal planning is given and meals comparing the food requirements of a child, a factory worker and a white collar worker are shown. A Teachers' Nutrition Manual and Quiz has also been prepared to accompany the film. This Manual, together with the 3-reel movie (running time 30 minutes) can be used as the basis for a brief nutrition course or as supplementary material.

Hidden Hunger was first distributed to theaters nationally. The film was contributed to the Office of Defense Health and Welfare Services of the Federal Security Agency by Swift & Company, which is now making the 16 mm. version available, free of charge except for transportation costs, to educational institutions and civic, service and social organizations as a further aid to raising the health standards of the nation.

Prints of the film and the manual are being deposited in centrally located film libraries throughout the country. Bookings are being handled by Swift & Company, Union Stock Yards, Chicago.

Allies to Exchange Films on the War

Plans are now being considered whereby propaganda films of the United Nations will be interchanged to give the people of each allied country a true picture of the other, and of what they are doing to help win the war. Thus, Americans will be shown pictures of the activities of our Allies, while they, in turn, will get films from the United States, portraying the story of the war and our war effort.

The Inter-Allied Information Committee, which includes representatives from the Office of War Information, the Coordinator of Inter-American Affairs, and other war agencies, is working on this program with representatives of the Allied Nations.

Role of Films in War Told to S.M.P.E.

Addressing members of the Society of Motion Picture Engineers gathered for a three-day meeting at the Hotel Pennsylvania last month, H. C. Brecha of the War Department's Training Film Production Laboratory, declared that the training of more than two million men for the air fronts of the world is being greatly speeded up through widespread use of motion pictures. Mr. Brecha, who is stationed at Wright Field, Dayton, Ohio, reported that training films were cutting weeks from current courses. Paralleling the Army's work with training films, Lt. William Exton, Jr., U.S.N.R., Bureau of Navigation, described a similar utilization of films by the Navy.

The convention delegates were also given an account of how motion pictures are produced in war-torn China and how they are exhibited before its people by T. Y. Lo, of the Chinese National government's Military Affairs Commission in Washington.

From the time the Japs attacked Shanghai in 1937, the entire motion picture industry has turned to making films as an educational and informational medium and as an instrument to help strengthen the people's morale, Mr. Lo said. After the fall of Shanghai and Nanking, he said, the motion picture industry went into dugouts. Today, in Chunking, the developing and printing laboratories of two production units are built underground to protect them from bombings. Picture "shooting" is done between bombing raids but as soon as an air raid alarm is sounded, every piece of equipment, all film stocks and even sets and props are carried down into the dugouts. The finished films are shown not only in theaters but also, through mobile projection units which tour all over Free China, in the streets of Chunking, Chengtu and Sian as well as in the remotest villages and isolated spots of Inner Mongolia.

The Soviet Union's highly advanced techniques in producing military films were pictured by Gregory L. Irsky of the Cinema Committee of the U.S.S.R. Emphasizing the new importance of documentary, scientific, and military films, Mr. Irsky illustrated his talk with a screening of motion pictures especially sent here from Moscow via London by clipper.

Announcement was made at the luncheon session of the election of Herbert Griffin, vice-president of the International Projector Corporation, New York City, as president of the Society, succeeding Emery Huse.

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CASTLE

"News Parade"

Covers All Fronts

THIS year's *News Parade,* a Castle Films annual release, is, for Americans, the most significant of them all, embodying as it does almost a full pictorial year of the United States at war. For us, naturally, the war activities of Americans on the far-flung battle fronts are of most interest. The *News Parade of 1942* features not only the "global war" as whole, but also our relationship to it. There are vivid scenes of our armed forces in Iceland, the British Isles, China, and India.

Scenes of severe air-fighting are shown around the vital outposts at Dutch Harbor, Alaska, Port Moresby, New Guinea, and Darwin, Australia. The fury of the Jap attacks on these strategic points shows their importance as military bases. As the coverage of the global conflict continues, we gain insight to the never-ending Battle of the Atlantic. Ships go down, but we see also the steadily tightening measures of counter warfare, from giant convoys to depth-bombing patrol planes.

Next, the war on the home front is reviewed. War Production Board Chairman Nelson gives a grim warning that we are not yet doing our best. Then there are glimpses of just a few of the weapons that soon will make our enemies sing a different tune. Tanks in mass production. Gigantic seaplanes take the air. The new Army Commando planes to carry air-borne infantry and even jeeps and artillery! New Liberty ships slide down the ways in ever increasing numbers. New fighting vessels are launched.

The scene shifts to our neighbors to the south. Mass demonstrations hail the entry of Brazil into the war. Another link in the United Nations' chain!

Amazing action shots are seen of Russia engaged in her life-and-death struggle against the ruthless invaders. Russia fights on, adding new leaves to her laurels and gaining precious time for her allies to mount an offensive. England's Churchill flies to Moscow for a series of vital conferences with Stalin.

The prelude to the second-front offensive which must come is seen in the ever-growing strength and fury of the R.A.F. attacks on Occupied France and Nazi Germany. American bombers participate! Then the daylight Commando and American Ranger raid on Dieppe, France is shown.

This comprehensive, historic reel, covering the stupendous events of the past year, is worthy to take its place as the most important News Parade yet. It is available in 16mm sound and silent, and 8mm silent versions.

The Literature in Visual Instruction

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they learn more? Rate the different parts of the film, rate the film's value to the course. Should the film be used again or dropped? Was the projection satisfactory, etc.?

Art Education Alert—Art Education Department, Pratt Institute, 511 Fifth Ave., New York City. 1942. 10c.

Some units of work on the various grade levels in which art education can be related to wartime needs. Among the materials recommended for the attention of the art teacher are visual aids.

SCHOOL-MADE MOVIES

The Public Relations Film—Godfrey Elliott, Mercer County, West Va.—*School Board Journal*, 105:48, Oct. 1942.

There is no denying the importance of public relations films but sometimes its effectiveness is exaggerated by over-enthusiastic persons. A carelessly planned film may give the critic a chance to question the use of school funds for such purposes and may even undermine the school's public relations program. A film is only one tool in the whole public relations program.

Some of the advantages of the motion picture are: it holds the attention of all; it appeals to parents who like to see their own children on the screen; it shows the school program in its natural setting; it overcomes verbalisms, such as "the benefits of a home economics program," etc. by showing actual activities. A film can show connected stories, not isolated facts. It presents a typical situation in a short time.

The average cost of a reel of silent film is $30 to $40. This cost is justified in comparison with costs for printing and other publicity. There is no limit to the size of audience if the film has been well planned, for it will be requested outside of the school system.

When intelligently handled, the public relations film can make its contribution to the success of the total program. Ill-conceived, poorly executed or carelessly used, it remains a mere novelty whose passing is brief and unremembered.

School Films Defense Work—Ruth Henry, ACL—*Movie Makers*, 17: 368 Sept. 1942.

The Herbert Hoover High School in San Diego, California has made a film, "Hoover High Prepares", on its role in the war effort. The movie production class assumed responsibility for the planning and photographing of the film. First they listed all the activities that might be included, and then arranged for the filming of the most important. First aid classes carrying on artificial respiration, knitting for the Red Cross, collecting and melting aluminum for salvage, the purchase of War Stamps are some of the activities shown. All departments of the school cooperated. The shops made stretchers for the Red Cross, girls have made surgical dressings and rolled bandages, posters and other printed material were turned out by the printing shop, model airplanes were made.

The production class made careful preparations in the scenario stage of planning. They arranged to get as much of the camera work done in a single day as could be managed. The film was shot in color. Editing was done by one boy, titles were made with a background of the school's emblem, the cardinal bird, bandaged for first aid and knitting a sock.

The experience of this film-producing class leads them to the warning that specific jobs be allocated to specific individuals; that you check with the school custodian for information about fuses and electrical lines. Color combinations, backgrounds and composition are important for getting interesting results in a film. Be sure to record action, not just showing the finished product.

Current Film News

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, has released a large group of diversified shorts, one reel each, in 16mm sound. Titles and descriptions of these pictures are as follows:

Siege—a vivid record, uncensored by military authorities, of the siege and fall of Warsaw and one of the most arresting documents to come from the present conflict. It will be remembered for the camera close-ups of bewildered and terrified Polish citizens, many of them bereaved and most of them homeless.

Air Army—the story of America's sky armada from production on the assembly line to the superb performance in the air.

Men of Muscle—Springfield College in Massachusetts provides the setting for this reel. This college gives its 600 students a stiff schedule of gymnasium instruction in addition to the regular curriculum.

Navajo Land—problems which face the Navajo nation today and sidelights on its history and traditions. The picture discusses the government's attempt to restore to the Navajo his ancient heritage.

Trans-America—wings across a continent! As the plane leaves Newark airport, the reel unwinds a panorama of the industrial East, the man-made canyons of Manhattan and the gingerbread farm area of Ohio. On the West coast the scenes which are spread beneath the wings range from the long low buildings of Hollywood to the splendor of Glacier National Park.

Television—this picture penetrates the fence of scientific phraseology that surrounds television and emerges with the first lucid explanation of the subject for the layman. Events outside the studio are covered as shown by the telecast of a horse race in the film.

Newsreel—following a movie news story from the time it's made till the time it's played. Among various interesting shots shown are the preparation and scoring of the narrator's script, the mixing of natural sound and music on the truck . . . all the inside workings of a news reel picture plant.

Gutlohn has just issued a Supplement to their current catalog of entertainment and educational motion pictures available for rental and sale. This Supplement lists the very latest Gutlohn releases, which range from Major and Independent features to diversified shorts, many of them of unusual timely interest. Also included are the OEM and Inter-American films which are available on a nominal service charge basis. Copies may be had upon request.

■ Ideal Pictures Corporation, 28 E. Eighth Street, Chicago, has acquired for exclusive release, the 16 mm. sound film:

The Man at the Gate—5 reels—a dramatic story of the sea, with a stirring appeal to triumphant faith. The central characters are the Foleys, the men of which have for years devoted their lives to the sea. Mother Foley grew to hate the sea, and determined to save her last son from it, but War changed everything. Where is God during this terrible holocaust of war? This question is being asked by millions of earnest Christians. Does God care? *The Man at the Gate* answers this question.

■ Brandon Films, Inc., 1600 Broadway, New York City, has acquired for release the first documentary film dealing with the courageous "V" movement of the true patriots of France.

Sign for Victory—2 reels, 16mm sound—was filmed partly in France, despite the watchful eyes of the Gestapo and Petain-Laval Nazi "collaboration" surveillance, and completed in Britain, under the direction of Albert Edward Carr. The picture takes for its theme, the tribute of Winston Churchill: "The V sign is the symbol of the unconquerable will of the occupied territories and a portent of the fate awaiting the Nazi tyranny." Written and narrated by the distinquished author-actor Emlyn Williams, the film depicts in quiet but moving terms the historic, almost universal, opposition to Nazi domination of France. It

A scene from "This Is the Enemy"

reminds us that the French are still our Allies and that in this critical time they are standing true to the original credo of "liberty, fraternity and equality."

This new subject is fully described in Brandon's 1943 catalog entitled *Movies to Help Win the War,* which also includes full details on other new releases, including:

This Is the Enemy—6 reels—a timely Russian production that portrays the epic struggle of the people of Eastern Europe—Poland, Jugo-Slavia, the Ukraine, and Russia—against the ruthless Axis forces.

Yellow Caesar—2 reels, directed by A. Cavalcanti—a penetrating documentary study of the career of Benito Mussolini that abounds in fact and satire.

Home on the Range—1 reel—and other new films from the Office of War Information.

Prize Winners—1 reel—a pictorial record of men and women of science and industry who have won prizes in Soviet Russia during the course of the war.

Front Line Hospital—1 reel—showing the medical staffs, nurses, and hospital aides in action at a warfront hospital.

From the Brandon film, "Red Tanks"

A selected list of musical features for recreational programs is also listed in the new catalog. War Informational shorts issued by the U. S. Office of War Information will be supplied with all features programs, free of any additional charge. Copies of the new catalog *Movies to Help Win the War* are available free of charge to those who write to Brandon Films, Inc.

■ New York Central System, 466 Lexington Avenue, New York City, has produced an informative sound motion picture entitled:

The Freight Yard—2 reels, 16mm sound — explaining the purpose and operation of a great railroad yard. It is the first of a series designed to show "behind the scene" phases of modern railroading.

Opening with a brief introduction, showing fast freight trains in action, it carries the audience through the many steps a train follows in a classification yard. Such operations as pushing the cars over the hump, car repairing, inspection routines, locomotive servicing, yard office procedure and many other fascinating but little known subjects are shown in detail.

A list of libraries handling distribution may be obtained by writing to the Motion Picture Bureau of the New York Central System.

(*Concluded on page* 368)

KEEP THE PEOPLE INFORMED WITH THESE WARTIME FILMS!

MOTION PICTURES—
POWERFUL WARTIME EDUCATOR

Every projector important in war effort

Vital to the war effort is the gigantic task of keeping the people intelligently informed. *You* can help by using your motion picture projector to show the hundreds of wartime films now ready. Tell your Civilian Defense Headquarters you'll help.

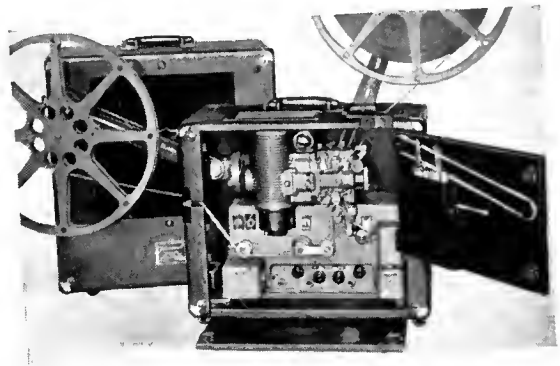
America's armies in the making, shown in thrilling new Government films, available from Bell & Howell's Filmosound Library, by arrangement with the Office of War Information and other Government agencies. Narrations by Spencer Tracy, Orson Welles, Katharine Hepburn, and other stars. Nominal service charges (50c for first film, 25c each thereafter)—waived when films are used with our rental programs.

The American people learn teamwork in Civilian Defense and similar activities. Our "Emergency First Aid" film series and other home front films are helpful and inspiring to citizen students of all ages.

Man-power mobilization in the United Nations—England, Canada, Australia, China, India, Africa, Russia—pictured in over 200 fine films about the war effort. Rentals: $1 per reel. The Filmosound Library handles all the film releases of the British Information Service.

FILMOSOUND UTILITY

Thousands of these sturdy, high-quality machines are now in active service with the armed forces or in use in industrial and educational centers engaged in the war effort. Priorities may prevent your using one of the newest models, but Bell & Howell Service will help you maintain and modernize your equipment.



CHECK YOUR EQUIPMENT... KEEP IT IN USE

To America's war effort Bell & Howell is bringing its more than 35 years of experience in precision workmanship. Naturally, Government needs come first . . . but Bell & Howell stands ready to help you with any equipment or film problem. Consult your local dealer.

Finest Recreational Films

Hundreds of fine films for school, church, factory, club, or home . . . *from B&H Filmosound Library. One single comprehensive source that meets every non-theatrical film need.*

The truth about our friendly neighbors. New films like "The Real Caribbean" carry on the high educational standard set by the well-known series that includes "The Real Hawaii" and "Puerto Rico."

★ BUY WAR BONDS ★

BELL & HOWELL COMPANY
1817 Larchmont Avenue
Chicago, Illinois

Without obligation, please send me, free:
( ) "Win the War" films folder;
( ) Filmosound Library Catalog Supplement 1942-A.

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Address.....

City.....State..... ES 11-42

Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Established 1907*

PRECISION-MADE BY
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(*Concluded from page* 366)

■ Films Incorporated, 330 West 42nd St., New York City, features *Gulliver's Travels*, the first full length Technicolor film to be available in 16mm, in their new 1942-43 School List and Short Subject Catalog.

Gulliver's Travels and numerous Technicolor shorts including: *Gabby, Madcap Models, Superman, Popeye, Hunky & Spunky*, and *Popular Science*, are available to Films Incorporated customers on their "Sliding Scale Rental Plan." Rental rates are based on school enrollments so that any school, small or large, can rent economically outstanding feature films and short subjects.

Again this year, Films Incorporated continues the Ray Committee Evaluations which have proved so valuable to educators in selecting short subjects for age groups. The Ray Evaluations are based on subject matter, continuity, and technique at age levels of 5 to 8 years, 9 to 12 years, and 12 to 14 years. Ratings are based on scale running from a low of 1 to a high of 10.

In addition to the new Technicolor shorts and feature programs listed in this latest Films Incorporated Catalog, many government films are offered at a 50 cents per reel service fee. These include films from the U. S. Office of War Information, U. S. Office of Inter-American Affairs, and the National Film Board of Canada.

■ Post Pictures Corporation, 723 Seventh Ave., New York City, has the exclusive distribution in 16mm sound of the popular theatrical feature, a Hal Roach production:

The Housekeeper's Daughter—starring Joan Bennett and Adolphe Menjou. This is a lively comedy centering around the glamorous daughter of a Park Avenue housekeeper who meets and finally marries the son of her mother's employer. Mystery, murder and intrigue are all present in the picture.

■ Swank Motion Pictures, 620 N. Skinker Boulevard, St. Louis, Mo., reports that they have been appointed Modern Talking Picture licensee for St. Louis and surrounding area, including Southern Illinois, Eastern Missouri, Western Kentucky and Tennessee. This service makes available various sponsored industrial films, without rental or service charge. The films are listed and described, together with rental features and short subjects, in the latest Swank catalog.

■ Castle Films, Inc., 30 Rockefeller Plaza, New York, has released two timely reels—one its latest sports movie, the other a Holiday cartoon.

Football Thrills of 1942!—an annual Castle release— features close-up action shots of the season's major games as seen through the telescopic eye of the camera. Games included are: Army-Navy; Harvard-Yale; Boston College-Fordham; Notre Dame-Wisconsin; Ohio State-Michigan; Duke-Georgia Tech; Northwestern-Illinois; Princeton-Dartmouth; Minnesota-Iowa.

Christmas Cartoon is a joyous cartoon with a novel human-interest story. Brother and sister's disappointment at finding no presents disappears after a rollicking cartoon treat. When the children have seen good old St. Nick and familiar fairytale figures frolicking on the screen in a special Christmas-joy cartoon, the lights go on and lo-and-behold the missing presents have appeared under the Christmas tree!

Other Christmas movies for 8mm and 16mm projectors released by Castle include *Merry Christmas* and *Christmas Time in Toyland*.

■ Bailey Film Service, 1651 Cosmo Street, Hollywood, California, announce the publication of the fall edition of their catalog, *Gateway to Learning*, listing new releases of sound and silent teaching films available for rental or purchase.

This new catalog, listing many more films than the last edition, embodies a unique index to aid the teacher in selecting the desired subjects, plus a special heading of films suitable for the study of the war effort and current affairs. A section of 8mm films is also included.

All persons interested in using 8mm or 16mm sound or silent films may have a copy of this catalog without charge by writing to Bailey Film Service, Hollywood.

■ Bell & Howell Filmosound Library, 1801 Larchmont Ave., Chicago, is distributing a new educational picture of an area now prominently in the news, entitled:

Caucasian Barrier—1 reel, 16mm sound—photographed and narrated by Carveth Wells, and edited by William F. Kruse. Beginning from Soviet Armenia, south of the great Caucasian barrier that separates the continents of Europe and Asia, the film continues the journey northward along the Georgian Military Highway into the almost inaccessible lands of the Khevsurs, remnant of isolated Crusader bands. The walled towns of the south contrast strongly with the hut clusters of the mountain lands.

Some types seen in "Caucasian Barrier"

Two new single-reel safety subjects in 16mm sound, produced by the Los Angeles Police Department, are also recent additions to the Filmosound Library.

Motors on Parade, stressing highway safety, presents training methods, functions and objectives of the Police Department.

Foot Faults deals with pedestrian safety, showing some examples of traffic violation.

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of The Educational Screen, published monthly except July and August, at Pontiac, Ill., for October 1, 1942, State of Illinois, County of Cook, ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Nelson L. Greene, who, having been duly sworn according to law, deposes and says that he is the editor of The Educational Screen, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The Educational Screen, 64 E. Lake Street, Chicago, Ill.; Editor, Nelson L. Greene, 64 E. Lake Street, Chicago, Ill.

2. That the owner is: The Educational Screen, Inc., 64 E. Lake Street, Chicago, Ill. Katherine Slaught, 1311 N. State Pkway., Chicago; Nelson L. Greene, 5836 Stony Island Ave., Chicago; Estate of Frederick J. Lane, 6450 Kenwood Ave., Chicago; Marguerite Orndorff, 7022 Warwick Rd., Indianapolis, Ind.; Frank Greene, Ocala, Fla.; Marie Craig, Bangor, Me.; Estate of J. J. Weber, Bay City, Texas.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

NELSON L. GREENE,
Publisher.

Sworn to and subscribed before me this 30th day of September, 1942.

JOSEPHINE HOFFMAN,
Notary Public.

(My commission expires June 21, 1945.)

News and Notes

(*Concluded from page 362*)

Photography Course Offered by Ohio University

A complete academic course in practical photography has been inaugurated at Ohio University in response to the demand for photographically trained personnel by government agencies and the armed forces. Graduates of this course will receive the degree of bachelor of fine arts in photography, believed to be the first ever offered in this field. The enlarged department, which will be headed by Dr. Emmet E. Shipman, will offer training in elementary photography, news photography, photographic processes, scientific and micro-film processes, history and theory of photography.

Association of School Film Libraries Discontinued

The Association of School Film Libraries has discontinued for the time being its services and activities. The following letter, addressed to the members of the Association by J. C. Wardlaw, President, is self-explanatory:

"With the financial support of the General Education Board, the Association of School Film Libraries was organized in July, 1938, as a non-commercial, non-profit organization. For the past four years, leading school film distributing libraries have cooperated as members of the Association in making available for school use many films of recognized educational value not otherwise available. A clearing house of information has been maintained by the Association; a monthly News Letter in the field of audio-visual education has been published; various other publications have been issued from time to time; and many helpful services have been rendered.

"The grant of the General Education Board was renewed in smaller amount for a second year. With the unexpended balance of the second year's income and conservation of limited earnings, the Association was able to continue its work through the third, and now through the fourth year without further grant. However, it is not logical or practicable that a non-profit organization could be self-supporting. The Association's budget for the current year, involving maximum anticipated income and minimum expenditures, will enable the Association to continue its activities only through the current fiscal year. Therefore, in the judgment of the directors it becomes necessary that the Association suspend operations for the time being, effective June 30, 1942. This step of course is regretted, particularly under present conditions when the activities and services of the Association might conceivably be most appropriately and effectively continued. Possibly at a later time and under more favorable circumstances, the Association may resume operations."

Among the Producers

Bell & Howell Awarded Army-Navy "E"

The new Lincolnwood, Illinois, plant of Bell & Howell Company, Chicago, provided an impressive setting for colorful ceremonies that marked the presentation of the Army-Navy "E" award for excellence of war production. In addition to many thousands of Filmosounds and cameras, as well as all sorts of professional cinema-chinery this firm produced for the armed services of the United Nations, a large production of other forms of war material of outstanding precision, has won it the coveted trophy. Every employee likewise wears a silver lapel button with the same insignia.

The "E" flag was presented by Rear Admiral C. H. Woodward, who came from Washington to attend. Mr. J. H. McNabb, President and Treasurer of Bell & Howell, accepted on behalf of all his "fellow workers". The lapel insignia was presented by Major L. J. Brunton, of the Army's Ordnance Department, and was accepted by Roy Richardson, president of the Pioneer Club, made up of a large number of employes who have been with Bell & Howell for over fifteen years. Mr. John G. Gallaher, of the U. S. Treasury, presented a "Minute Man" flag for outstanding bond buying.

Music was provided by the band of the Great Lakes Naval School, and an official Navy color guard raised the various flags. A large delegation of veterans of World War I, from among employes, posted their colors on either side of the crowded platform. An audience of approximately 5000 attended this gala occasion, which took place October 11th.

All details of the celebration were filmed by "News of the Day" cameramen, and the film will be issued by the Bell & Howell Filmosound Library as a single reel educational subject, in sound, on a 50-cent service charge basis. The film provides an interesting record of a timely current procedure, and of some of the steps that lead to the winning of such an award.

Carboloy Visual Education Program

Designed to expedite the training of new workers in the use, care and handling of carbide tools, Carboloy Company, Inc., Detroit has developed and is making available for general distribution a series of six educational 35 mm. silent slide films.

Strictly non-commercial in character the films are designed for instructional purposes and are completely self-explanatory throughout. They are intended to enable users of carbide tools to increase production, save time, reduce tool costs and tool consumption by a proper understanding of all the factors relating to their application. The films are based largely on experience gained over several years in the operation of a training course at the Carboloy plant.

The complete set covers the following subjects: (1) What is cemented carbide? (2) Designing cemented carbide tools. (3) Brazing cemented carbide tools. (4) Chip breakers and their application. (5) Grinding single point carbide tools. (6) Putting cemented carbide tools to work.

Each of the six films is reproduced in a booklet for reference by the trainee following the showing of the film. Each booklet also contains appendix reference material, charts, etc., of value in the daily use and handling of carbide tools. Accompanying the set of booklets is a booklet which gives complete instructions for conducting training meetings at which the films are to be shown.

The films will be distributed by Carboloy at print cost for use as a permanent part of the current war training programs by industrial concerns and educational institutions. Arrangements are also being made for free loan of the films to educational institutions through film libraries maintained by colleges in many states.

Eastman Flies the "E" Pennant

The Army-Navy Production Award was officially presented on August 17th to the Eastman Kodak Company for its high achievement in the production of photographic material and equipment for the Army and Navy, as well as outright materials of war. Eastman is making an enormous contribution to the photographic needs of our armed forces and those of our allies. More than two-thirds of the Company's production of various types of film, photographic papers, developers and chemicals, is for the fighting forces, or for other essential war purposes. More than 90 per cent of the output of Kodak's camera and optical divisions is high-precision military equipment, much of it non-photographic in nature. Height finders, time fuses, instruments for aerial navigation and fire control instruments are some of these fighting products.

Upwards of 20,000 Kodak men and women of Rochester gathered at this stirring ceremony in Rochester. After an address by Mr. T. J. Hargrave, president of Eastman Kodak Company, Brigadier General Herman W. Schull made the presentation of the "E" Award and Pennant, which was accepted by William J. Lehle, of Eastman Kodak Company. Award lapel pins for every worker in the company were presented by Rear Admiral Clark H. Woodward. The program concluded with a recitation of "America" by Miss Helen Hayes.

The story of Kodak products and developments, which have earned the Eastman Kodak Company the crimson and blue pennant now flying over its Rochester plants and offices, is told in an illustrated 16-page brochure.

DeVry Hears from Pearl Harbor

A revealing story of the value placed on motion pictures by the boys on the battle fronts is contained in the following letter received by E. B. DeVry, Vice-President of the DeVry Corporation in Chicago.

U. S. S. —(Censored)
c/o Postmaster
Pearl Harbor, T. H.

Mr. E. B. DeVry
1111 Armitage Avenue
Chicago, Illinois
Dear Mr. DeVry:

I am going to collect on a favor you promised me several years ago. That's if you remember? When the old TYPEE* caught fire due to a short in the battery circuit and I and my boys saved her. I could sure use that favor now, which I didn't need then.

Here it is:—We have one of your projectors, Model "XD", but we are fresh out of projection lamps—so—no movies. We have had them on requisition through official channels for four months and still haven't got them.

Out here in the Pacific movies is the one and only diversion our boys have apart from chasing Japs, so if you'll be good enough to send me a half dozen of those projection lamps via airmail, it will really be the biggest favor anyone could do for our crew.

We have had a little action and of course are prepared for more. Never did I dream, when I was Harbormaster in Chicago, that some day I'd be back at sea fighting Japs—but here I am.

I have been enjoying perfect health and hope the same for you.

Yours sincerely,
(Signed) Henry P. Michiels
Lieut.-Comdr., USNR

*The "Typee" was a yacht formerly owned by the late H. A. DeVry, founder of the DeVry Corporation.

Within a half hour after receiving this letter, nine projection lamps were on their way down to the Navy Department in Chicago. Navy Officers immediately contacted the Army Ferry Command and by early afternoon the lamps were winging westward for delivery in an Army Bomber which was scheduled for take-off the same afternoon. An example of 100% cooperation between the Army and Navy, and likewise an example of the importance placed on motion pictures.

Experimental Research

(Concluded from page 359)

Findings

Ranking of Media In Terms of Amount of Gains Produced

	All Groups		High I.Q. Group		Low I.Q. Group	
	Immediate Recall	Delayed Recall	Immediate Recall	Delayed Recall	Immediate Recall	Delayed Recall
Silent Motion Picture	1	1	3	2	1	2
Sound Motion Picture	4	4	4	4	4	3
Silent Film Slide	3	2	1	1	3	4
Sound Film Slide	2	3	2	3	2	1

1. The investigation offers additional research evidence that all the pictorial media aid materially in the learning process both for immediate and delayed recall for groups at all I. Q. levels.

2. The silent motion picture is the single most effective medium.

3. The sound motion picture is the least effective of the four media.

4. The silent film strip and the sound film slide are very close behind the silent motion picture in effectiveness.

Ranking of Subjects In Terms of Amount of Gains Produced

	All Groups		High I.Q. Group		Low I.Q. Group	
	Immediate Recall	Delayed Recall	Immediate Recall	Delayed Recall	Immediate Recall	Delayed Recall
Auto Safety	3	3	4	3	3	3
Pedestrian Safety	4	4	3	4	4	4
Fire Safety	1	1	2	1	1	2
Bicycle Safety	2	2	1	2	2	1

5. All four safety subjects—auto, fire, bicycle, and pedestrian—can be taught effectively by means of the pictorial media with groups at all I.Q. levels.

6. Fire and Bicycle Safety may be more suitable for study through the pictorial media than Auto and Pedestrian Safety.

7. The subject least suitable for visual presentation may be Pedestrian Safety.

Significance of the Study

A number of important generalizations, suggestions, and specific criteria emerge for the use of these media in teaching safety. It is advisable to consider the specific values of each pictorial medium which govern its selection and use in the classroom.

(1) As to *effectiveness in presenting information,* all of the media were found effective. However, the sound motion picture appeared the least effective, while the silent motion picture ranked highest of the four media. Previous research investigations, of course, have revealed the contribution of the sound motion picture. Perhaps what is needed is a further critical analysis of the sound motion picture's contributions which are unique in themselves and which are not offered by any of the other media. (2) As to *economy of classroom time,* the time required to present each of the four media ranked approximately the same. (3) As to *cost, and simplicity in handling,* the findings favor the film slide over the motion picture very decidedly. (4) As to *availability of subjects,* the slide-film, being one of the newest of the visual media, and as yet hardly recognized by educators, suffers seriously in comparison with the great range of material available from the many well-organized libraries of sound and silent motion pictures.

A revolution is taking place at this very moment in the entire instructional field as a result of the war situation and the urgent need is for the relating of information and the training of personnel in the most effective way. The visual field is making giant strides toward becoming a foremost factor in meeting these objectives. It is highly doubtful if the tremendous training program under way would be so far advanced if it were not for the contributions offered by the visual media. Great numbers of film slides are being prepared both in sound and silent versions. But the results of this experiment seem to indicate that a revaluation of this educational program, in light of the findings here set forth, may help to reduce the costs of the program as well as to speed it up still further.

HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bailey Film Service (3)
1651 Cosmo St., Hollywood, Calif.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 367)

Brandon Films (3)
1600 Broadway, New York City
(See advertisement on page 362)

Bray Pictures Corp. (3, 6)
729 Seventh Ave., New York City
(See advertisement on page 369)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on pages 333, 357)

College Film Center (3, 5)
84 E. Randolph St., Chicago.

Creative Educational Society (1)
4th Fl., Coughlan Bldg.
Mankato, Minn.

DeVry School Films (3)
1111 Armitage Ave., Chicago
(See advertisement on page 334)

Eastman Kodak Co. (3)
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 355)

Eastman Kodak Stores, Inc. (3)
Eastman Classroom Films
356 Madison Ave., New York City

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Father Hubbard Educational Films (2)
188 W. Randolph St., Chicago
Santa Clara, Calif.
(See advertisement on page 365)

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.
(See advertisement on page 359)

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
25 W. 45th St. New York City
(See advertisement on page 369)

Harvard Film Service (3, 6)
Basement—Germanic Museum
Frisbie Pl., Cambridge, Mass.

Hoffberg Productions, Inc. (2,5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 361)

Knowledge Builders Classroom Films
35 W. 45th St., New York City (2, 5)

Manse Film Library (3)
1521 Dana Ave., Cincinnati, O.
(See advertisement on page 360)

Post Pictures Corp. (3)
723 Seventh Ave., New York City
(See advertisement on page 360)

Princeton Film Center (2)
410 Nassau St., Princeton, N. J.
(See advertisement on page 358)

RCA Manufacturing Co., Inc. (2)
Educational Dept., Camden, N. J.
(See advertisement on page 338)

Douglas D. Rothacker
729 Seventh Ave., New York City

Swank's Motion Pictures (3)
620 N. Skinker Blvd., St. Louis, Mo.
(See advertisement on page 360)

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 365)

Visual Art Films (2)
204 Empire Bldg., Pittsburgh, Pa.
(See advertisement on page 360)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
2718 Beaver Ave., Des Moines, Ia.

Wholesome Film Service (3, 6)
48 Melrose St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 337)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 367)

DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago
(See advertisement on page 334)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 361)

RCA Manufacturing Co., Inc. (2)
Educational Dept., Camden, N. J.
(See advertisement on page 338)

S. O. S. Cinema Supply Corp. (3, 6)
449 W. 42nd St., New York City

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on inside front cover)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

RCA Manufacturing Co., Inc.
Educational Dept., Camden, N. J.
(See advertisement on page 338)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILMSTRIPS

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 361)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 363)

Radio-Mat Slide Co., Inc.
222 Oakridge Blvd., Daytona Beach, Fla.
(See advertisement on page 369)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 362)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago
(See advertisement on page 334)

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Keystone View Co.
Meadville, Pa
(See advertisement on page 363)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 336)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16 mm silent.
(2) indicates 16 mm sound.
(3) indicates 16 mm sound and silent.
(4) indicates 35 mm silent.
(5) indicates 35 mm sound.
(6) indicates 35 mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.

EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION

25¢ A COPY $2.00 PER YEAR

DECEMBER, 1942

SPEED WAR PRODUCTION

WITH

U. S. OFFICE of EDUCATION MOTION PICTURES

that help to teach

MACHINE SHOP WORK

48 SUBJECTS

All available in 16 mm. Sound-on-Film

LOW COST!

5 ON PRECISION MEASUREMENT
1. The Steel Rule
2. The Micrometer
3. Fixed Gages
4. Vernier Scale
5. Height Gages and Standard Indicators

7 ON THE ENGINE LATHE
1. Rough Turning between Centers
2. Turning Work of 2 Diameters
3. Cutting a Taper with the Compound Rest and with the Taper Attachment
4. Drilling, Boring and Reaming Work Held in Chuck
5. Cutting an External National Fine Thread
6. Turning a Taper with the Tailstock Set Over
7. Cutting an External Acme Thread

5 ON THE MILLING MACHINE
1. The Milling Machine
2. Cutting Keyways
3. Straddle and Surface Milling to Close Tolerances
4. Straddle Milling
5. Plain Indexing and Cutting a Spur Gear

3 ON THE VERTICAL BORING MILL
1. Rough Facing, Turning and Drilling on a Vertical Turret Lathe
2. Rough Facing and Boring and Turning a Shoulder on a Vertical Turret Lathe
3. Facing, Turning, Boring, Grooving, Chamfering on a Vertical Turret Lathe Using 2 Heads

2 ON THE RADIAL DRILL
1. Drilling and Tapping a Cast Steel Valve Body
2. Drilling and Spot Facing a Cast Iron Valve Body

1 ON THE SENSITIVE DRILL
1. Drilling a Hole in a Pin

2 ON THE VERTICAL DRILL
1. Locating Holes, Drilling and Tapping in Cast Iron
2. Countersinking, Counterboring, and Spot Facing

8 ON BENCH WORK
1. Centering Small Stock
2. Laying Out Small Castings
3. Fundamentals of Filing
4. Threading with the Use of Taps and Dies
5. Scraping Flat Surfaces
6. Fitting and Scraping Small Bearings
7. Reaming with Straight Hand Reamers
8. Reaming with Taper Hand Reamers

3 ON THE SHAPER
1. Cutting a Keyway on End of a Finished Shaft
2. Machining a Rectangular Cast Iron Block
3. Machining a Tool Steel V Block

2 ON SINGLE POINT CUTTING TOOLS
1. Fundamentals of Side Cutting Tools
2. Fundamentals of End Cutting Tools

10 SUBJECTS ON SHIPBUILDING!

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From all over the country, glowing reports are coming in on U. S. OFFICE OF EDUCATION films! "They cut scrap losses!" "They cut training time!" "They help workers to help themselves to better jobs!" "They're helping to increase production!"

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MOVIE NEWS

DeVRY — 29 Years of Progress

Published in the Interests of **Educational Visual Aids to Victory**

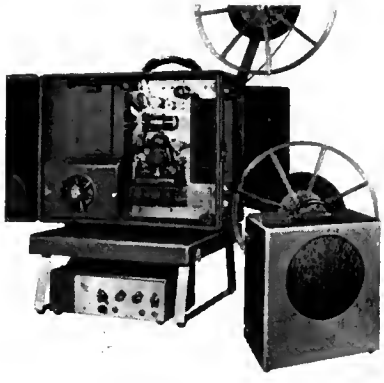
WHEN GOVERNOR DWIGHT GREEN OF ILLINOIS *previewed the State's latest film "The Open Road" in the Governor's mansion at Springfield recently, two DeVry 35mm portable sound projectors assured performance perfection. With Illinois' popular chief executive (right above) is Ellsberry O'Hair of the State's Department of Reports. Harry Canfield is Director of the Department and in charge of all state publicity. "The Open Road" is available free to schools, clubs, churches and other organizations that may be interested.*

Bring Africa, Focal Point In World News to *Your* Classroom

How? It's easy! Just rent the 16mm. sound film called NATIVE AFRICA from DeVry. This timely film shows "hearts" of villages and intimate ways of life of the natives. Your students will benefit and the rental cost of $1.50 will not tax your film budget.

FREE! 44 Page FILM CATALOG

Hundreds of 16mm. educational sound and silent films are described, many illustrated. Write for your copy today—it's free.



The De Vry "Freedom" Projector

A superb 16mm. sound projector that conserves vital war materials without sacrificing and in many respects improving the high quality, dependability and portability that are characteristic of all DeVry projectors. 12 or 30 watt amplifier and 12 inch speaker in separate case for use as Public Address System.

We're Taking ORDERS

For the Most Up-to-Date

FREE FILMS Source Directory As Yet Compiled

Now on the presses, this directory lists and describes more than one thousand films available FREE to schools, clubs, churches, etc. Order your copy today.

CASH with ORDER 50c

VICTORY DeVRY

Buy War Bonds and Stamps

Save and Salvage For Victory

DeVry Equipped "Theatre on Wheels" Provides Sound Movies for U. S. Troops in Australia

U. S. and Australian troops, churches, missions, penal institutions throughout Australia enjoy sound motion pictures through the efforts of Missioner C. F. Clarkson of Methodist Home Missions. Mr. Herschell of Herschell Pty. Ltd., DeVry's Australian dealer writes, "Projector has received some rather bad falls without suffering any serious damage." Yes, Mr. Herschell, DeVry projectors can "take it."

In war as in peace, manufacturers of the world's largest and finest line of motion picture sound equipment.

DeVry Chicago — Motion Picture Sound Equipment — Symbol of Quality

". . . officers, whose business it is to know, assure me that training films . . . can cut the time required for training up to 40% . . ."
Col. Melvin E. Gillette, Chief, Army's Training Film Production

DeVRY CORPORATION 1111 Armitage Ave., CHICAGO

The EDUCATIONAL SCREEN

VOLUME XXI DECEMBER, 1942 NUMBER TEN
WHOLE NUMBER 207

Contents

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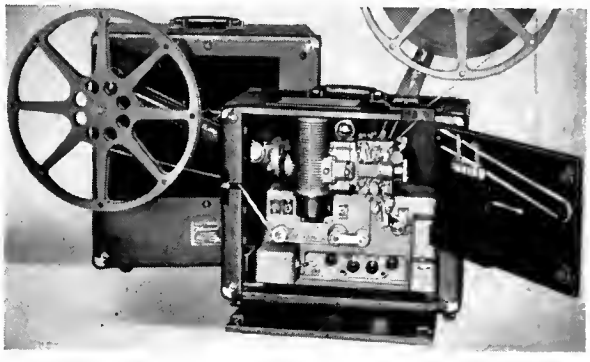
Address communications to The Educational Screen, 64 East Lake St., Chicago, Ill.

Make this a movie Christmas—give films—the gift that brings joy to the whole family, and to many more besides.

For the more serious note, official war films—like this British picture "Words for Battle"—and many U. S. Government films can be rented for as low as 25 cents per reel. (The first reel on any order carries a 50c charge.)

LET MOTION PICTURES *help brighten this* WARTIME CHRISTMAS



FILMOSOUND UTILITY, *compact, precision-built projector offering every feature essential to finest reproduction of 16mm. sound and silent pictures.*

A WORLD AT WAR! Brave voices singing, in battle-scarred churches, "Peace on Earth, Good Will to Men!" In millions of homes, vacant chairs tell mutely of loved ones fighting to bring true the dream of peace and happiness to all mankind. But that is not the complete picture of this wartime Christmas . . .

Millions of homes and thousands of schools, churches, and clubs will rededicate themselves to the high ideals for which we fight. Fortunate, indeed, will be those who can enjoy the inspiration of fine motion pictures that fit the times and mood in which we carry on. There are morale-lifting films that tell of the war—and escape films which help one momentarily to think of other things. Yours is the choice.

YOU can be among those so favored, if you will but put your projector to work. For yourself and your own family there are fine films to be bought and rented. But here, also, is it not "more blessed to give than to receive"? Think of the happiness and inspiration you can give by using your projector for social service to your community.

Sound films—or silent (16mm. and 8mm.)—literally by the thousands, await your call. Consult your nearest Filmosound Library Branch, or Bell & Howell dealer.

★ ★ ★

Take good care of your projector—If your projector needs service, *do not wait too long.* Let our Service Department look over your machine and advise you as to its best operation. The finest Filmosounds ever made are already doing full war duty. When peace returns they will again be showing your films with matchless brilliance of picture and sound.

★ BUY WAR BONDS ★

Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Est. 1907.*

MOTION PICTURE CAMERAS AND PROJECTORS

PRECISION-MADE BY

Bell and Howell

BELL & HOWELL COMPANY
1817 Larchmont Avenue
Chicago, Illinois
Without cost or obligation, please send me:
( ) Filmsound Library Catalog Supplement 1942-A;
( ) Lists and descriptions of U. S. Government films available on rental basis.

Name.....

Address.....

City ..... State..... ES 12-42

The School — A Service Center on

CAMILLA BEST
Supervisor Special Division
of Audio-Visual Aids,
Orleans Parish School Board
New Orleans, Louisiana

A scene from the Erpi classroom film titled "Mexican Children."

PRESIDENT Roosevelt in a few simple, well-chosen words has defined the role of the schools in the present world crisis. Speaking at a Conference sponsored by the United States Office of Education Wartime Commission in Washington, D. C., August 28-31, 1942, he said, "We ask that every school house become a service center for the home front." In this one sentence he has told us in the educational field in America wherein our responsibility lies.

Doubtless many of you have read the account of the devotion of the teachers of Norway in keeping alive the ideals of freedom. This story was published in the United States Office of Education's *Education for Victory,* and later republished in the September issue of *The Elementary School Journal.* I quote it to you here because it exemplifies, I believe, the courage, devotion, and vision which are characteristic of true educators throughout the world.

The article explains that the 14,000 school teachers in Norway were ordered by the Nazi and Quisling government to join the "Teachers' Front." This was done by the Quisling government because they were quite sure that school teachers were soft and would prefer to join, rather than to give up their salaries and pensions. Through the surrender of the teachers, an example would be set whereby more difficult sections of society could be overcome.

The order was issued in February. Very few teachers joined. They went on with their work without salaries or pensions. The Quislings then closed the schools, ostensibly because of a coal shortage. Teachers were arrested throughout Norway for resisting the Quisling orders. Some of them were sent with Russian prisoners to do hard labor. By the first of April, 1,300 had been arrested but still only 500 had joined—500 out of 14,000 teachers!

Seeing that they were not progressing along these lines, the puppet Education Ministry made the announcement that all schools would reopen and that no teacher would have to join. As teachers, they would be regarded as members automatically. All they would have to do was to acknowledge membership in order to get their pay. The Statement in answer to this, issued by the teachers on April 10, so frightened the Quislings that schools were closed again. Parents now joined with the teachers, and 200,000 letters of protest were sent to the puppet government. On April 21, the Reich Commission for Norway declared that the resignation of the teachers was regarded as a strike and threatened the interest and the security of Germany. The 1,500 teachers who had been in prison were now tortured. Five hundred were sent on a filthy ship without sufficient food or water to the far North. The Nazis believed that people of culture and refinement could not stand this. Only four recanted, and two of these had lost their minds due to the torture they had suffered.

During the summer months, the Nazi-Quisling government, having been defeated in their effort by the courage and endurance of the cultivated minds, decided to withdraw from the stand they had taken, hoping that the teachers would come back in the fall with changed minds. They were disappointed in this, for the teachers' ultimatum was "there will be no surrender because, while German has been substituted for English as the second language, the Quislings have not been able to make the 'V' stand for 'Verboten'. It still stands for 'Victory'."

I mention this situation in Norway because it brings home to us here in America the grave responsibility

*Address presented at the Sixth Annual Southern Conference on Audio-Visual Education in Atlanta, November 4-6, 1942.

ome Front*

Many schools should take stock of their "effort," comparing what they now do with what they can do, in the light of this article.

A ceremonial procession seen in the Gutlohn feature, "This is India."

which we as educators face. I mention it also because it gives to each of us in the educational field a sense of pride that we are with people like that. Many of us who have pioneered in the field of visual education have come to understand pretty well the tenacity and the courage of conviction with which the teachers of Norway have held to their cause. We who have known the value of visual aids in the teaching situation and have realized the enrichment of learning brought about by their use have many times experienced blockings, discouragements, and lack of understanding. Yet we have survived to see visual education come into its own at last. No longer is it necessary to say that visual education has "proved its worth." In every branch of war activities, either by posters, filmstrips, moving picture films, or slides, visual education is being used and its value is recognized.

If the schools are to play a part in this onward march of visual education, the procedure must be two-fold: first, to work within the school itself, and second, to open the doors of every school house and go to work with community agencies.

One of China's "400,000,000," a Brandon release.

First, in the relating of visual education to work in the school in wartime, we must think of the subject matter fields being emphasized at this time. Mathematics with its problems drawn from the field of aviation, navigation, mechanized warfare, and industry, will need the help of visual education. I mention the publication, *A Bibliography of Mathematical Education*, by Dr. William L. Schaaf, published by the Stevinus Press, because of its excellent listings of visual aids in mathematics.

The field of science is unusually rich in visual aids material so that courses in physics which stress the study of heat, radio, photography and electricity, can be very ably supplemented by films, slides, filmstrips, and pictures. Much material is available for the courses being taught in pre-flight aeronautics. In the bulletin, *Pre-Flight Aeronautics in Secondary Schools*, issued by the Federal Security Agency, United States Office of Education, will be found a "General Source List of Visual Aids."

In industrial arts, special application is being made to the operation of tools and courses in auto-mechanics with particular emphasis on the repairs of trucks, tractors and automobiles. Series of filmstrips are being made for this purpose. An outstanding example of motion pictures to increase industrial skills in war production is the U. S. Office of Education series on various phases of machine shop work. These films are distributed nationally through Castle Films.

Health, which perhaps stands in immediate importance above everything else, both in school and outside, can be vitally taught by the use of visual aids. All of you are familiar with visual material on the care of the teeth, the care of the eyes, prevention of the spread of disease, proper diet and nutrition. The school nurses will welcome the use of visual aids in their work in the schools. Many of the advanced home economics courses in high school are placing emphasis on home nursing. Much good material can be found along these lines.

Visual aids will be used in the pre-induction courses which are being prepared for use in the school for the purpose of giving our young men and women a fundamental understanding of the basic problems with which

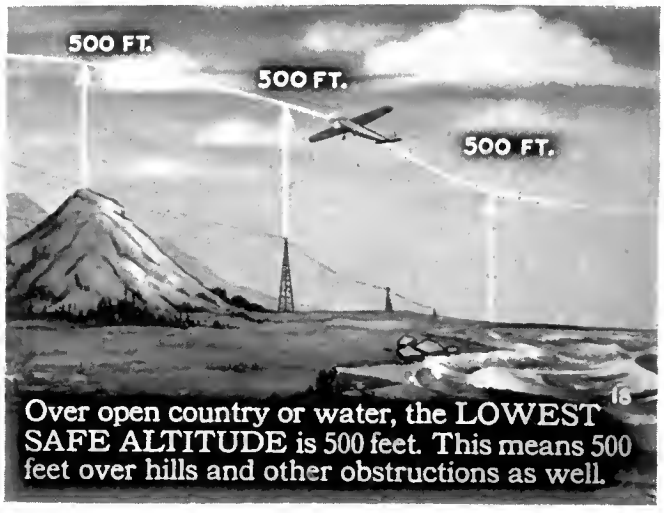
Demonstrating the effect of a swift current of air on top curved surface of plane's wing, in the Bray motion picture "Youth Takes to Wings."

they will be confronted when inducted into military service. These courses will serve to shorten the training of our armed forces after they are actually in the service.

In social studies where global concepts of the present war and postwar living must be presented, what better way can be found of making students familiar with the peoples of the world than by the use of pictures? A film on China, a stillfilm on Australia, a set of slides on Norway can do more to give a real appreciation of the values in the lives of these people, the people with whom we are allied in a struggle to bring about a better world, than all of the printed words in all of the books. We may speak a different language from our Latin-American neighbors but through pictures of home life, food, shelter, games, and festivals, we can really know them, and they can know us.

In vocational guidance, students can be directed to a better field of service through the knowledge obtained concerning the training and future development of occupations by means of films on vocational guidance.

These are some of the ways in which we can serve within the classroom, but an even greater opportunity lies before us in carrying our work of visual education to the community. How many of us have felt sometimes that people in our community do not understand



From the Jam Handy slidefilm set on "Pilot Training."

what we are doing with visual aids within the school? We have felt that if we could come in contact with more of the people in the community, we could demonstrate to them the value of skillfully used visual aids. Herein now lies our golden opportunity.

If yours has been the same experience as mine, you will now find the community seeking you out. Projectors are not to be had; yours in the schools should be made available for all war-time activities. The school buildings should be opened to all civic organizations engaged in war work. Recently, in one week, some three thousand air-raid wardens saw a picture through the means of school projectors in New Orleans.

Cooperation should be given to the Red Cross for the showing of its film, *Until the Doctor Comes*. It is in four reels and is available through your local chapter of the Red Cross. In groups of Junior Red Cross workers, Boy Scouts, Girl Scouts, Camp-fire Girls, Four-H Clubs, and Future Farmers of America, interest in photography can be developed; also through the use of visual aids, world consciousness can be created by the study of our world neighbors. In one of our settlement houses in New Orleans, by the use of one film on South America, a social worker has built an entire project on dances, costumes, and the recreations of our neighbors to the South.

By use of a film on the Constitution, some simple units on our Government have been worked out for delinquent boys in one of our municipal homes in order to bring to them convincingly the privilege of being an American.

In the book, *This Is Our China*, Madame Chiang Kai-shek tells of school-community work in China. In the chapter entitled, "Educating the Children of the Revolution" she tells how, in the schools established for the children whose fathers had been killed, a threefold program was planned for the training of the head, the heart, and the hand. In training the heart, a contribution is made by the students in the schools

(*Concluded on page* 394)

OEM Defense Photo

Making Surgical Dressings ("Women in Defense")

Moving Pictures as an Integral Part of War Production Training

A high school industrial training program designed to help speed wartime production.

WALTER F. McANDREWS
Supervisor of Industrial Arts, Hartford, Connecticut

THE success of any program whether educational, social or business depends on the cooperation of all who are participating. For the Hartford public schools, with excellent cooperation from our Superintendent of Schools, Fred D. Wish, Jr., and our Assistant Superintendent Thomas F. Carberry, a center has been established at the Administration Building. Here a film library and the necessary equipment are always available in charge of Mr. Harold Ludwig. In Hartford there are twenty-seven schools,—twenty elementary, four junior high, and three senior high schools,—with eleven sound and sixteen silent projectors distributed as follows: sound equipment is available in four elementary schools, in two junior high schools, and in three senior high schools; silent projectors are available in eleven elementary schools, in two junior high schools, and in one senior high school. In addition, there are two sound and two silent projectors available at the Administration Building for general distribution to the schools which lack equipment, and occasionally they are loaned to approved local organizations.

The central film library contains one hundred and twenty silent and forty-seven sound titles, all on 16mm. film. Schools requisition these films, either weekly or on long range schedules. When the films are returned to the central library, they are rewound, inspected and the necessary repairs made. Movie projectors from the various schools are also sent to the Administration Building for adjustment and repair.

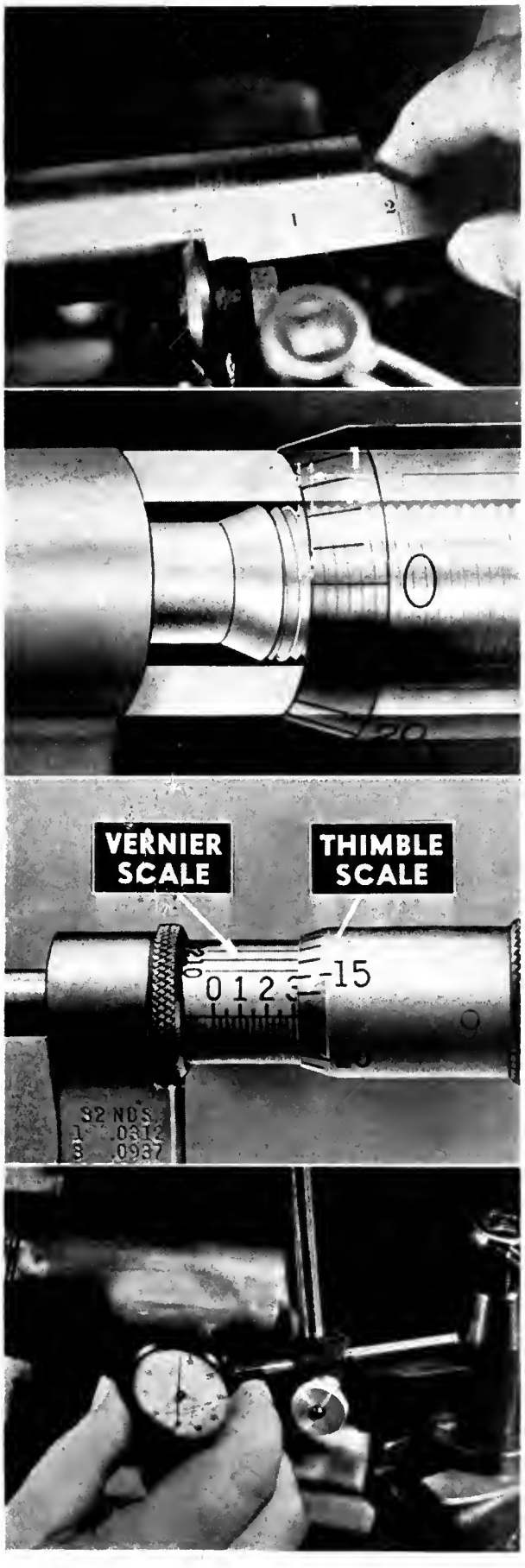
At Weaver High School a projection squad composed of twelve students, four from each class, was started in November 1939 under the capable leadership of Mr. G. Hapgood Parks, instructor in physics and chemistry, and in charge of visual education. It may be interesting to relate briefly the organization and activities of this group.

The squad consists of twelve boys, four from each of the classes. As the four senior members of the group graduate, four new sophomore members are selected and thoroughly trained to handle the sound and silent equipment available. When he has proven his competence, each boy is awarded an emblem which designates him as an operator qualified to conduct any program involving the use of the school's visual equipment. These boys are subject to call for duty at all hours of the day, every day in the week, and such is their devotion that it is very exceptional that any other engagement is sufficiently important that it cannot be set aside when a request for an operator arrives.

Programs have been given for such groups as the War Production Training Classes in machine work, first aid classes, air raid protection and warden training groups, and physical training classes outside of the regular courses of the school. Programs have been conducted, not only during the school day, but afternoons, evenings, and Saturdays, and not a few of them have been conducted at other schools. To date a total of 422 programs have been conducted by the members of the projection squad.

The entire squad is organized for duty in cooperation with the air raid program of the school. Under such conditions these boys set up the sound projector, speakers, and microphone in such a manner that the principal, at his office, is able to address every pupil

Film projection for General Machine class, in the war production training program at Hartford Public High.



Pictures from the U. S. Office of Education films on "Precision Measurement" (distributed by Castle Films), showing—from top to bottom—the Steel Rule, Micrometer, Vernier Scale, Height Gages and Standard Indicators.

and teacher as they are assembled in the first and second floor corridors. Each boy has a certain duty to perform in such a drill and upon the occasion of their first trial the twelve boys assembled from throughout the school as the air raid signal sounded, brought the equipment from the storage room on the third floor, and assembled it in the first and second floor corridors. The equipment was in actual operation and use in less than five minutes after the drill gong sounded.

In July 1940 Defense Training Classes were started at Hartford Public High School and to date approximately twenty-five hundred young men and women have enrolled in the General Machine courses, either part-time or full-time. At present our three senior high schools—Bulkeley, Hartford Public High and Weaver—are offering General Machine courses part-time in five machine shops. This is in addition to the regular use of these shops by our high school students. For nearly two years the shops were in operation twenty-four hours a day, six days a week. A course in General Machine was offered for high school senior boys and girls the past two years on Saturdays and during vacation periods for students not only from our three senior high schools but also from high schools in the surrounding communities without such facilities. A course in General Machine was offered for women last summer.

The completion record of these trainees has been exceptionally high, and the number placed in employment has been nearly one hundred per cent. Thanks to the splendid cooperation of our local industries, well trained instructors were loaned to assist our industrial arts instructors in these courses. The United States Employment Service is also contributing much to the success of this program through its selection of trainees for the courses.

Today the abundance of material and teaching aids available compared to the early days of this program is due to the many fine contributions of our Federal, State and local agencies, all of which have done a remarkable job in collecting and distributing this material.

The primary purpose of all Defense Training Centers, now War Production Training Centers, is to produce semi-skilled operators for the various machine operations as quickly as possible. The term semi-skilled is used because in the short-time, intensive defense courses no trainees can be called skilled when compared to the experienced worker. The person completing the courses has a few elementary concepts of machine operation and not much more. This does not reflect adversely on the school, trainee or instructor. There is no time for more. And it may be said that the students who complete, in fact all who participate in the program, do receive a considerable amount of information which they never can assimulate because of the intensity of the course. So the problem of instruction resolves itself into what units shall be taught and the best method of teaching them.

Types of instruction vary in direct proportion to the number of teachers employed, for each instructor conveys his message to the students in the way he thinks is best and which probably is the best method at his command. Some do it best by talking; some by demonstration; some by a combination of both. This

Close-up showing operation of a lathe in "The Metal Working Lathe," produced by South Bend Lathe Works."

last method, in my opinion, is probably the best. However, unfortunately there are comparatively few who can consistently perform in this manner. Happily, because of man's ingenuity, we do have a mechanical teacher which never varies in its approach to the lesson, which never shows the results or the effects of the party the night before, or commits the cardinal sin of "taking for granted" the student knows certain facts beforehand. This instructor is the talking moving picture.

The U. S. Office of Education in Washington, the Bureau of Mines in Pittsburgh, and certain commercial manufacturing companies have done a magnificent job in producing films on the machine trade skills.* These films may be purchased at a very low cost. Through these films the story is told in clear, concise, and understandable language. It is a story told in such a manner that the very intelligent are not provoked and the many are kept interested without being made to feel that the operation is too difficult for them to comprehend. Because each film is the product of a concerted group effort, rather than the work of an individual, each lesson filmed has the proper skills demonstrated, the correct technical vocabulary is employed, the approach is satisfying, and there is a continuity of thought that cannot and does not fail to attract and hold the interest of its audience. The proof of this is in the results and in our three high schools, for the instructors are as enthusiastic about the machine operation films as are the trainees. Some feel that at least fifty per cent of all instruction should be by this method.

In our three high schools the following types of heavy machines are available: 1. Lathes, 2. Millers, 3. Grinders, 4. Shapers and Planers. All students regardless of the machine they are operating are allowed to see the films. Schedules are prepared for all schools to prevent conflicts and to provide sufficient time for Mr. Ludwig at the Administration Building to check the films for breaks and rewinding.

*The machine shop films made by The U. S. Office of Education are distributed by Castle Films.

The following is a sample of our schedule at Weaver High School War Production Training Center for this year:

Sept. 15, "How To Run a Lathe"—Sept. 17, "Steel Rule," "Fixed Gages," "Micrometer"—Sept. 22, "Vernier Scale," "Height Gages and Staudard Indicators"—Sept. 24, "Milling Machines," "Cutting Keyways," "Straddle and Surface Milling to Close Tolerances"—Sept. 29, "Straddle Milling," "Plain Indexing and Cutting a Spur Gear"—Oct. 27, "Steel—Man's Servant"—Nov. 10, "Flow"—Jan. 26, "Where Mileage Begins," "Diesel, The Modern Power"—Apr. 15, "The Inside of Arc Welding"—May 13, "The Making and Shaping of Steel."

Our schedule permits all students to see each film twice (if he remains in the course for fourteen weeks.) The first time the student sees the film it often evolves into amusement; however, after he has performed the operation or operated the particular machine shown in the film, he reacts differently—that his thinking has been stimulated is attested by his questions. These questions have been of two-fold value: first, they answer doubts and problems in the trainees' minds and secondly, they give the instructor a core upon which to formulate a set or group of suggested points of interest that the trainee can look for in the film. In milling, for example, the following points are stressed:

1. Holding methods
2. Mounting cutters
3. Centering stock
4. Use of feelers
5. Direction of cut
6. Cleanliness
7. Trial cuts
8. Vibrations vs. accuracy
9. Coolants
10. Protection of finished surfaces

The values derived from these films are not easily listed but a few may be mentioned: production methods not easily adapted to school work; new uses for old machines; a survey of a far greater field of men-

View from General Electric's "The Inside of Arc Welding," showing (left) the proper and (right) improper angle of electrode for a correct arc under normal conditions.

suration and testing (impractical to schools); a more diversified group of jigs and fixtures; and illustrations of the newest type of machine in the field. Unimportant as it may seem, this last item serves as a bumper to the learner when he goes to work in the shop. Even though he has not run the newest machine, he at least has seen it running and he knows that underneath the imposing finish the machine is simply another lathe, grinder or automatic screw machine and he can approach the new job with a much greater feeling of confidence.

These films do a fine job of demonstrating the importance of safety and cleanliness in modern manufacturing and they tend to impress upon the trainee's mind the close tie-up between accuracy and production without which we would have few such happy feelings as run through us at the mention of Midway, the Coral Sea, the Solomons, and North Africa.

In conclusion, I have tried briefly to portray what we are doing in Hartford with the available films and equipment especially in our War Production Training Centers. The keen interest demonstrated by our administrative officials (superintendents, directors, principals and teachers) in providing the facilities and encouraging their use, and through the purchasing of new films for the central library that are recommended by teacher committees, will enable the Hartford schools to maintain their leadership in this important area. The projection squad at the Weaver High School illustrates one method of developing and maintaining an active interest in the many contributions films are making and will continue to make in bringing to the classroom in a progressive school the motivation and instructional aids that cannot be secured in any other way. Through visual aids valuable time is saved and a real advantage is gained in a time when trips through neighboring factories are no longer possible. Fortunately high fences and closed doors will not prevent a valuable experience through the use of available films, for nearly all major industries now have films to tell the story of their production methods. Through continued use of these films we feel that the saying "too little and too late" will not apply to our War Production Training Program in Hartford.

Sense versus Non-Sense

H. A. HENDERSON
Butler University, Indianapolis, Indiana

Excerpts from a lecture given by the writer at Butler University, and recorded by Justus Rising, Head of the Engineering Drawing Department of Purdue University, for reproduction.

VISUAL Education has come to mean any sense or experimental process of learning and is as old as the stream of life.

I am inclined to think that what we have been taught to call instinct, like the robin building its nest or the squirrel making its winter home, is the result of many generations of experimental learning. Consider the following illustrations: When the automobile first came into use it was very difficult to drive without killing dogs. The dogs had been accustomed to horses and a horse will not step on a dog or hurt it if this can be avoided; also, the dog knew the speed of the buggy. Today, after some five generations of dogs, even though the machines travel much faster and there are many more of them, comparatively few dogs are killed. It is sometimes said that mosquitos are learning to grow smaller in order to get through our screens.

In the earliest processes of learning the boys were taught by actual experience how to hunt, prepare shelter and to protect themselves. By the same method the girls were taught to care for the home, to prepare the food and clothing. All our fundamental information is acquired the same way today. The child when he enters school has a marvelous background of experimental knowledge. A farmer would hardly teach a boy to operate a twine binder by having him read books on the subject.

The gradual growth of language means that man learned to articulate sounds in such a way that the sound could be used to recall experiences. If two or more had learned to associate the same sound with the same experience, then it would be possible for one person to recall an experience to another *provided the other had had the same experience*. "Words are handy tools but they mean the same thing only to those that have had the same experience." So it is in the sequence of learning; we first get the experience, then use the memory or recall and this opens the door to thinking which is the Creator's greatest gift to man.

Astronomy is the result of the sense experiences of the Chaldeans and Egyptians as night after night they observed the movements of the stars and charted the heavens so it would be possible to give a common name to the various heavenly bodies and locate them in their seasons. Every science has developed through long and tedious experimental processes.

The Greek philosophers drew their lessons from the objects observed while walking about. Aristotle is the most outstanding exponent of this "peripatetic method." As an example of experimental learning my thoughts turn ever to Socrates. It was my privilege to enter the cave room, hollowed out on the side of a sand stone hill on the outskirts of Athens, and recline on the stone couch where Socrates lay as he gave to his disciples his final discourse on the immortality of the soul.

Let us consider, with reverence, the greatest teacher the world has known, The Christ. "Is it lawful to pay tribute to Caesar?" Christ did not go into a discussion of civics. He said "Show me a penny," and they showed Him a penny. . . . He said "Render unto Caesar the things that are Caesar's and unto God the things

that are God's." A visual lesson, and the greatest lesson on civil government that has ever been taught. "Where is the Kingdom of Heaven?" He set a child in their midst, and said, "Except ye become as a little child ye can in no wise enter the Kingdom of Heaven." Visual images were His teaching materials. "Consider the lilies of the field." "Not a sparrow falleth." "A sower went forth to sow." "A man planted a vineyard." And the highest reward He offered was a visual culmination. "Blessed are the pure in heart for they shall *SEE* God." I have not been able to find any lesson, taught by this Master Teacher which was not based on sense teaching.

Fortunately the teachings of the masters were recorded and preserved through the dark ages, but unfortunately the scrolls or books containing the teachings of the masters too often became the basis for mere memory learning and not the source from which the learner could obtain help in his creative and intellectual thinking. Creative thinking cannot be done with memory learning. Teachers should not be merely conveyors to transfer the words of the textbook into the memory of the would-be learner.

"I want to know a lot of things. With curiosity
I'm cursed.
But teacher says that I must get my education first."

Books in abundance should be at the disposal of the learner. They should be a *much sought after source* to supplement the natural curiosity of the child, stimulated by the understanding teacher.

Since the beginning of the Renaissance period the outstanding leaders in pedagogics have endeavored to reduce the importance of the text books in favor of more experimental learning. Let us listen to a few of them:

MONTAIGNE: "It is the custom of schoolmasters to be eternally thundering in their pupils' ears as if they were pouring into a funnel, while the pupils' business is only to repeat what their masters have said."

FRANCIS BACON: "Turn away from the shallow springs of natural science, and draw from the unfathomable and ever freshly flowing foundation of creation. Live in nature with active senses."

COMENIUS: "For it is certain that there is nothing in the understanding which has not been previously in the sense; and consequently, to exercise the senses carefully in discriminating the differences of natural objects is to lay the foundation of all wisdom."

JOHN LOCKE: "Unless I have seen it with my own eyes and perceived it with my own understanding I am as void of knowledge and as much in the darkness as before."

ROUSSEAU: "The period of childhood should be devoted to physical development and the training of the senses. The abuse of books is destructive to knowledge."

PESTALOZZI: "The man who has only word wisdom is less susceptible to the truth than a savage."

FROEBEL: "The task of education is to assist natural development toward its destined end."

JOHN DEWEY: "The image is the greatest instrument of instruction. If nine-tenths of the energy at present directed toward making the child learn certain things were spent in seeing to it that the child was forming proper images, the work of instruction would be indefinitely facilitated."

Thoughtful and progressive teachers have always found help in the use of such visual aids as were available. Among these are the blackboard, bulletin board, models, maps, drawings, natural specimen and sand-table. Photography with its multiplicity of pictures was added to the above list near the close of the past century and today beautiful and appropriate pictures are available everywhere. Many years ago Glenn Frank, in his New York World column, prophesied:

"I suspect that the next great step in the intellectual development of the race will depend upon our reading less and looking at pictures more."

Early in this century the mazda bulb was discovered and found suitable for illumination in the slide lantern. This made the stereopticon available for classroom use. Previously it was used for illustrated lectures. At the same time the stereograph, which had been a source of pleasure in the home, was found helpful in bringing correct imagery to the child in school. Until 1915 visual aids were used only at the option of classroom teachers and often they were frowned upon by administrators.

The "Moving Picture" was first displayed to the amazed public toward the close of the "gay nineties." For some twenty years it was commercialized only for entertainment. By 1915 it had found its way into some school auditoriums and then school authorities and administrators began to awake to the possibilities of "Bringing the World to the Classroom."

By 1924 there was enough interest in this type of presenting subject matter that Dr. Frank Freeman of Chicago University was authorized by a research department of the N. E. A. to investigate its value by comparative tests, and $10,000.00 was set aside for this purpose. The results of these investigations are set forth in Dr. Freeman's book "Visual Education." While the tests made by Dr. Freeman proved the worth of the moving picture, they also proved the value of the demonstration, stereograph, lantern slide and other visual aids.

Within five or six years of the publication of "Visual Education" the talking picture had been added to the silent picture and the educational films had been reduced from 35mm to 16mm width. This was a great help to the schools as the 16mm projectors were much cheaper and easier to handle and the 16mm film is made only on the non-inflammable material.

Preceding the work of Dr. Freeman, Dr. J. J. Weber had written his Doctor's thesis at Columbia University (published in 1922 by THE EDUCATIONAL SCREEN), the first thesis in this field, entitled "Comparative Effectiveness of Some Visual Aids in Seventh Grade Instruction." Dr. Weber later wrote "Picture Values in Education," with the same publisher, based on his researches at the University of Kansas.

The general impression that any teacher can use visual aids was soon dispelled. In fact the abuse of visual aids was very apparent and discouraging to school administrators. It became necessary to set up courses in the teacher training institutions—courses which would not only convince the teacher of the value of using visual aids but help him to select and use properly the visual aid which would best meet the need of each specific problem. Within the last 12 years such courses have been established in some 200 teacher training schools. Visual Education is still in its infancy and it does not yet appear what it will be.

MOTION PICTURES—NOT FOR THEATRES

Part 42.—More about varying viewpoints upon which non-theatrical systems of distribution are founded and by which they carry on their several lines of business.

By **ARTHUR EDWIN KROWS**

HERE is the point of that fallacy which has misled so many theatrical men who have tried vainly to organize the non-theatrical field. The values, which are traded between service organization and customer here, are variously different from those simple and literal ones involved in the regular playhouse transaction. The money fallacy is common enough. Too many agencies using non-theatrical films have it also, and gauge their appropriations for picture production accordingly. Most small non-theatrical producers have it, too, and consider it reasonable to work on the strictly "educational" and "social service" pictures for starvation prices because they recognize that so little money can be obtained generally in rental or outright sale of prints. They forget that there are higher values for the client—values which just do not happen to be expressed often by the coinage system—and that the client should be charged accordingly.

The result is that the professional maker of this type of picture—and please understand again that I am referring to the "non-commercial" offering which many in this field are pleased to regard as being idealistically at the top of the "non-theatrical" class and to the producer who makes that sort of thing exclusively for his bread-and-butter without industrial or equipment sidelines—usually lives a hand-to-mouth existence. His customer has to advance funds for production all through the production period. That is sufficiently demoralizing; but, in addition, the shoestring producer is obliged by a low contract price, which allows for few contingencies, to make his picture in a hole-and-corner, fugitive manner. Unable to pay his workers by standard wage scales, he has constantly to dodge labor unions. He cannot afford up-to-date cameras and lights. He cannot afford standard sound-recording equipment. He keeps down the number of studio scenes because of heavy expense there. He is able to fulfil scarcely any part of his obligation on the liberal basis which should prevail for an efficient result.

If satisfactory work could be done in this cheese-paring manner, Hollywood producers (who are no fools) would do it, too. The shameful necessity under which these harassed souls are still called non-theatrical producers would quickly end if customers (and they, themselves) would frankly estimate picture benefits in terms other than money. But, of course, as a body, they never will. That would be contrary to human nature. So I hope, for the ultimate soundness of the non-theatrical field, that *all* non-theatrical films, including especially the unsubsidized kind, will some day be bought and sold in that straight over-the-counter style which is self-evident and measurable. I am sure that the large, prosperous, non-theatrical producers who make classroom reels out of funds derived from indirect sources—those who *do* estimate values in terms other than money directly received—will heartily endorse this sentiment as one the realization of which would relieve them of a complicated system. But, up to now, this scheme of swapping advantages has kept a developing, hit-or-miss business alive, where a cash-and-carry plan would quickly end it. It keeps it alive in such an engaging manner that the profit-seeking theatrical men return to it again and again, only to retire in complete mystification upon finding so little money there.

Advice on film care prepared by Charles Roach of Iowa State Agricultural College in 1921 for users in his own area, became the master guides in many other places.

Before the close of the silent films period this exchanged-values idea had manifested itself in probably all its important phases. At first the pictures were sold outright, the assumption being, no doubt, that the non-theatrical customer was a thoroughly irresponsible person, not to be trusted in a rental plan. Charles Urban, granddaddy of educational production and distribution, probably set the original price in that direction. His films were sold through Kineto, Ltd., at "fourpence per foot net—no charge for tinting, but toning extra." But an entire subject then might be only fifty feet long. When specifically non-theatrical libraries came in, it was chiefly understood, by those regularly in the business, that non-theatrical customers in general would not pay reasonable rentals. The question then naturally arose, what *would* they pay?

The charge was settled at around two dollars per 35-mm reel per day. In this arrangement, though, the reels were discarded theatrical subjects, patched and made as serviceable as might reasonably be. The intrinsic value of a reel of this sort on the theatrical market, before being turned over to this salvage use, averaged probably one dollar, so the first day's rental usually returned the investment and something more. Then standards raised as the customer became more discriminating and demanded cleaner, unbroken prints. If the subject was a popular number, the non-theatrical distributor might take a chance on buying a new print for his library, in which case he would be likely to pay fifty dollars per reel.

To protect himself against competition from other distributors who might also buy new reels for rental purposes, he sometimes signed a contract with the original producer, thereby gaining exclusive non-theatrical rights for a period of several years—ten was the usual number. For this privilege he might pay $100 on the given subject, and the negative would be held at a stated laboratory where he, and the actual owner, might order duplicate prints, as required, at actual cost. In 1923 Pathé Exchange introduced a system providing new prints whereever a customer would take a three-year lease. The leasing arrangement did not mean that Pathé expected to receive a still usable print at the end of that time, but that it might then be reclaimed and destroyed and thus kept from illicit further use.

A new print, having an intrinsic value so much greater than a used one, was, of course, a larger distribution risk. Amateur operators and poor projection could easily destroy large sections of film, for which damage there could be little redress. Nevertheless, the distributor had two leading methods of guarding against such possible losses. One was to have the customer sign a contract assuming responsibility for condition of the print, and the other

was to send along with the catalogues and sometimes with individual shipments of film, printed instructions on proper handling. The instructions given by Charles Roach, in a bulletin published by Iowa State Agricultural College, in August, 1921, were widely copied for this purpose.

These approaches had to be made tactfully, of course. If a customer was threatened with reprisals before he had even received the shipment he would cease thereafter to be a customer and, if he was made to believe that the use of the film was too complicated, he would be discouraged from attempting it. It is interesting to observe, in view of what has been said about exchanged values, that the sharpest reminders of neglected reports and the most rigid systems of fines for reels kept over-long, are to be found in those non-theatrical libraries where "free" films prevail.

I encountered an instance of aroused antagonism, caused by too stern a sales policy, at a well-known experimental school in southern New Jersey. The officials there had rented a three-reel subject on American history. Through unskilled projection the operator had scratched it badly from end to end, causing irreparable injury to that particular print. The owners demanded restitution, and the school was quite willing to make this on a cost basis. Instead of meeting straight laboratory expense, however, it was obliged to pay the full list price of the subject, which was $200 per reel. Resentment there has made the authorities of that school forever wary of film renters.

Willard Cook worked out highly practical agreement forms, specifying that charges for possible damage would be nominal. Among cautions on the proper handling of reels, nothing became more celebrated than "The Film Prayer," by Andrew P. Hollis. It dates from about 1920, when its author was in charge of the North Dakota Visual Education Service and wrote it for the guidance of his own patrons. It was first printed for him at the State College in Fargo. The *Educational Screen*, of which Hollis was for a time associate editor, reproduced it for wider information; and reprinting occurred in so many places, including the official bulletins of a number of leading colleges, that even the man who wrote it probably still does not know of them all. Worldwide circulation was given it at a single step when the Eastman Kodak Company began regular use of it in its film catalogue. In a letter as lately as the spring of 1942, Hollis told me that: "The requests still come. Recent ones have been the Methodist Publishing House at Nashville, Tennessee, General Films, Ltd., of Canada, and the Frederick Brail Visual Service."

A price to customers much above actual costs indicates that the subject has been produced especially for the non-theatrical field, and that the expense therefore is being thus gradually amortized, along with the laboratory costs. In certain instances where Government departments have needed additional pictures in their work but have been without funds for the purpose, they have arranged with independent film-makers to coöperate by providing the production factors while they, themselves, gave the materials to be photographed. In regular Government bulletins the subjects then have been publicized, and all sales have been made through the producer, whose price has been set to return his costs as speedily as might be. Unfortunately, with the market generally incapable of understanding why all reels should not cost the same, this exploitation-and-sales arrangement, so far as I have been able to discover, has never worked out satisfactorily.

I refer to the tendency of the customer to think of all reels as worth the same figure with reservations, first, that this attitude is not always true, and then that producers are only too prone to jump at excuses for their own failures in the field. A common alibi for unemployed non-theatrical producers is that their market has been ruined by the lavish distribution of "free" films. Superficially this seems grave enough, and, under scrutiny, it appears relatively serious. However, the truth of the matter is that every "free" film obliges its user to become party to the dissemination of some propaganda, and, in places where such an arrangement is prohibited, the regular market is unobstructed. At the same time one must be mindful that somebody must produce even the "free" films, so in that place also the non-theatrical producer may find employment. According to my experience he will find it financially an even more profitable place.

The price situation was somewhat improved when, in the popular introduction of 16mm reels, the average rental charge of two dollars per reel per day for worthwhile material was for a time maintained. The intrinsic value of the new reel then was under ten dollars, and shipping costs were proportionately reduced. Later, however, through force of competition, the 16mm rental rate was cut to a dollar-fifty average, and there was a strong move in progress to reduce it still more to a dollar, shipping time and time lost in transit not counted. This move was blocked by the coming of the more expensive sound pictures. Bell & Howell, who manufacture cameras as well as projectors, urge outright purchase of prints from their extensive 16mm Filmo Library, especially of travelogues, bidding the customer to reëdit them to suit his own needs and to interpolate shots photographed by himself.

When an adequate, average non-theatrical picture costs approximately three dollars per foot to produce—they occasionally cost less and frequently several times more—and there is added to this sum the laboratory charges for prints, the office overhead, advertising and selling costs and the many other items of legitimate expense (not to forget the cost of replacements due to wear and tear in the comparatively short life of a reel), it becomes apparent that a return of two dollars per reel *per diem*, with unprofitable days lost in transit and more when there are no bookings at all, will take a long while to work off the investment. And, when one speaks of a reasonable profit which must be made besides, it seems all too preposterous to continue.

In the cases of films which book in on the lyceum circuits—and they are subjects which frequently have cost upwards of ten dollars per foot to produce—there is no such absurdity as a two-dollars-per-day-per-reel charge. Instead, there is a virtual theatrical contract calling for a flat sum running into hundreds of dollars, or a sharing arrangement with the lecture hall management which may mean a thousand or more dollars, depending on the box-office receipts.

Films which have outlived their theatrical usefulness, or which, although they have never had theatrical release, have been "written off" as losses in bankruptcy proceedings, obviously are not required to recover their original investments. So, those distributors, such as De Lorme and Walter Yorke, who accumulated libraries of used reels in order to eliminate that production obstacle, took the first step in making a necessary market compromise with the non-theatrical exhibitor who, it seemed, could afford to pay only two dollars per reel, and declined to trade in propaganda. The figure was arbitrary and unreasonable, but there it was, and those who pretended to serve the market could take it or leave it. De Lorme, Yorke, Willard Cook and many others, preferred to take it, and, in so doing, adopted a form of service which has had the longest-sustained success of any in the field. These reëdited film libraries have their occasional new productions, too, made by assembling special subjects out of the miscellaneous ready-made scenes which have come into their possession.

The customer who does not wish to pay any money for his show is, of course, provided for, but, as said before, he is expected to compensate just the same. An admirable meeting of this need was the scheme launched by Dr. Francis Holley and his Bureau of Commercial Economics, to serve the "free" field with propaganda reels. It probably was suggested by the old-time medicine show, which was still fairly common in America in 1913, when the Bureau began. The remote ancestor of the medicine show was surely the medieval quack doctor and his merry

(*Continued on page* 404)

A Producer Serv

Despite the hesitancy of the Church to use instruments dedicated to worldly purposes her ministry turns again for aid to the undeniable powers of the motion picture

IT IS quite natural that Thomas Paine's famous remark, concerning another distressing period in our history, that "these are the times that try men's souls," should have become current again now. It is odd, however, that nearly all the emphasis should be placed upon the "times" and so little upon the "souls," especially as the souls, an excellent authority, are all that really matter. So it is at least comforting to learn that an apparently notable instance of soul-saving is going on actively and well in this highly specialized field of ours.

It bears the name Cathedral Pictures, and the address is Hollywood, California. Of course, California's celluloid region has been the scene of many religious film endeavors, ranging from Harwood Huntington's Old Testament shorts to DeMille's "The King of Kings"; but evidently the full course has not yet been run, for this approach is refreshingly different. The man who created Cathedral Films came into motion pictures in 1939 without previous theatrical film experience but with $135,000 which he had inherited and had decided to invest in producing a religious feature. The situation was perfect for thieves to exploit. Instead of that expected outcome, however, the Reverend James K. Friedrich, the present assistant rector of St. Mark's Episcopal Church at Van Nuys, California, who was the tyro in question, exercised his native good sense in employing competent workers and proper facilities, and evolved a feature which proved to be sufficiently "box-office" to be purchased by Darryl F. Zanuck, production genius of Twentieth Century-Fox, for $170,000.

* * *

A Galilee aristocrat, hearing so much about the great Healer in his neighborhood, goes forth to Cana to fetch Him for his son. From "A Certain Nobleman."

THAT made a sensational beginning. But the movie czars of Hollywood, with their myriad eyes to the future and their collective ears to the ground, decided that the peace theme of "The Great Commandment" was unsuited to the awakening martial spirit of the then imminent World War Number Two. Consequently, but with no diminution of professional interest or ultimate expectation, they shelved it, and "The Great Commandment" now rests on ice, so to speak, awaiting the glorious day of a global armistice. Meanwhile 16mm prints are being distributed by Films, Incorporated.

This was disappointing to the Reverend Friedrich, but there had been progress. Far from being stamped with failure, he had achieved a mark of commercial success in the form of $35,000 more than he had put in. But to him that victory represented only a proof of the correctness of his aim, and a widened opportunity to realize it. For his hope had been not for just one Bible film, or even for two. So he took his profits and the enthusiasm of those who believed in him, and embarked on making films regularly for the church.

"It is so important," he says, "that we reach the 'man in the street' with the simple way of life that Jesus talked and lived. Few people these days stop to consider the values with which Christ was really concerned, for, in His way of looking at life, He placed new values on certain things that we seldom consider of any importance at all. Yet everyone who has caught a glimpse of what Jesus really meant, has found that a man *can* be born again; and the world he lives in, though its surroundings be the same, is changed completely because he looks at everything so differently. It is through the eye that I believe this transformation may be done quicker; other methods used by the Church have failed to accomplish the task."

And here Dr. Friedrich adds sadly that the Church is disinclined to use the film mainly because the forces opposed to its philosophy have employed it as a principal instrument with which to sow and reap horrible results.

ne Church

* * *

CATHEDRAL FILMS has produced four films since "The Great Commandment." Each is in approximately two reels. "A Certain Nobleman" was released in August, 1940. The following November came "The Child of Bethlehem." The first month of the new year brought "The Prodigal Son," and there was quite a long interval between that subject and "No Greater Power," the story of Zaccheus "who climbed a tree," which made its appearance as recently as May 1942. Two additional subjects are in preparation, and despite war shortage, it is expected that these will be completed within six months.

Wise Men bring their gifts in "Child of Bethlehem." This two-reel subject follows Jesus from birth to twelve years of age, as related by Saints Luke and Matthew.

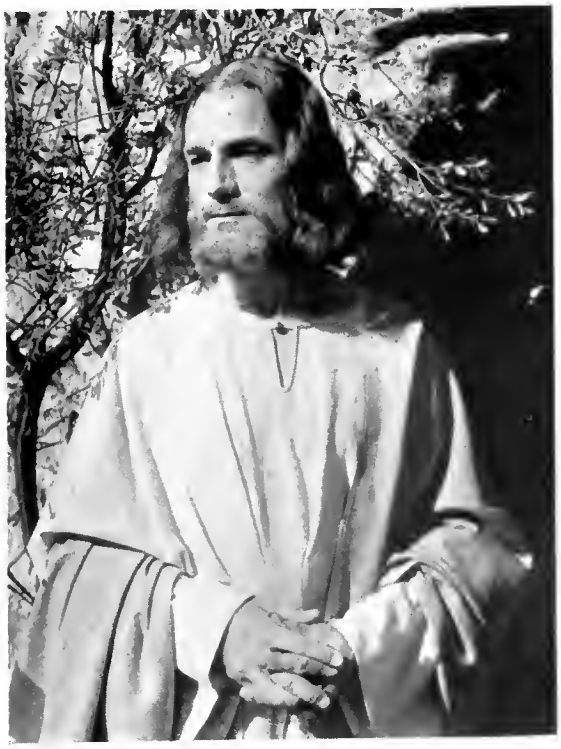
Production has been done altogether in Hollywood or vicinity, the interiors at Grand National Studios and the exteriors near Chatworth, a small town about thirty miles from the film capital. The actual location is a ranch owned by a Mr. Iverson, selected by Dr. Friedrich for its likeness in many places to the countryside of Palestine as he had seen it, and made a happier situation still through the devout Christian interest of Mr. Iverson. Distribution is through a growing list of 16mm libraries throughout the country.

* * *

WITH all the ecclesiastical interest that there necessarily is in the current activities of Dr. Friedrich and his organization, there inevitably is also a strong curiosity concerning that major production which awaits peace on earth in the locked and guarded vaults of 20th Century-Fox. The circumstances in which, in words of the churchmen, "The Great Commandment" so literally "came to pass," are best described by Dr. Friedrich himself.

"Previous to my going into the ministry," he says, "16mm pictures had been a hobby with me for a number of years; but it was not in my mind when I decided to enter that I could use pictures as other than a sort of social diversion. It was when I began to get into the life of Paul that I suddenly realized what possibilities for a motion picture lay hidden in that dramatic character. The more I thought about it and the deeper I got into Paul's experiences the more I became convinced that if his story could be told on the screen truthfully, it would do more for the Church in one year than the Church has been able to do for itself (from a teaching point of view) in the past two centuries.

This reverent actor in "No Greater Power" was long known for role in Hollywood's "Pilgrimage Play."



"The life of Paul runs the whole gamut of human experience, and has all the humor, pathos, love, hate, fear, courage, and human interest that would thrill any audience if told properly on the screen. It was this drama in Paul's life that aroused my desire to use my amateur 16mm experience for the good of the Church. I began in my second year at the Seminary at Alexandria, Virginia, to work toward this end with three other students in volunteer collaboration. The scenario was used as my graduation thesis. The fact that the professor under whom I worked had never seen a scenario probably accounted for its acceptance. Now that I have had four years of experience in real motion picture production, I realize what a very bad job

(Concluded on page 401)

A Health Program—With Hand-Made Lantern Slides

By ANN GALE

Lindblom High School, Chicago

THESE days when a large proportion of our doctors are in service and with many foods unavailable, everyone must follow an intelligent health program. We should use the remaining doctors' time for serious illness only.

In elementary schools a few simple health rules may be explained with hand-made lantern slides.

Since food is essential in maintaining our health the main protective foods should be eaten each day.

1.) Drink a quart of milk, eat an egg, butter at every meal, some bread and other cereals every day.

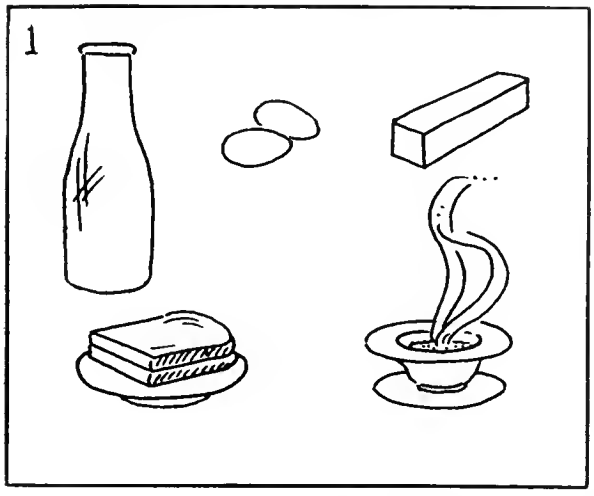
2.) Daily eat one serving of tomatoes or citrus fruits, one serving of potatoes, three servings of other vegetables including leafy, green, or yellow vegetables, two servings of fruit, and one of meat, fish or poultry.

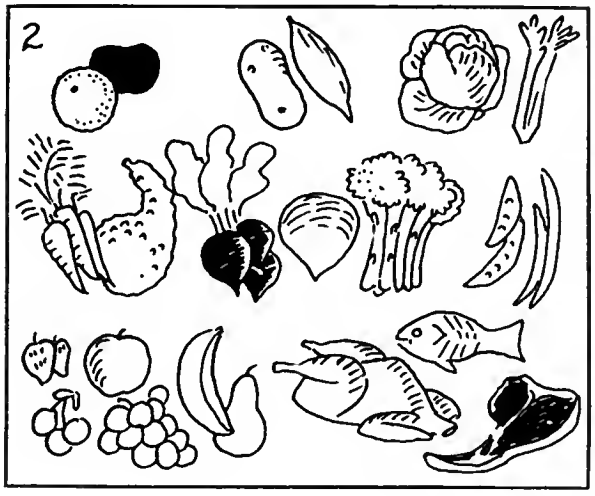
3.) Get plenty of sleep every day. Be regular in going to bed and getting up.

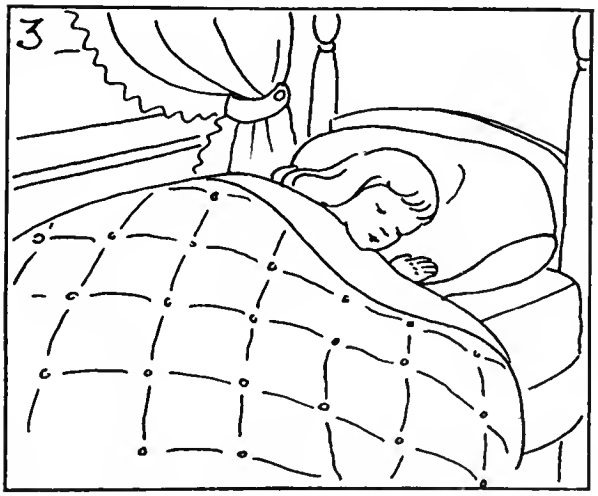
4.) Annually, go to your doctor for a physical check-up.

5.) Keep clean with baths, wash your hands. Help keep your house and school clean.

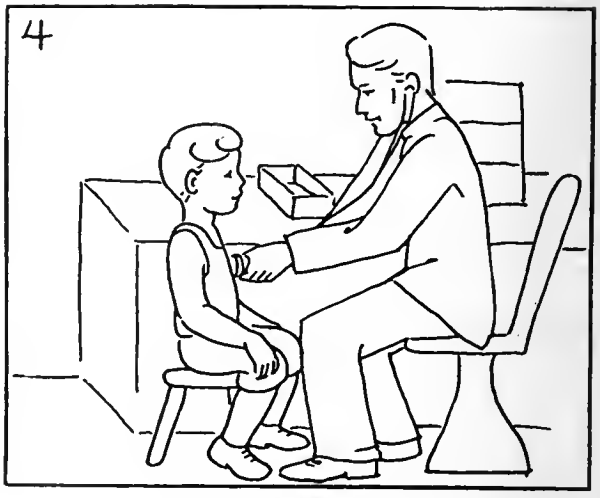
6.) Be sure to play a few hours every day—out of doors and in the sunshine if possible.

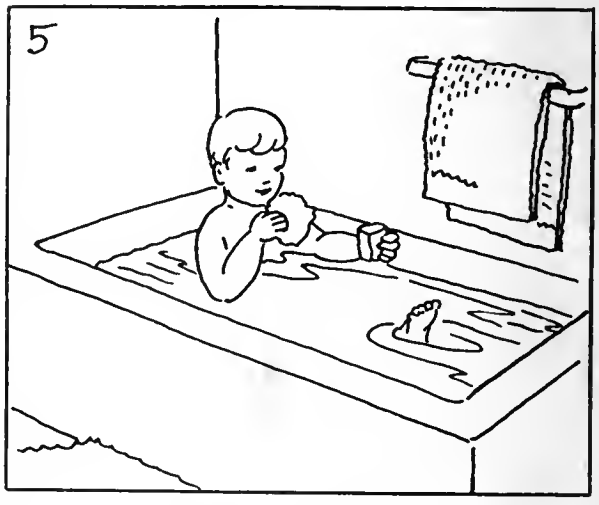






The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.





The Film and International Understanding

DR. JOHN E. DUGAN
Haddon Heights (N.J.) Schools

"INTERNATIONAL Understanding" at first glance may seem to be a rather artificial term for these days of global conflict, and any contribution which the film can make in this field may seem to be of purely secondary importance.

Yet the war itself is a problem in the breakdown of international understanding, and the very purpose for which it is being fought by us is to make possible the establishment of a sound and lasting foundation for international understanding in a post-war world of peace and reason.

The very conduct of the war itself involves problems of international understanding. For we are fighting a global war with allies from all parts of the world—allies of various lands, races, and languages. If we are to fight together, we should have some decent understanding of each other. If we are to establish a victorious common peace for the whole world, there must be mutual understanding among us. Even an understanding of our enemies may help us to tear from about them certain myths that they have tried to establish, and may help us to see more clearly the flaws and weaknesses which will hasten their defeat. Surely international understanding is a vital problem, even in these days of war.

The motion picture is the most potent agent which has come of age since the last war, and its effectiveness in the field of international relations is almost unlimited. It can jump over the barriers of distance, of time, and of differences in language so easily. Through the manipulation of scenes and of sounds it can be used to arouse almost any emotion, desirable or undesirable, of loyalty or of hatred, of courage or of fear.

Such an instrument can create or destroy international understanding. It can be used either constructively or destructively. Consider some of the things which have been done with it: (1) It was used extensively by the Axis to build a background for war and to lay the groundwork for the present conflict. (2) It was used to inculcate the totalitarian ideology into their peoples and to arouse in them the attitudes and emotions necessary for precipitation into the conflict. (3) At the same time beautiful "cultural" and educational" films were exported to lull into peaceful indifference nations which they were not yet ready to antagonize. (4) During the earlier part of the conflict frightful scenes of destruction by aerial bombardment, heightened by hideous sound effects, were used in an attempt to intimidate those leaders and peoples who might oppose them in their conquests. (5) At the same time the advances of their armies were pictured to the citizens at home as crusades of deliverance for the downtrodden—Such are the uses to which an instrument of communication as powerful as the motion picture can be put.

Looking at the problem from a constructive standpoint, consider the strides which we have made in nurturing the good neighbor policy through the use of films. Consider also the numerous British films which have been used to show us her methods of civilian defense, as well as her military efforts in her own behalf and as our ally. Yet we have only begun to appreciate the possibilities of the film in this connection. There is much more that can be done.

This column believes that the potentialities of the film in the field of international understanding is a very vital contemporary problem, and a field in which those who are interested in visual education may be able to contribute much toward the winning of the war and the establishment of a lasting peace.

Subjects such as the following may be discussed during the coming months:

THE FILM AS AN INSTRUMENT OF INTERNATIONAL UNDERSTANDING.
UNDERSTANDING OUR ALLIES THROUGH MOTION PICTURES.
WHAT THE MOTION PICTURE CAN TELL US ABOUT OUR ENEMIES.
THE MOTION PICTURE IN THE GOOD NEIGHBOR POLICY.
THE MOTION PICTURE AS A WEAPON OF WAR.
THE FILM IN POST-WAR WORLD RECONSTRUCTION PLANNING.

It is hoped that projects in these fields and related ones may be encouraged, and that reports of these projects will be received. Teachers, schools, organizations and distributors are encouraged to send in reports of materials available and of work or plans in progress, looking upon these reports as patriotic as well as professional contributions.

The educational motion picture will play an increasingly important role during both the war and post-war periods. All of us are pleased with the part visual education is contributing to the war effort. It is just as important that we look ahead to the part which it will play in the post-war world. Visual education will be of the greatest importance in influencing post-war world reorganization, and we must be ready!

No one, who views the evidence, denies the immense values being derived from motion pictures in the present world emergency, and few will question that they are destined to play a powerful role in developing and consummating harmonious world relations through the post-war years to come.

The Educational Screen is pleased to offer its readers a new monthly department,

"The Film and International Understanding"

which will aim to cover this deeply significant aspect of the visual field. We are especially fortunate in having the services of a man pre-eminently qualified to conduct such a department, Dr. John E. Dugan, Chairman of the Section on Visual Education, World Federation of Education Associations. We earnestly bespeak from our readers the fullest cooperation with Dr. Dugan toward bringing this department to its maximum in interest and effectiveness. N. L. G.

SCHOOL MADE MOTION PICTURES

Madison Teachers' Association Produces

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

STATE and local teachers associations are finding the school-made film to be a very valuable adjunct to their public relations program. An account of the experience of the Madison (Wis.) Teachers' Association in the junior high school field is given below. It was written by J. T. Femal, Madison (Wis.) West High School.

"Taking moving pictures in the schools was an outgrowth of the public relations program of the Madison teachers' association. The movie committee was chosen from volunteers among the members and those who had amateur experience. To facilitate the work, the movie committee decided to limit the film to the junior high school since only three buildings would be involved. The committee also believed that this level was least understood by the general public.

"The purpose of the project was to provide a pictorial story of the junior high school, the pupils and their activities. Included were pictures of pupils from the three grades at work in various fields.

"Planning, taking pictures, providing the titles, cutting and splicing, and writing the script proved to be a tremendous job. Approximately 1300 feet of colored 16 millimeter film was used in the production at an approximate cost of $160. The photographer furnished the camera and the lights and cords were borrowed from the board of education.

"Planning and organization was important, particularly so that school schedules would not be greatly interfered with and the maximum number of shots could be taken in one building at one time. The movie committee cooperatively drew up a schedule of the activities to be photographed. Then sub-committees in the various buildings made up tentative shooting programs after sending and collecting questionnaires from the teachers whose classes were to be photographed. Included on the questionnaire was the following information: the type of work to be photographed, the setting within the room, the number of pupils participating, the lighting exposure, the time the class was in session.

"After receiving these reports, the general committee checked the activities to avoid repetition and to prevent omission of curriculum activities. Building chairmen then organized the shooting schedule and contacted building principals for their approval. Each teacher was responsible for organizing his or her work so that no time would be wasted in shooting the picture. Each one also was asked to provide the building chairman with a written explanation of his or her project for the use of the script writers.

"Since the shooting program was organized with economy of time and effort in mind, most of the films from one building were on the same reel. This necessitated a tremendous amount of cutting and splicing to arrange the movies in logical sequential order. While one sub-committee was doing the editing, a committee of art teachers from the various buildings made the titles, about 20 altogether, in color with hand lettering and figure drawing. These titles were then photographed and spliced in their proper places in the film.

"With the completion of the film, the next big task was to provide a script which would explain in more detail the action taking place on the screen. The script committee, composed mainly of English teachers, took the written summaries of the projects or activities and after much rephrasing, cutting, and lengthening, completed a script which was pretty well synchronized with the scenes.

"The possibility of making a synchronized recording was considered, but the movie committee decided against it since the film was to be used mainly for public relations and since many groups would lack the facilities for making use of the recording.

"The committee hopes that the movie will afford an accurate panorama of school activities in the Madison public junior high schools which will be interesting to fathers, mothers, students, future students, and many other groups who might have the opportunity to see the film."

Other Film Reports

Florida

A committee of five students of Miami Senior High School have filmed 1500 feet of their school's activities, Miss Kathryn Carlin reports. The film, which was completed in May, 1942, is entitled *Miami High on Parade*.

Ohio

The Cleveland Heights, Ohio, Board of Education report the production of the following Kodachrome 16mm silent films, by members of the staff:

The Child Creates (1000 ft.)—Art experiences with design, color, and materials, illustrating fifteen phases of elementary art and craft work, including weaving, clay modeling, textile designing, free brush painting, and woodworking.

Growing Things (700 ft.)—Elementary pupils showing various phases of school garden work, including planning the garden, preparing the seed beds, transplanting, cultivating, removing insect pests, and harvesting.

Insects and How to Collect Them (800 ft.)—How to make an insect collection; how to collect water insects. Life history of the monarch butterfly and the cecropia moth; the praying mantis; insect pests such as the Japanese beetle and the tomato worm.

Nesting Habits of Birds (500 ft.)—Nesting habits and characteristic activities of the bluebird, wren, cliff

(*Concluded on page 394*)

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swallow, scarlet tanager, grosbeak, cowbird, red-winged blackbird, wood thrush, robin, hawk, and sandpiper.

Play Ways for Posture (1000 ft.)—Physical education activities of the elementary schools which contribute to good posture. Development of the child from 11 months to 12 years.

Protection for Florida Birds (500 ft.)—Describes work of the Audubon Society in protecting bird life in Florida. Included in the film are the burrowing owl, wood duck, pelican, American egret, great white heron, man-o-war bird, caracara, American eagle, and white ibis.

Winter Birds (300 ft.)—Feeding habits of woodpeckers, including downy, hairy, and pileated; tufted titmouse, chickadee, cardinal, English and tree sparrows, junco, starling, and nuthatch.

A film showing what the Cleveland Heights schools are contributing to the war effort is now in preparation. This will be in the nature of a record and will include curricular changes in preparing high school boys for army service; extra-curricular activities such as Junior Red Cross, scrap drives, paper sales, war chest drive; emphasis on health and physical fitness; civilian defense activities, etc.

Texas

An interesting account of a school-made film appeared in a recent issue of the Bell and Howell *Filmo Review*. It is as follows:

"E. P. Hancock, Director of Visual Instruction, and K. L. Mills, Director of Manual Training, at the Sabine Public Schools of Gladewater, Texas, saw no reason why detailed instructions in elementary wood turning should be repeated again and again—so, they made a 16mm. silent motion picture of such high technical quality that the Filmosound Library took on its circulation. . . . Then came the problem of adding sound. . . . It was felt that a sound film on wood turning should embody the appropriate sounds of operation. The teachers had access to a recorder and just by way of experiment they "mixed" sound effects and narration on their record in a way that permitted re-recording on film in the sound laboratory.

"The result is a one-reeler, *Essentials of Wood Turning*, teacher made, but practically of professional quality. Sound: rental, $1.50; sale, $36. Silent: rental, $1: sale, $24."

The School—A Service Center On the Home Front

(*Concluded from page 380*)

to better living in the community. The boys formed a rural club called "The Rural Social Service Club." Members went to the farmers, made friends with them, gave them better seeds, gave monthly entertainments of moving pictures and plays. A school for the children of the farmers was organized by the members of the club for an hour and a half in the afternoon. The children were taught reading, arithmetic, Chinese, and health habits. A doctor held a clinic for the children twice a week. The members of the club cut reeds and sold them for fire-wood in order to buy medicine for the children. In speaking of this, Madame Chiang Kai-shek says, "I feel that education in itself is useless. As soon as one works for personal glory, the work suffers. Only work for the sake of the work itself and the good it can do deserves success."

The school can serve as a powerful agency in helping its own community raise its standards of living through teaching proper housing, food, and child care. In raising the standard of the community, a better social understanding of world living can be realized because the people will then understand how their community fits into the world at large. Films, filmstrips, slides, and pictures on nutrition, housing, health and child care can be used before groups of parents. Children in school who see a film on proper diet will carry home the message of proper food and nutrition. Parents, seeing a film on the prevention of disease through improved home conditions, are moved to improve their own living conditions.

On a poster recently, I saw this quotation by Cordell Hull, "For the immediate present the all-important issue is that of winning the war,—winning it as soon as possible and winning it positively. Into that we must put our utmost efforts—now and every day until victory is won." This is our immediate duty. How many of us saw the documentary film, *The Battle of Midway?* Do you recall how conscious it made us of the world struggle in which we were involved? Therein lies the responsibility of each of us in the visual education field. We must help to make our own communities conscious of the grave situation which is facing us every day. The full realization has come to too few of us as yet.

A survey of every civic organization, parent club, church and college group should be made in each community, and full cooperation in the furnishing of projectors and the showing of films made by the Government agencies should be given by all of us. There is a stillfilm with recording waiting for us to use in the bond drives in our community. Our Government has made it for our use. There are films on bombers, tanks, safeguarding military information, and many other subjects which the Office of War Information has made for us to use in our community. These films should be used in every adult community group possible by means of school projectors. They are ours for the asking. We in the field of visual education have the privilege of serving on the home front. It is within our power and accomplishment, to quote from the President once more, "to mold men and women who can fight through to victory."

FILMS *that Fight for* FREEDOM!

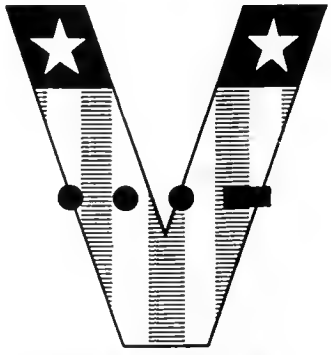
Deposited with us by Government Agencies

Released by the Office of War Information

Aluminum
Bomber
Building a Bomber
Building a Tank
Democracy in Action
Lake Carrier
Men and Ships
Power for Defense
Ring of Steel
Safeguarding Military Information
Tanks
The New Spirit
Women in Defense
Defense Review No. 3
Western Front
Winning Your Wings

Short Song Shorts

Keep 'Em Rolling
The Caissons Go Rolling Along
Anchors Aweigh



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Thrilling account of an actual air raid by the Bomber Command of the Royal British Air Force, from routine of preparation, flight to destination, bombing of target, and return to headquarters.

Released by the Coordinator of Inter-American Affairs

Americans All
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Brazil Gets the News
Buenos Aires and Montevideo
Colombia
Fiesta of the Hills (Mexico) (Color)
The Day is New (Mexico)
Bounteous Earth (Color)
A Line from Yucatan (Color)
High Spots of a High Country (Guatemala)
Our Neighbors Down the Road (Color)
Patagonian Playground (Color)
Sundays in the Valley of Mexico (Color)
Hill Towns of Guatemala
Venezuala
Wooden Faces of Totonicapan

Released by the U. S. Navy

I Am an American Blue Jacket
American Sea Power
Submarines at Sea
Eyes of the Navy

Any of these Government films (with the exception of TARGET FOR TONIGHT will be provided without any charge whatsoever, when they are included in regular rental programs, costing $2.00 or more. To all others, we are compelled to make a service charge of 50c for the first film, and 25 cents for each additional subject used on the same program. The service charge on TARGET FOR TONIGHT is $2.50, when used alone, or with other Government films. When used with rental programs, the service charge is $1.00.

A Few "Specials" You Should Use

THE CRISIS—8 reels. The rape of Czechoslovakia. See the crisis in the Sudetenland. The Czeck preparations. Hitler propaganda methods. Nazi subversive techniques exposed. Rental, with shorts, $17.50. In series, $15.00.

LIGHTS OUT IN EUROPE—7 reels. Narration by Frederic March. Shows the invasion of Poland and Danzig. The stalemate in France. The attack on Britain. Rental, with shorts, $15.00. In series, $12.50.

THE FOUR HUNDRED MILLION—6 reels. The absorbing and timely screen story of China's epic defense against the invasion by Japan. Rental, $15.00. In series, $12.50.

AFTER MEIN KAMPF—7 reels. This picture vividly portrays how Hitler has tried to enforce the doctrines of "After Mein Kampf" throughout the world. Rental, $15.00. In series, $12.50.

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OWENS-IDEAL PICTURES (Drawer H, Milwaukee Branch), Portland, Oregon.
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News and Notes

West Virginia Visual Society Revived

In the November issue of *West Virginia School Journal*, Mr. R. H. Eliassen, Bethany College, tells of the history and progress of Visual Education in that state, which was one of the pioneers in the promotion of visual aids. More than a decade ago the Visual Education Society of West Virginia was doing an outstanding job in the state, but discontinued during the height of the depression. After that, visual education section meetings were held annually in connection with the State Education Association, but nothing significant was done in these meetings. Last fall, however, a vigorous campaign for attendance at the state meeting resulted in splendid attendance and the proposal to revive the Visual Education Society. Mr. H. V. Allen of West Virginia University, and Mr. Godfrey Elliott of Princeton were appointed to serve as the executive committee.

Under their leadership, important developments took place. A plan of affiliation with the Department of Visual Instruction was approved, and the publication of certain monographs undertaken. Three such monographs have now been mimeographed, and others are in preparation. These materials are free to members of the Visual Education Society but will be distributed to others at a nominal fee. Mr. R. V. Braham, secretary-treasurer, Leewood, West Virginia, will furnish information about these monographs and membership in the Society.

The feature of this year's Visual Education program, held concurrently with the SEA in Huntington November 11-13, was an address by Dr. Edgar Dale, who also appeared on the general program of the state meeting.

New York Visual Section Meeting

Three recent studies of interest in the field of visual education were reported at a meeting of the Visual Instruction section of the New York Society for the Experimental Study of Education. The meeting was held on Friday, November 20, at the Washington Square branch of New York University. Mrs. Esther L. Berg presided.

The first speaker, Dr. Irene F. Cypher of the American Museum of Natural History, discussed the value of the diorama as a teaching aid and urged pupil construction of dioramas as a valuable and inexpensive activity. Several types of dioramas were displayed in illustration of her talk. Mr. John B. Leder, principal of P. S. 78, Brooklyn, then showed two units of 2x2" Kodachrome slides, one on "China," prepared by a 4th grade and the other on "The Puritans," prepared by a 5th grade class of his school. The third speaker, Dr. David J. Goodman, Executive Director of Foley & Edmunds, Inc., Visual Teaching Aids, and former research fellow of the Center for Safety Education, New York University, presented a summary of a study he has just completed in which he compared the effectiveness of the sound and silent motion picture and the sound and silent film slide as teaching media on four different topics in the subject of Safety. His talk was illustrated by the showing of a portion of the material on one subject through each of the four media compared.

A lively and stimulating discussion and question period, led by Dr. Grace Fisher Ramsey, Director of the Education Division, American Museum of Natural History, followed each speaker's presentation.

Religious Films for Our Armed Forces

A plan has been formulated by the Religious Film Association, 297 Fourth Avenue, New York City, whereby religious films will be shown to men in service. Because of the limitation of chaplains' funds for film rental fees, and the constant shifting of chaplains in the camps, a special distribution method has been devised to meet these problems. The films will be made available to a camp as a whole for a period of time, through the office of the post chaplain, during which time the chaplains in the camp can make use of the films. When they have finished with the films, they would be sent on to the next camp.

The Religious Film Association has secured the consent of a number of producers and distributors to supply films on the basis of a lease for the duration, thus cutting the cost per showing. The Committee on Visual Education of the International Council of Religious Education has approved this plan and is urging denominational executives, in charge of the disbursement of funds for camps, to apportion certain of their funds for the lease of religious films, such expenditure to be made through the newly organized Service Men's Christian League.

Minnesota Visual Group Meets at MEA

Among the Section Programs given at the annual Minnesota Education Association convention in Minneapolis October 29-31, was one on Audio-Visual Aids, devoted to the theme: "Getting the Most Effective and Economic Service from Our Available Audio-Visual Equipment." Donald K. Lewis, Red Wing Schools, presided. Speakers included Karl Reinke, Faribault High School; Carl F. Mahnke, Vocational Guidance Films, Des Moines; Paul C. Reed, Educational Field Adviser, Office of War Information; John L. Hamilton, Visual Education Service, University of Minnesota; A. J. McClelland, Erpi Classroom Films, Vincennes, Ind.

2000 Reels of GE Welding Movies in Use

Reports from key war production areas throughout the country as well as from the Army, Navy, and vocational schools indicate that General Electric's film, *The Inside of Arc Welding*, is being used extensively in speeding and facilitating the training of arc welding operators. Over 2000 reels of this 16-mm film are in regular use throughout the United States alone, while numerous reels are being used in England, Canada,

(*Concluded on page 398*)

In the classroom the JAM HANDY slidefilms and motion pictures help the teacher SHOW what he means with pictures large enough for every member of the class to see.

If the challenge is to be met—in every school, the HIGH-SCHOOL VICTORY CORPS needs to be well trained . . . *quickly.* New subjects need visual aids to help accelerate learning . . . Tens of thousands of JAM HANDY discussional slidefilms* and motion pictures have been enlisted in this new program . . . to help students SEE and learn . . . There are 17,015 pictures—photographs, charts, drawings and cross-sections—in these slidefilms . . . *Use* of these discussional slidefilms and motion pictures by schools and the armed services is endorsement of their authenticity and effectiveness.

HUNDREDS of Slidefilms and Motion Pictures Ready NOW!

Automotive Mechanical Training Kit-set No. 1—2,829 Pictures
Units of Automobile, Mechanical Principles, Operation, How It Works—(35 slidefilms)

Automotive Mechanical Training Kit-set No. 2—1,910 Pictures
Care and Repair of Passenger Cars and Trucks—(35 slidefilms)

Basic Electricity Kit-set—888 Pictures
Fundamentals of Electricity—(12 slidefilms)

Machining Kit-set—860 Pictures
Fundamentals of Machine-Shop Work—(16 slidefilms)

Oxyacetylene Welding Kit-set—742 Pictures
Fundamentals of Oxyacetylene Welding—(15 slidefilms)

Bench Work Kit-set—970 Pictures
Principles of Bench Work—(10 slidefilms)

First Aid Training Kit-set—1,084 Pictures
A visual training course for first aid—(20 slidefilms)

Selling In America Kit-set—392 Pictures
Distributive Education—(5 slidefilms)

Bridging the Gap Between School and Business—524 Pictures
Distributive Education—(4 slidefilms, 8—15-minute presentations)

Pre-Flight Aeronautics Slidefilm Kit-set—1,742 Pictures
(24 slidefilms)
A slidefilm training course based on the official ground school material of the Civilian Pilot Training Program and checked and approved by the Civilian Pilot Training Service of the Civil Aeronautics Administration. Hundreds of these are in use in schools, C. P. T. P. franchised units and the armed forces.

Aircraft Engine Mechanics Kit-set—1,453 Pictures
Care and Repair of Airplane Engines—(25 slidefilms)

Aircraft Mechanics Kit-set—2,742 Pictures
Care and Repair of an Airplane—(46 slidefilms)

Aviation Metalsmiths Kit-set—879 Pictures
Metalsmithing in Aviation—(15 slidefilms)

Sound Motion Pictures available—46 subjects—on Radio, Electricity, Machines, Automotive Mechanics, General Science, Shop Work, Aircraft Mechanics and others. Information about motion pictures on any of these subjects will be sent on request.

**Film strips with textual material on 35 mm. film which provide for the teacher's own commentary and permits classroom discussion while being shown*

Write for complete information and the name of your authorized JHO visual aids dealer

The JAM HANDY Organization

★New York	★Washington, D. C.	★Detroit	★Dayton	★Chicago	★Los Angeles
1775 Broadway	Transportation Bldg.	2900 E. Grand Blvd.	311 Talbott Bldg.	230 N. Michigan Blvd.	7046 Hollywood Blvd.

(Concluded from page 396)

Brazil, and South Africa. Of these, 30 complete sets are being used by the U. S. Navy in its training programs, and 25 sets by the War Department. Hundreds of prints of this film are in use by State Vocational Departments, private welding schools, shipyards, and other industrial manufacturers. Reports from many of these sources emphasize that the film has helped shorten the average beginner's training period by as much as 20 per cent.

Made in full color and sound, 6 reels in length (although each reel can be shown independently), and available at print cost, *The Inside of Arc Welding* presents the basic fundamentals of modern arc welding technique. Beginners as well as experts profit from the film since it bridges the many hard-to-understand gaps between the written and the spoken word.

Projection Courses in Army Camps

From Edward H. Stevens, of Stevens-Ideal Pictures, Atlanta, Georgia, comes interesting information about a valuable service his company is donating to Army Camps in the form of projectionist schools. Ten qualified men employed by Stevens-Ideal now conduct these classes in ten Army Camps, and plans are being made to extend the work among additional camps. In these classes, which Mr. Stevens reports are extremely popular, the men are taught how to operate various types and makes of projection equipment. Officers as well as enlisted men attend. Classes are held once a week for six weeks. Students are then given an examination, and on passing, are given a certificate of qualification.

Conference Proceedings Published

The Proceedings of the Sixth Annual Southern Conference on Audio-Visual Education is scheduled for publication on December 15, 1942, or shortly thereafter. Included will be the addresses made by leaders in the field of audio-visual education, complete transcripts of demonstrations of the "Production and Classroom Use of a Radio and Recorded Program" and the "Use of Visual Aids in Classroom Teaching," and records of the discussions in nine Specialized Group Forums.

The price of the Proceedings is $1.25 per copy, postage prepaid. Orders should be mailed at once to the office of the Southern Conference on Audio-Visual Education, 223 Walton Street, N. W., Atlanta, Georgia.

University of Virginia Inaugurates Visual Service

A new Audio-Visual Center has been established in the University of Virginia Extension Division at Charlottesville. The State Department of Education has deposited in this new center a collection of films, slides, and recordings that are available on the same terms as from other visual libraries in the state. A recent catalogue, issued by the State Department of Education, gives details of the services from these centers.

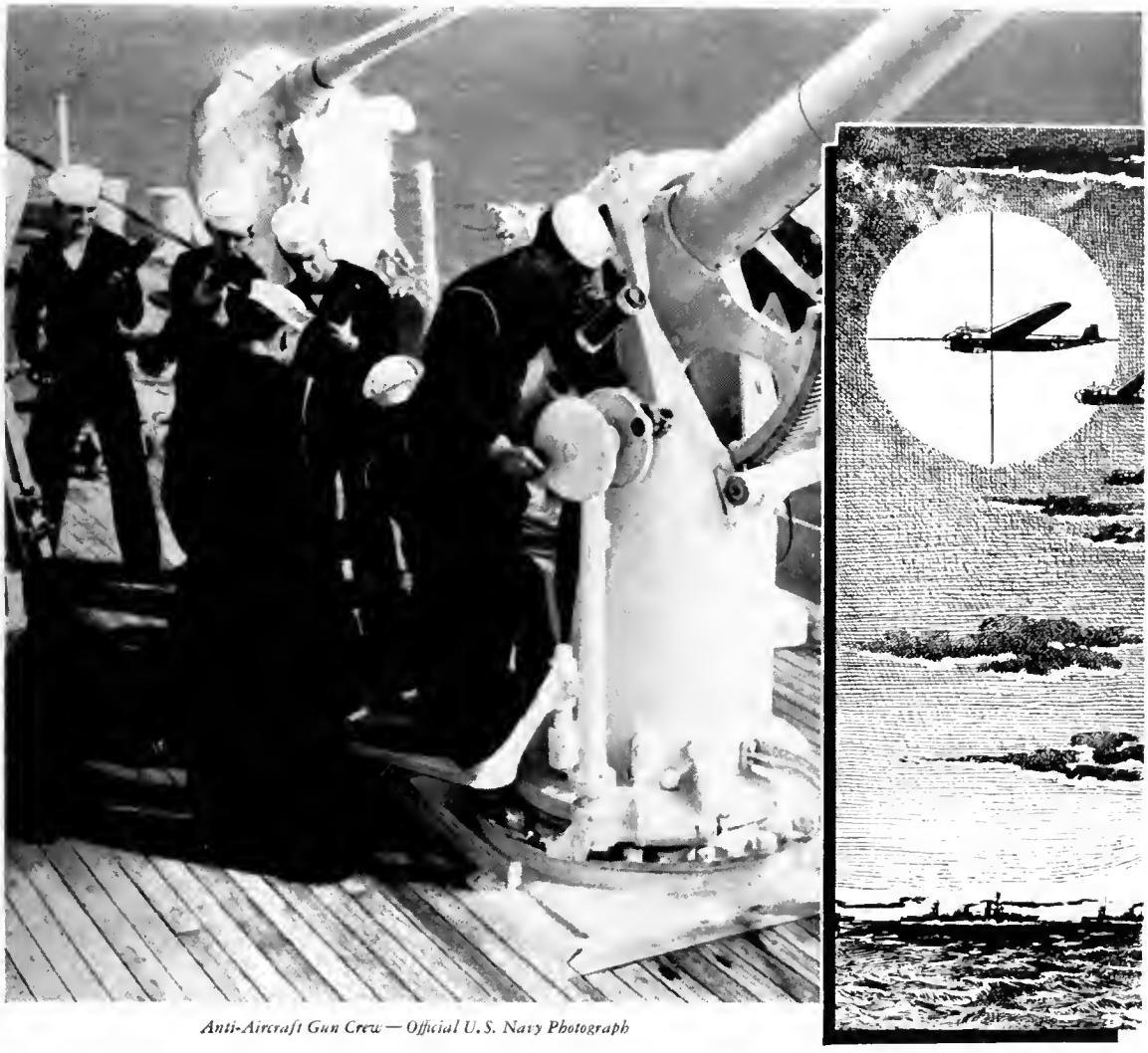
A Message from the Office of War Information, Motion Picture Bureau

The American people want information about the war they are fighting. They want to know how the war is going on the military fronts, on the production fronts. They want to know what they, individually and collectively, can do to win the war. Such information is available through motion pictures—through the 16mm sound films of the Bureau of Motion Pictures of the Office of War Information.

Widespread use of war information films depends upon three things: films, projectors, and audiences. The films are available now—films ranging in content from an R.A.F. bombing raid on Germany to the "why" and "how" of scrap salvage. The *audiences* are available now—schools, churches, men's clubs, women's clubs, civilian defense groups in every community. Wherever there is a gathering of American citizens, there is an audience for war information films. Films and audiences are ready. What about *projectors?*

There are an estimated 20,000 16mm sound projectors in the United States, over half of them owned by schools. By "table cloth" arithmetic, if all these projectors were used only one day a week to show war films to 100 people, the weekly audience would be 2,000,000. If they were used once a day, five days a week, the audience would be 10,000,000. And if they were used twice a day, once in school and once out of school, the weekly audience would be 20,000,000. "Table-cloth" arithmetic these figures may be, but they emphasize the importance of using projectors once a day, twice a day, and every day—if the American people are to see Government war films.

What can schools do? The answer is clear: SHARE YOUR PROJECTORS. Get Government war films from your nearest distributor of films. Show these war films to students in the morning, to a men's luncheon club at noon, to a P.T.A. meeting in the afternoon, and at a community gathering at night. Cooperate with service clubs, community groups, civilian defense councils in scheduling the use of films and projectors. Keep your projectors working to win the war.



Anti-Aircraft Gun Crew — Official U. S. Navy Photograph

"Fire when ready!"

Dramatic seconds pass while the enemy plane approaches. It must be brought down or a U. S. ship may sink below the waves. Accurate marksmanship literally becomes a life-or-death matter. And accuracy depends on many factors—chief among them being the gunsights such as supplied by Spencer.

The Navy and Army have entrusted the manufacture of some of the most intricate optical devices to Spencer because of a long record of success in producing scientific optical instruments of great precision.

In addition to thousands of standard microscopes and other instruments being made for the armed services and war industries, Spencer's production includes periscopes, telescopes, aircraft gunsights, prism binoculars, azimuth instruments for directing artillery fire, tank sights, and telescopic alidades for navigation.

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Optical instruments are so vital to war and public health that the nation's needs absorb practically all of Spencer's greatly increased production.

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Spencer LENS COMPANY
BUFFALO, NEW YORK
SCIENTIFIC INSTRUMENT DIVISION OF
AMERICAN OPTICAL COMPANY

Experimental Research in Audio-Visual Education

By DAVID GOODMAN

TITLE: THE ORGANIZATION, ADMINISTRATION AND SUPPORT OF VISUAL INSTRUCTION IN CALIFORNIA

Investigator: HARRY MAXWELL MCPHERSON

For the degree of Doctor of Education, completed 1939—University of California.

Purpose

The purpose of this study was to determine: (1) the important factors to the organization of a visual service for the teachers in school districts; (2) the administrative provisions essential to the proper functioning of a visual service program; (3) the cost of visual services now provided by districts, and procedures by which visual service programs might be financed.

Procedure

Data were collected by the writer in person from the visual departments of large city school districts on their organization, equipment and supplies owned, circulation of materials, supervisory procedures, cost of operation, and methods of financing the department. In addition inquiry blanks secured data from 349 school districts. The Extension Division of the University of California provided data on distribution of motion picture films and fifty-six county superintendents furnished data on the visual activities of their office.

Findings

The findings of the study may be summarized as follows:

There is little or no visual instruction in districts which do not provide visual materials from centralized departments. Since visual departments are seldom found outside large city school districts, most teachers in small districts are without visual materials.

The formation of county or joint-county visual departments to centralize visual services of school districts seems advisable on both economical and educational grounds and is desired almost unanimously by school administrators. A few county superintendents have inaugurated visual services to school districts, but, since district attorneys do not agree on the legality of these services under existing provision in school law, there is need for legislation which will permit county superintendents to organize visual departments. There are sufficient county unapportioned funds available for the support of these departments when established.

The technical aspect and high cost of motion pictures creates a special problem in the organization of a visual program. While four-fifths of the districts own projectors and one-fourth of these districts use no other means of visual instruction, only a few of the largest city districts have film libraries. Most districts rely on commercial agencies for "free" films and on the Visual Center of the University of California for classroom films. State support of a state-wide film distribution service appears desirable.

A Supervisor of Visual Instruction trained in visual techniques and library procedures is essential to the administration of a visual program. Class room supervision is particularly necessary since, although administrators are convinced that teachers need special training in visual instruction, teacher training institutions in California are doing little to meet the need.

Careful, long-time planning of the visual program with specific, continuous allocation of funds to the department is essential. In administrative units of 10,000 average daily attendance or more, fifty cents per pupil is sufficient to provide centralized visual services.

A Producer Serves the Church

(*Concluded from page 389*)

I did on my life of Paul. Be that as it may, I still feel that, of all stories in the Bible, it is the one with the greatest motion picture possibilities; and I hope that some day I may have a part in producing it.

"On leaving the Seminary I was determined to get into motion picture work in some manner to prove my growing conviction that this instrument is the most potent thing that man has yet created for getting ideas across; and it has been a long but intensely interesting road toward convincing the Church of the great possibilities that lie in the use of pictures for teaching the great underlying truths of Christianity.

"After being ordained an Episcopal minister, I came to California with the consent of my Bishop, for the purpose of developing (if I could), at my own expense, some kind of motion picture that would prove or disprove my desire. I began working on a 'short' built around the story of the Good Samaritan. By the grace of God I met two men, Jack Coyle and Dana Burnett, who worked with me on the idea.

"The first thing we knew we had a feature film on our hands. I called it 'The Great Commandment,' because that was its subject: 'Thou shalt love the Lord thy God with thy whole soul, and thy whole mind, and with all thy heart and all thy strength, and thy neighbor as thyself.' We tried to sell the script to a major studio for production, but they laughed at us, saying that a religious story would die at the box office. Nevertheless, convinced that I had a good story, I put my own money into it. The picture was made; its test showings in Joplin, Missouri, and at Emporia, Kansas, proved that it was good box office; and Darryl Zanuck bought it for $170,000.

"Now I am confident that the Church can and will support a motion picture program, once it has had a chance to see what can be done when truly good pictures are produced for its use. This we have done with four shorts that we have made at a cost of over $10,000 per picture. We have not begun to get anything like the production cost back on even the first of these shorts. Nevertheless, we are going ahead making them, believing that the results so far justify our program, and knowing that the market is great enough to support the finest kind of films, once they are properly developed."

A Source List on Safety

Visual Aids in Safety Education: Supplement I.—Safety Education Projects, Research Division, N.E.A.—1201 Sixteenth St., N.W., Washington, D.C., June 1942. 25c.

An evaluated listing of silent and sound motion pictures, silent and sound film strips and lantern slides on such topics as: street and highway safety, fire prevention and protection, first aid, driver training, general safety and civilian defense. The compilation includes poor films as well as good ones, with comments as to quality.

Current Film News

■ Bell & Howell Company, 1801 Larchmont Ave., Chicago, have acquired three 16 mm sound motion pictures, the subject matter of which is most timely, dealing as they do with the problems of vocational guidance in a world at war. These films, produced by Forum Films of Los Angeles, are designed to help high school job applicants by showing them what qualifications are needed to get a job, and to hold it.

Courtesy Comes to Town carries an instructive story based on the student's own experiences. It not only vitalizes the question of courtesy as applied in the business world, but definitely gives it a more meaningful place in the students' everyday life.

I Want a Job has a typical high school group for its cast. A high school boy loses his job and is aided in finding new work by his uncle. The film stresses the importance of appearance and correct approach in seeking employment, the correct and wrong way being demonstrated by a series of applicants.

Minutes Are Pennies points out the difference in efficiency between a discordant office with a self-centered, uncooperative staff, and one in which every employee cooperates in fulfilling his specific duty.

■ British Information Services, 30 Rockefeller Plaza, New York City, have published a new catalog of *Films of Britain at War* which lists 167 factual subjects with full descriptions, dealing with the many aspects of Britain in wartime. Sponsored by the British government, these films present the full-rounded picture of England's war effort, dramatizing the jobs, resources, people and ideals of that nation.

The films have been grouped in the catalogue under nine major headings: Armed Services, Britain's Allies, British Commonwealth of Nations, Civilian Defense, The Farm Front, The Home Front, The Industrial Front, Transport and Communications, and Women in War. Many of these main groups are further classified, making it possible to locate films readily according to their content. An alphabetical Index of film titles also provides quick reference. Except where specifically marked silent, they are all 16mm sound films.

Since the printing of this catalogue, another list has been compiled to include many new films, among which are: *Paratroops, Troopship, Fighting French Navy, Soviet School Child, Blitz-Wash, Tale of Two Cities, Ditching, Hedging, More Eggs From Your Hens, A Letter from Home, New Towns for Old, ABCD of Health, Machines and Men, No Accidents,* and many others.

Copies of these film listings may be acquired direct from the British Information Services, or through local film dealers and libraries.

■ Walter O. Gutlohn, Inc., 25 W. 45th St., New York City, have just issued a folder describing their 16mm. silent and sound aeronautics films. These motion pictures are especially valuable for pre-flight training. The films listed include such subjects as: Aviation Mechanics, Basic Theories of Flight, Air Currents and Streamlining, Methods of Bomber Identification, the Story of our Air Army from Assembly Line to Performance in the Air, and a thrilling review of aviation from the Wright brothers to today's fighting over Europe. Copies of this folder may be had from Walter O. Gutlohn, Inc., upon request.

Submarine Circus—at Silver Springs, Florida, a trick circus is seen in action entirely under water. The audience is shown how the tents are constructed on shore, painted with water-proof paint, dried, then lowered to the bottom and anchored.

Pilot Boat—deals with the life and activities of the pilots who direct craft through the intricate channels and chartings of New York harbor 24 hours a day.

■ Bailey Film Service, 1651 Cosmo Street, Hollywood, California, announces the exclusive distribution of two Southwestern Indian films produced by Tad Nichols of Tucson, Arizona. These films are available in either color or black-and-white, for sale or rental. A teacher's guide accompanies each film.

Navajo Indian Homelife portrays the activities of the Navajo Indians against the colorful geographical background of Northern Arizona. House types in different localities of the reservation, intimate camplife scenes, and the Indian's method of dry farming are followed by the Navajo family preparing and eating a meal. A detailed sequence on the process of Sandcast Silverwork for making Navajo jewelry shows the forming of an ornamental bowguard and ring.

Navajo Rug Weaving, filmed on a Navajo Indian Reservation, with a typical Navajo family and their camp as a background, tells the complete story of the weaving of a Navajo rug from the shearing of sheep to the finished rug. All intermediate steps are presented in detail, with many closeup shots, including carding and spinning of the wool, coloring wool with native vegetable dye, use of the root of Yucca plant for washing wool, erecting the loom and steps of the weaving process.

For further information, or a free copy of the complete catalog of teaching films, write to Bailey Film Service, Hollywood.

■ Father Hubbard Educational Films, with offices at 188 W. Randolph St., Chicago, and University of Santa Clara, Santa Clara, California—where Father Hubbard is Head of the Geology Department—have published a new catalogue presenting the 16mm sound films available from this library. On the first page is an interesting summary of the exploitations and researches of Father Hubbard, "the Glacier Priest," who for more than 16 years has explored and recorded on film more than a million feet of motion pictures in Alaska and in the Pacific. Besides these films, travel subjects on Africa, Asia, Central and South America, United States, and other corners of the world, are also available for rental from this library, as well as films on Defense (releasd by the Office of Information) Nature Studies, Sports, Various Industries, Vocational Adventures, and World War II. The catalogue lists 175 films with information given as to contents, running time, and rental charge.

■ Official Films, Inc., 425 Fourth Ave., New York City, continues its policy of including several phases of the war in each volume of its News Thrills instead of producing individual subjects. Volume 3 of 1942 News Thrills now ready for release, contains the following:

U. S. Rangers Raid Dieppe—U. S. Rangers, in collaboration with Canadian and British ground troops, Navy and Air Force move across the English Channel for the greatest assault of World War II.

U. S. Marines Capture Solomon Islands—with Army Flying Fortresses overhead, Uncle Sam's Leathernecks swarm ashore in the first pictures to show this action in the war against the Japanese.

United Nations Stop Rommel—British air strength, reinforced with American bombers, halt the advancing Axis columns. Nazi Marshal Rommel's troops become the target of a constant aerial attack.

1100 U. S. and British Planes Bomb Germany—U. S. Douglas "Boston" bombers take part in this large scale action of a raid on a German city. The "Bostons" bomb an industrial city, then shatter the docks of the old port of St. Malo.

Volumes 1 and 2 of 1942 News Thrills were released in March and June of this year, and together these two reels contain a total of sixteen different actions.

(*Concluded on page* 404)

MOVIES ARE EAGERLY AWAITED

at our far distant outposts

The above dual unit Ampro-sounds are typical of those used in "special services" overseas

The roar of a huge U. S. Patrol bomber ploughing to a stop in the harbor is always welcome music to American fighters at faraway bases. Among other things, it means mail from home *and a fresh supply of the latest motion picture releases!*

Every inch of space in our vast fleet of cargo planes is precious—is urgently needed for transporting vital medical supplies and important war materials. Still our government considers motion pictures so valnable to the maintenance of high morale in the U. S. armed forces that the latest films, in 16mm. versions, are classed as a "must" for our wartime skyway freight lines.

Thousands of Ampro projectors are being utilized in a vast 16mm. motion picture program for training and entertaining United Nation soldiers on both fighting and production fronts. Still more projectors are needed! Private owners of 16mm. projectors are urged to contact Civilian Defense authorities in their local communities and enlist their machines in this vital wartime program.

100% of Ampro facilities are engaged in the production of projectors and precision war equipment for the United Nations. Ampro engineering research continues undiminished—assuring civilian users more efficient projectors than ever when the war is over. In the meantime you can plan for the future by keeping up with the newest developments in 16mm. projectors. Write today for latest Ampro Catalog!

The Ampro Corporation, 2839 N. Western Ave., Chicago, Ill.

★ AMPRO ★

PRECISION CINE EQUIPMENT

Current Film News

(*Concluded from page* 402)

■ Office of War Information, Motion Picture Bureau, Washington, D. C. has released the following two information films in 16mm for use by schools and community groups:

Home on the Range—produced by the Department of Agriculture—an inspiring picture of the Western range country and its contributions to the war. Photographed in Montana, the film gives authentic pictures of the Western ranges, herds of cattle and flocks of sheep, and the men, who make sure that we and our Allies have enough beef and mutton, wool and leather.

Salvage—in which Donald Nelson, Chairman of the War Production Board, presents America's desperate need for scrap for the manufacture of tanks, guns and planes, and makes an urgent appeal to the American people to save metals, greases, and rubber. Mr. Nelson talks against a background of steel mills, tank arsenals, nitroglycerine factories and ammunition plants already suffering from shortages.

■ Artkino Pictures, Inc., 723 Seventh Ave., New York City, exclusive distributors of Soviet films in the Western hemisphere, has just released a new catalogue of its current films. The listings comprise 39 features and feature-length documentaries and 75 shorts, including newsreels.

The features are classified under the general headings of "Russia at War", "Modern Russia", "The History of the Russian People", "The Founding of the Soviet Republic", and "Documentary Films."

The short subjects include 20 and one-and two-reelers dealing with Russia's war effort. Other short subject classifications cover science, industry, agriculture, natural resources and transport facilities in the Soviet Union. There is also a series of four films on the Soviet Constitution and a group of travel films.

Motion Pictures—Not for Theatres

(*Continued from page* 387)

andrew, so the idea has a real antiquity. In the medicine show the entertainment also was "free," but the audience paid for it by purchasing the nostrums of the chief performer. In the case of the modern propaganda film, however, the deal is not quite so bald; the "medicine," which the patron is expected to take, is, as a rule, of a truly beneficial sort, conforming with the high standards of our responsible, native advertising.

The various film distributing departments of the National Government are probably the outstanding American "free" services today. But there are many lesser centers of supply which operate on the same general basis, and there are many more which offer "free" films quite consistently along with other items listed at specified rental prices. In maintenance of the terms of the trade it is usually stipulated by the agency from which "free" films are obtained—and by none more emphatically so than the National Government and formerly the Bureau of Commercial Economics—that at the showings there must be no paid admissions. Thus, not only the showman, but the audience, is made tacitly to accept the aforesaid terms of give-and-take.

In protection of the prints it is usually necessary for the prospective customers to post assurances of responsibility and to name the makes and types of projectors they use. For many years Willard Cook issued his films primarily to "club members," whose initiation fees actually constituted a deposit, and whose introductions by their friends were assurances of reliability. Occasionally the distributors of "free" reels insist upon having audiences comprising a minimum number of persons—usually not less than two hundred. Nearly all require reports of showings, giving particularly total attendance.

In the various conditions set by the different distributors one may read the entire record of the unprofitable experiences which have occasioned them. All of the subsidiary companies of U. S. Steel, which have "free" reels to offer, uniformly specify that their films shall go to those "who have a legitimate use for them." Carter's Ink Company, of Boston, sends a selection from its three principal subjects only "to responsible parties owning projectors," and "three showing dates must be given." And there are many more interesting examples to be found.

By the Y.M.C.A. plan of "free" distribution, the advertising industrialists, for whom the given propaganda pictures were originally produced, formerly paid the Bureau twenty-five dollars per reel per year for general handling and maintenance. As the distribution areas expanded in later years and costs correspondingly increased, this figure was raised first to thirty-five dollars and so on up to a present sliding scale which now begins at seventy-five dollars for a 400-foot 16mm sound reel and reduces proportionately as the number of reels to the given subject becomes greater—that is, a hundred dollars for a two-reeler, and so on. If duplicate prints are provided for listing in the widely circulated catalogue, each reel is admitted to the library at the same rate. In the existing system one print is guaranteed a minimum audience of 12,500 people in any fiscal year.

In the year 1926, which was near the close of the silent films period, the Y.M.C.A. Motion Picture Bureau estimated that, through its New York and Chicago offices, it had furnished a total, during the twelvemonth, of 24,216 programs, consisting of 68,804 reels, to 919 different exhibitors in churches, schools, industries, community and welfare organizations and Y.M.C.A's, with a total reported attendance of 6,649,400 persons. Even then rather a tidy audience for any advertiser to reach. In 1939, through exchanges in New York, Chicago, and San Francisco, the Bureau shipped 127,000 reels for an estimated attendance of 26,000,000. In 1941, when a fourth exchange was opened at Dallas, the figures were still higher, reaching a total audience of 47,000,000, equalling over a third of the population of the United States of America. Of course, the entire Y.M.C.A. list is not composed of "free" films; many straight rental items are included.

Opportunities for Service

For ready perspective on the existing places of film distribution in the American non-theatrical field (as also for perspective on the matter of production), group the pictures in ten natural, convenient, broad divisions. I believe that virtually every manifestation in the field may be placed under one or another of these headings: school films, social service, medical, religious, fraternal, industrial, commercial, public utilities, government, and recreational—what I call the "entertainment fringe," meaning chiefly those miscellaneous non-theatrical shows such as one finds in summer hotels, social clubs and on steamships, and which obviously have many points in common with theatrical representations.

Most of the other classifications, with functions more sharply set off from those of the professional playhouse, may be broken down further for technical information of workers, as teacher-training films in the educational group, and shows which are apparatus, tools to help in achieving the group purpose, as classroom pictures. We have this subdivision of internal and external uses most clearly in government, schools, medicine, the fraternal class, and industry—in "government" think not only of politics, but Army and Navy schools, and understand "industry" to mean the arts, crafts and group processes, which literally create earthly values. It is less pronounced in "religion," although the volume of pictures on institutional service there is accompanied by a few subjects adaptable to the needs of seminary training, and is to be found scarcely at all in "social service" (welfare associations, foundations, etc.), which seem to have more compelling forms of visual instruction for its students. But it is becoming more marked in the "commerce" (advertising, distribution and sales), and "public utility" groups (transportation, light, heat, power and communication), where there is a developing sense of the importance of teaching employees to maintain proper public relations. So far as the "entertainment fringe" goes, its training films may be borrowed from the theatres where there are plenty of them. But that is going completely out of our bailiwick.

(To be continued)

Among the Producers

Visual Instruction in First Aid

The value of first-aid training in peace time is unlimited, and in times of war it cannot be overestimated. During the present emergency, it is necessary to train large numbers of people quickly and thoroughly, in the most efficient method possible.

To meet the growth of interest and need for helpful information, among the civilian population and the armed forces, on the subject of first aid, the Society for Visual Education, Inc., 100 East Ohio Street, Chicago, has produced a series of filmstrips called *Film Aid to First Aid*. Seven Picturols are included in this series: "Bandaging, Part I" "Bandaging, Part II"; "Wounds"; "Control of Bleeding"; "Fractures"; "Artificial Respiration"; and "Transportation of the Injured."

The two filmstrips on bandaging include various bandages which are necessary for first aid procedures, with detailed descriptions as to their application and construction. The Picturol on "Wounds" describes the different types of wounds and gives directions as to their treatment by first aiders. "Control of Bleeding" carefully locates the six pressure points in the body, tells how arterial and venous pressure should be applied, and explains the uses and application of various types of bandages and tourniquets in the control of excessive bleeding. "Fractures" describes the symptoms, the treatment, and the different types of splints used in the treatment of fractures in first-aid work. When, why, and how to use artificial respiration is discussed in the Picturol on "Artificial Respiration." In "Transportation of the Injured," approved techniques of carrying and methods of handling injured persons are shown.

An arm fracture splint

Eastman Organizes V-Mail Unit

The Eastman Kodak Company is recruiting 115 skilled technicians from among its own employees for V-Mail service with the United States Army. These men will assist in the establishment of numerous V-Mail stations which are contemplated by the Army. Kodak has accepted the sponsorship, under the Army's affiliated plan, of a recruited unit which will be known as the Signal Photo-Mail Company, and has assumed the responsibility of supplying both officer and enlisted personnel. The unit will comprise nine commissioned officers in junior grades and 106 highly trained technicians in various enlisted grades.

The unit will be called to active military service, partially or as a whole, within the near future. The need for V-Mail operators is pointed out by the Army's recent disclosure that V-Mail facilities and stations are in operation both in the United States and abroad.

V-Mail is an adaptation of Kodak's Recordak System which is used for record-keeping in thousands of banks and business houses. V-Mail letters are photographed on microfilm, each reduced in size to about one quarter of a square inch. The film, only 1/80 the weight of the original letters, is flown overseas. On the receiving end, letter-size enlargements are made from the film, folded, sealed in an envelope, and forwarded.

The Army Postal Service urges that all persons corresponding with members of the armed forces outside of the United States take full advantage of V-Mail service.

Army-Navy Decoration to Bausch & Lomb

For the third time in fourteen months, the Bausch & Lomb Optical Company of Rochester, New York, was honored by the armed forces when it received the Army-Navy Production Award on September 6, 1942, for exceptional achievement in the production of war equipment. The company was in the first group awarded the Navy "E" on July 25, 1941, and the first to fly this pennant in the United States. It was also the first company to be awarded the Navy burgee with an added Service Star, which it received on May 18, 1942.

The Army-Navy "E" is the joint recognition of both fighting services, and was presented by Captain Henry T. Markland, Naval Ordnance Inspector for Optical Material, and Colonel J. Atwood, chief of the Rochester Ordnance District.

"Twice before," said Colonel Atwood, "your company has received the Navy's high tribute. It is quite fitting that the Army should join the Navy in awarding to you its citation on behalf of our soldiers on land and in the air who are using your superior and much needed equipment. The Army is proud of its association with craftsmen of Bausch & Lomb."

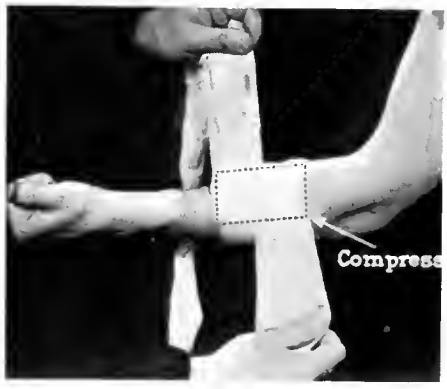
The award was accepted by Herbert Eisenhart, president, on behalf of the company, and Michael J. Smith, representing the employees. Both pledged increasing efforts to keep the armed forces supplied with needed optical equipment.

The formal ceremony, at the plant, was preceded by a dramatic presentation of the company's history over three local broadcasting stations.

The new red and blue Army-Navy pennant, with added Service Star, will now supplant the Navy burgee on Bausch & Lomb's masthead.

Filmslide Course in First Aid

The Jam Handy Organization, 2900 East Grand Boulevard, Detroit, have also prepared a first aid course in the form of a slidefilm Kit-set for use in the wartime educational and industrial field.



A frame from "Dressings and Bandages"

The aim of this visual material is to save time in teaching the basic fundamentals of first aid procedures. Now, with the exigencies of war and war production and the increasing accident rate in military, industrial and civilian life, the introduction of this visualized course is especially important.

There are twenty separate slidefilm productions in the slidefilm set. The subjects covered are: "Purposes of First Aid", "The Body" (2 parts), "Shock", "Unconsciousness", "Common Emergencies", "Minor Injuries", "Wounds" (2 parts), "Dressings and Bandages", (2 parts), "Artificial Respiration," "Burns", "Poison", "Fractures" (3 parts), "Moving the Injured" (2 parts), "First Aid for Survivors". The two parts on "The Body" are in Technicolor. In all, there are 1,084 individual pictures, including special photographs, sketches, diagrams, cross sections, and exhibits. They reveal the step by step procedure recommended in each emergency. For each film there is a synchronized voice recording, and a printed text-book. An instructor's guide also is provided, and provision is made in the program at intervals to stop and make physical demonstrations and trials of points brought out in the lesson.

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(by NELSON L. GREENE)

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(Conducted by ETTA SCHNEIDER)

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Sources of Materials

Audio-Visual Aids for Adult Education (*James Brown*, Adult Ed. Bul.); Picture File Pointers (*Norma Ireland*, Wilson Lib. Bul.); Aids to Democracy: Radio, Movies, Press (*Edgar Dale*)—Jan. p. 21. . . . Field Manual for Museums (*Ned J. Burns*); Music in the Junior and Senior High School: A Tentative List of Visual and Teaching Aids (*Lili Heimers*)—Feb. p. 86. . . . Victor Directory of 16mm Film Sources; Education and National Defense Series —Mar. p. 108. . . . The Other Americas through Films and Records (*Amer. Council Ed.*); Health Education (*Ethel M. Booth*)—May p. 185. . . . An Index to Visual and Auditory Aids and Materials (*Eliz. Findly-L. F. Beck* (Curric. Bul.); Films for Defense (*WPA Writers*)—June p. 225 . . . Catalog of Films for Church and Community Use—Sept. p. 264. . . . Basic Field Manual: List of Publications for Training, Including Training Films and Filmstrips—Oct. p. 306.

Miscellaneous

Visual Aids Digest, 1941—(*N. J. Vis. Ed. Assn.*)—Feb. p. 65. . . . Addresses and Forum Discussions of the Fifth Annual Southern Conference on Audio-Visual Education—Mar. p. 107. . . . International Journal of Religious Education Special Number on Visual Education in the Church Program; Motion Pictures Build Mid-Week Service (*R. T. Loesch*, Church Mgmt.); Accent on Purpose (*W. L. Rogers*, Internatl. Jl. Rel. Ed.); Visual Review—June pp. 224-5. . . . The Motion Picture in a World at War (*Will H. Hays*)—Sept. p. 263. . . . Films in International Relations (*Blake Cochran*, Tchr. Col. Rec.)—Nov. 351.

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(Conducted by DAVID GOODMAN)

SCHOOL-MADE MOTION PICTURES
(Conducted by HARDY R. FINCH)

Question Box, conducted by Godfrey Elliott, in every issue January-September.

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NEW FILMS OF THE MONTH
(Conducted by H. C. LARSON)

Monthly Evaluations of Educational Films by a Teacher Committee

The Flag Speaks; Power for Defense; TVA—Feb. 74-6. . . . First Aid: Wounds and Fractures; The Electrician; The World We Want to Live In; Time to Spare—Mar. 114. . . . Land Birds of the Eastern U. S.; Americans All; Tall Tales; Masterpiece Paintings in Color Slides—Apr. 152-53. . . . Simple Machines; Harvests for Tomorrow; A Letter to Grandmother: A Guidance Problem for School and Home; New York Calling—May 194-5. . . . Hidden Hunger; Before the Doctor Comes; A Child Went Forth; Fighting the Fire Bomb—June 236-7. . . . Ring of Steel; Democracy in Action; Columbus; Coal for Victory; Romance of Robert Burns Sept. 280-3. . . . Scrap for Victory; The Battle Is In Our Hands; Making a Clay Portrait; In Every Day—Oct. 316-8. . . . Westminster Abbey; Great Lakes; Western Front; Origin of Mathematics—Nov. 356-8.

CURRENT FILM NEWS

AMONG THE PRODUCERS

MISCELLANEOUS

They Now Work for Uncle Sam

- Charles F. Milner, for several years head of the Bureau of Visual Instruction, University of North Carolina is now Lieutenant Milner, U. S. N., in charge of visual work at Great Lakes Naval Training Station, Great Lakes, Ill.
- Dr. H. A. Gray, long associated with ERPI Classroom Films as Director of Field Studies, is Captain Gray in the Aviation School of the Army Air Force at Miami. His work is the preparation of instructors' manuals for the air force films and general supervision of the use of films in the different training units.
- Harold Fleck, president of Vaporate Co., Inc. now serves Uncle Sam as Lieutenant in the Navy.
- Albert Reid Bailey, head of Bailey Films Service, Hollywood, California, is now Corporal Bailey, engaged in visual work at Chanute Field, Rantoul, Ill.
- Orville Goldner, formerly of Leland Stanford University, California, has been commissioned Lieutenant and is directing the production of training films for the Navy and Marine Corps. His new address is Training Films Unit, Bureau of Aeronautics, Navy Department, Washington, D. C.

HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bailey Film Service (3)
1651 Cosmo St., Hollywood, Calif.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 377)

Brandon Films (3)
1600 Broadway, New York City
(See advertisement on page 398)

Castle Films (3)
R C A Bldg., New York City
(See advertisement on pages 373, 393)

College Film Center (3, 5)
84 E. Randolph St., Chicago.

Creative Educational Society (1)
4th Fl., Coughlan Bldg.
Mankato, Minn.

DeVry School Films (3)
1111 Armitage Ave., Chicago
(See advertisement on page 374)

Eastman Kodak Co. (3)
Teaching Films Division
Rochester, N. Y.

Eastman Kodak Stores, Inc. (3)
Eastman Classroom Films
356 Madison Ave., New York City

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Father Hubbard Educational Films (2)
188 W. Randolph St., Chicago
Santa Clara, Calif.
(See advertisement on page 400)

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
25 W. 45th St. New York City
(See advertisement on page 400)

Harvard Film Service (3, 6)
Basement—Germanic Museum
Frisbie Pl., Cambridge, Mass.

Hoffberg Productions, Inc. (2,5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 395)

Knowledge Builders Classroom Films
35 W. 45th St., New York City (2, 5)

Manse Film Library (3)
1521 Dana Ave., Cincinnati, O.
(See advertisement on page 400)

Post Pictures Corp. (3)
723 Seventh Ave., New York City

Princeton Film Center (2)
410 Nassau St., Princeton, N. J.

Douglas D. Rothacker
729 Seventh Ave., New York City

Swank's Motion Pictures (3)
620 N. Skinker Blvd., St. Louis, Mo.
(See advertisement on page 394)

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 401)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
2718 Beaver Ave., Des Moines, Ia.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 403)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 377)

DeVry Corporation (3, 6)
1111 Armitage Ave., Chicago
(See advertisement on page 374)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 395)

S. O. S. Cinema Supply Corp. (3, 6)
449 W. 42nd St., New York City

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on inside front cover)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILMSTRIPS

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 395)

Jam Handy Organization
2900 E. Grand Blvd., Detroit, Mich.
(See advertisement on page 397)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 376)

Radio-Mat Slide Co., Inc.
222 Oakridge Blvd., Daytona Beach, Fla.
(See advertisement on page 400)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 401)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago
(See advertisement on page 374)

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave., New York City

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Keystone View Co.
Meadville, Pa
(See advertisement on page 376)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 399)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16 mm silent.
(2) indicates 16 mm sound.
(3) indicates 16 mm sound and silent.
(4) indicates 35 mm silent.
(5) indicates 35 mm sound.
(6) indicates 35 mm sound and silent.

Continuous insertions under one heading, $2.00 per issue; additional listings under other headings, $1.00 each.

HERE'S HOW TO ENLIS YOUR BINOCULARS

The Navy needs every binocular it can get. If you have a Bausch & Lomb 6 x 30 or 7 x 50 binocular and will turn it over to the Navy for the duration, pack it carefully and ship to the Naval Observatory, Washington, D. C., or deliver to the nearest naval district headquarters. An identification tag bearing your name and address should be fastened securely to each instrument. Accepted binoculars will be acknowledged with a fee of one dollar and will be returned to you after the war if still in use.

The Navy is not authorized to accept gifts or free loans. Therefore, the binoculars are purchased for $1.00 and if they are available after the war they will be returned to the owner, in which case the $1.00 will constitute rental and appreciation charges. Commanding officers of naval vessels are requested to notify you of the ship aboard which your binoculars are in service.

They're in the Navy Now

SOMEWHERE on the high seas, with engines throbbing in the urgency of their mission, grim gray ships press forward in spite of the deadly perils of sea and sky.

On the bridges and look-out stations of such ships, brave men stand alert, searching the horizon—on guard against enemy attack. These are the men whose task it is to fight our sea battles and protect the ships which feed your sons and your brothers, your friends and fellow workers clothe and arm America's expeditionary forces strengthen and aid our allies.

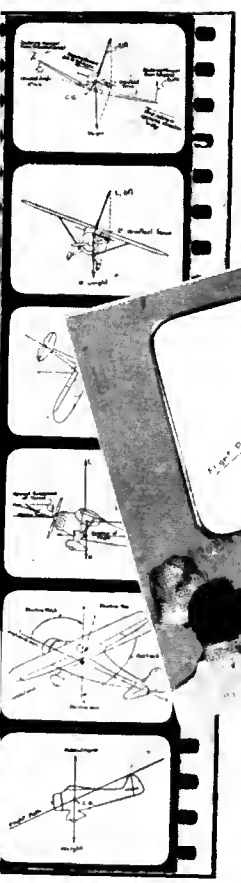
You can help these men, and thus help to hasten the day of Victory, by sending them your binoculars for the duration.

Binoculars are among the many optical instruments of war that Bausch & Lomb is producing and helping others to produce. Today, Bausch & Lomb is working a full twenty-four hours a day, but even with its vastly expanded production program there is not room enough, nor time enough, to turn out all of the binoculars the Navy needs.

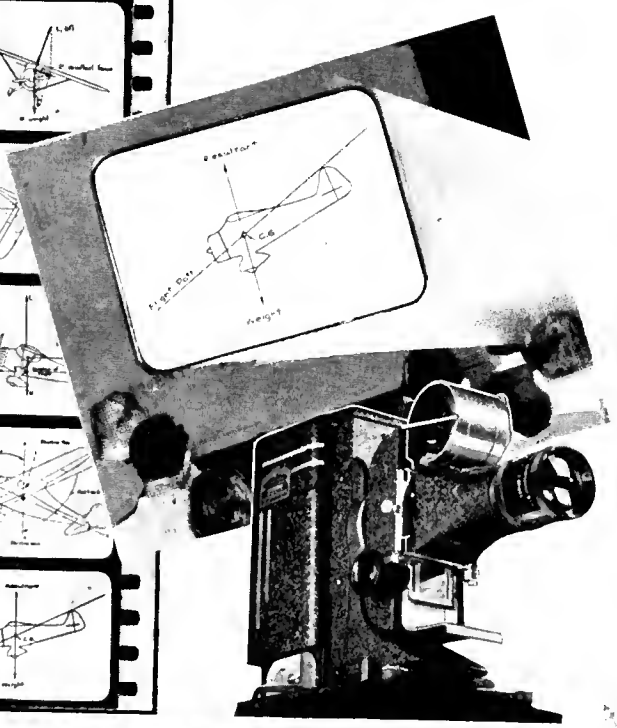
That is the problem you can solve—you and all the thousands of other owners of Bausch & Lomb 6 x 30 or 7 x 50 Binoculars. Your binoculars can help save American lives and American ships.

BAUSCH & LOMB
OPTICAL CO. EST. 1853

ARE TRAINED *Quickl*
WITH SLIDEFILMS
and S.V.E. *Projector*



(At left)
Scenes from the new S.V.E. slidefilms on "Theory of Flight" which are used by the armed forces and by high schools and universities. This new series of filmstrips is based on the book **Simplified Theory of Flight**, by Thomas C. Gillmer, United States Naval Academy, and H. Erich Nietsch, Massachusetts Institute of Technology, published by D. Van Nostrand Company, Inc., copyright 1941.



LONG before the treacherous attack on Pearl Harbor a year o December seventh, our Army and Navy commanders had alre proved the practical value of slidefilms in training programs.

The speedier learning which follows the use of these convenient 35 m filmstrips has been recognized by educators for over 20 years. Vis impressions not only **teach students faster** than oral statements but a assure better retention of facts which are learned. Because filmstr can be made quickly and at low cost they were used by the thousan to give our Army and Navy and Marines quickly the training th needed to defeat the enemy wherever they met him. They are be shown by S.V.E. Projectors in training schools and camps everywhere.

Today pre-induction courses for the 18 and 19 year old boys, and training programs for the new high - school Volunteer Corps are also being illustrated with slidefilms.

Slidefilms and S. V. E. Projectors are training not only our "avengers of Pearl Harbor" but our adult civilian population and the future defenders of democracy — the millions of boys and girls in our schools and universities.

Write for **FREE CATALOGS:**

Four ***new*** catalogs of 2" x 2" Kodachromes are now available on the following: (1) ***The Arts,*** (2) ***The Social Studies,*** (3) ***The Sciences*** and (4) ***The Beale Collection.*** Write Dept. 12 ES for the ones covering your needs! Also ask for a copy of the S.V.E. Picturol Catalog.

SOCIETY FOR VISUAL EDUCATION, INC.
100 EAST OHIO STREET · CHICAGO · ILLINOIS

MANUFACTURERS · PRODUCERS · DISTRIBUTORS OF