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BUREAU OF EDUCATION

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ORGANIZATION  
FOR VISUAL INSTRUCTION

By

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## EXPLANATORY NOTE.

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The visual instruction section of the division of educational extension of the Bureau of Education has within the past few months deposited in each of 35 distributing centers throughout the country an average of 113 reels of motion-picture film. In each of these centers these will be at once, or shortly, a part of a motion picture library. There are now well-established distributing centers of educational motion pictures within easy reach of the schools or other educational organizations, public or voluntary, in most of the States. This fact, and the additional fact that the production of educational motion pictures is receiving such constantly increasing attention, remove very largely the difficulties that have been in the way of any wide use of the motion picture for education—difficulties due to the inaccessibility and inadequacy of a suitable supply of films.

The technique of local distribution becomes, therefore, an important matter for both the distributing center and the user, since with the distributing center at hand and the sources of material becoming richer, success will depend on how well distributor and user cooperate.

It is with the hope of being of assistance in this matter that this bulletin is issued. Mr. W. H. Dudley, who has prepared the bulletin, has drawn largely upon his own experience in Wisconsin, where, as chief of the visual instruction bureau of the Extension Division of the State university, he has built up a system which has attracted Nation-wide attention. Mr. Dudley's explanations will save others some of the difficulties he has had to overcome by experience.

F. W. REYNOLDS,

*Director Visual Instruction Section,  
Division of Educational Extension.*

## ORGANIZATION FOR VISUAL EDUCATION.

### I. EDUCATIONAL USE OF MOTION PICTURES.

The man of vision and mental reach to-day is thinking of the motion picture in terms of service to education, to commerce and industry, to science and art, to religion and philanthropy; in short, of benefit to humanity.

Speaking of the educational value of films, President Emeritus Eliot, of Harvard, says: "The moving picture is a valuable means of instruction, and all our school systems ought to seize upon it."

"The time is at hand when moving pictures will be as much an adjunct of any properly equipped school as textbooks," writes Supt. Hyatt, of California.

"Indeed, the educator must use it," says Henry W. Lanier, "for at the present time film manufacturers are educating about 5,000,000 children a day along more or less undesirable lines."

We may safely assert that we have even now passed beyond the propaganda stage. It is no longer a question of worth while, but rather one of ways and means to an end now recognized by leading educators as a most worthy and fruitful one. It is not a question of the great possibilities or the practicability of such service; not a discussion of theories, or of some ultimate ideal for the remote future; we are past that period in thought and largely in action. It is now a question of how to realize in practice, and with the greatest efficiency and economy, the fullness of vision we already behold.

And may it not be said parenthetically and at the outset that we must get away, so far as university extension is concerned, from the "side line" idea of visual instruction, if it is to become a worthy part of our educational scheme. It is not enough simply to have a clerk in a hit-and-miss way lend slides and films and exhibits to those who ask for them, and who may know how to use them and may not.

Recognizing, then the existence of visual instruction material and service as an established element of education, what next follows is to study some of the larger and more practical problems involved, the working out of plans whereby the largest and most efficient and truly educational service with a minimum expenditure of resources can be rendered.

### FILMS FOR SCHOOLS—FOR ADULT EDUCATION.

The fact must not be overlooked that our university extension departments are largely, perhaps we may say chiefly, committed to the work of adult education, of carrying instruction to those not

formally enrolled in schools. We therefore have two rather distinct classes of borrowers—the schools on the one hand, calling for material to use in formal classroom work, and on the other hand civic and community organizations of many sorts, whose needs and desires differ from one another to a greater or less degree and in particular from the somewhat stereotyped needs of the schools. Either of these two classes of borrowers alone—the standing army of the public schools, and the militia-like civic centers, women's clubs, farmers' clubs, community welfare organizations, parent-teacher associations, etc., on the other—presents demands sufficiently large to absorb all the energies and resources of a well-organized and abundantly stocked department of visual instruction. Among our problems, therefore, is how to prepare for and meet these two kinds of calls without too much overlapping or duplication of work and material.

## II. A VISUAL INSTRUCTION BUREAU; ORGANIZATION AND OPERATION.

### IMPORTANCE OF DEFINITE PLANS.

Visual instruction service, to be worth while, requires careful organization and administration, the adoption of a definite educational policy, a study of the needs of borrowers with a view to fitting the service to those needs, and unceasing attention to mechanical details. Films and slides are expensive and must, therefore, be kept track of, repaired when needing repair, and otherwise be well cared for. It is important that visual instruction materials be kept reasonably busy. All this requires time, accurate records, the proper use of time-saving blanks, forms, etc.

The practical details of the organization and operation of a bureau of visual instruction, its relation on the one hand to sources of material—such, for example, as those of the departments of the Federal Government—and on the other to borrowers whom it serves, become at the outset exceedingly important.

### VISUAL INSTRUCTION BUDGET ESTIMATE.

The following estimate is intended to suggest only the minimum personnel, equipment, cost, etc., required to enable any center to carry on effective work in visual instruction and to qualify as a safe and satisfactory depository for Government films and slides. It is recognized that established conditions vary in different universities, involving in some cases an overlapping of activities that will necessitate a different distribution of work. The essential thing is to recognize that visual instruction service involves much attention to detail, both as to its educational and mechanical features; it

## A VISUAL INSTRUCTION BUREAU.

should, therefore, not be made merely incidental or subservient to other work.

### A. Personnel:

|  |        |
|--|--------|
| 1. Booking and record clerk, annual.....                       | \$1.00 |
| 2. Film and slide inspector, repairer, and packer, annual..... | .00    |
| 3. Stenographer, possibly part-time only, annual.....          | .72    |

### B. Equipment:

1. Proper vault or room for storage of films.
2. Moderate-sized workroom with tables, shelving for slides, etc.
3. Film shipping cases, slide cases, reel cans, repair material for both films and slides, etc.

#### Film cases, chief items--

|   |         |
|---|---------|
| Five 6-reel cases, at \$3.60.....                             | \$18.00 |
| Two 5-reel cases, at \$3.50.....                              | 7.00    |
| Six 4-reel cases, at \$3.20.....                              | 19.20   |
| Six 3-reel cases, at \$2.40.....                              | 14.40   |
| Six 2-reel cases, at \$2.....                                 | 12.00   |
| Six 1-reel cases, at \$1.75.....                              | 10.50   |
| Twenty-five 1-reel film storage cans, at 35 cents.....        | 8.75    |
| Twenty-five 1,000-foot metal-hub film reels, at 35 cents..... | 8.75    |
| One roll caution labels.....                                  | 1.00    |
| One film rewind.....  | 10.00   |
| One film-patching block.....                                  | 10.00   |
| 1,000 feet blank white leader film.....                       | 10.00   |
| 1,000 feet university ownership leader.....                   | 50.00   |
| One film inspector's table.....                               | 25.00   |
| One quart film cement.....                                    | 2.50    |
| Fifty 100-slide shelf boxes, at 15 cents.....                 | 7.50    |
| One case lantern-slide cover glasses (1,000 covers).....      | 11.00   |
| Lantern-slide mats, binding strips, etc.....                  | 3.00    |
| Twenty-five lantern-slide shipping cases, at \$4.75.....      | 118.75  |

The above estimate includes no provision for the production of either motion-picture films or lantern slides. Few university visual-instruction departments will find it practicable to establish a film-producing laboratory with the necessary equipment and personnel, as limited quantities of films from local subjects can usually be done cheaper by contract. On the other hand, a very efficient dark room for slide and other photographic production can be fitted up at an expense of \$500 or even less, and many bureaus of visual instruction will find it economy to include such provision.

### BOOKING AND RECORD CLERK.

The booking clerk can carry on most of this detail work, such as the booking of programs, keeping of records, inspection of reports, advise on problems of projection, etc., and can, if properly directed, handle some of the educational and advisory features of the service, such as the selection of slides and films, the organizing of programs, the selection of proper material for specific needs, etc.; yet the fact must not be lost sight of that a department of visual instruction is

not merely a film exchange, but, on the contrary, calls for much educational and constructive oversight and direction—a work that should not be placed exclusively in the hands of a booking clerk. Neither must it be forgotten that the more strictly clerical features of his work are no less important.

#### BLANK FORMS.

In several university extension divisions sustaining a department of visual instruction, various blanks, forms, report cards, etc., have been worked out. It is not practicable to reproduce these forms in this bulletin, although a full sample set of those prepared by any one of the universities referred to can doubtless be had upon request. The forms as now used in the university extension division of Wisconsin may be listed and briefly described as follows:

1. Purchase or Accession Card.  
For permanent file, showing sources of films or slide sets, their release dates, condition, and other data.
2. Film Inspection Card.  
For keeping record of each film as it is used from time to time, the entire series of cards on any film constituting its history.
3. Film Assembly.  
Consists of the subtitles or captions that run through a film. Useful in giving preliminary information in lieu of screening the film for that purpose. Assemblies of all films should be copied and stenciled.
4. Slide Inspection Card.  
Similar to film inspection card. Series of cards on any set shows extent of use, auspices, etc.
5. Slide Order Card.  
For use in making requisition on dark room or purchasing department.
6. Lecture Manuscript.  
A stenciled syllabus to accompany each set of slides. Being printed in quantity, it can be placed in the hands of borrowers before slides are forwarded, thus insuring more thorough preparation.
7. Blue Print of Slide Shipping Case.  
Plans and specifications of the double wooden case recommended by the visual instruction committee of the National University Extension Association.
8. Application Form for Slide and Film Service (Direct).  
Contains contract and conditions relating to service by the *direct* plan.
9. Order Blank.  
For use of borrowers.
10. Shipping Ticket.  
In triplicate, three colors—to be made out in carbon, one copy to borrower, one to shipping clerk, and one for serial file.
11. Report Card (direct service).  
To be mailed by borrower at time of return of films and slides.
12. Preliminary Circuit Schedule.  
An announcement of the contents of circuits offered, permitting borrowers to make intelligent choice of circuits.
13. Circuit Application Form.  
Similar to form used in direct service.



14. Circuit Schedule.  
A formal grouping of films and slides in "packages" for circuit or routing service, showing order of arrival of packages, etc.
15. Circuit Chart.  
The entire itinerary of a given circuit, showing towns included, borrowers, and dates of arrival of packages.
16. Circuit Report Book.  
Similar to report cards for direct service, but in triplicate, one copy to remain in hands of borrower reporting, one to go with package to next borrower, and the third to be mailed to visual instruction department in special envelope provided.
17. Circuit Report Envelope.  
This envelope is specially prepared, with blanks for data printed on the outside, and reports are filed in them.
18. Operating Booth, Blue Print and Specification.  
Prepared to conform to underwriters' requirements.

#### FILM AND SLIDE INSPECTOR—SHIPPING CLERK.

*Repairing films.*—The most vital mechanical problem is to keep the films and slides in proper repair. A new reel of film costing \$100 may be ruined in a comparatively short time if it is not inspected after each run. A slight tear or break, if not immediately mended, may in a short time grow to disastrous proportions. Every reel should, therefore, be gone over in the rewind before it is run through a projection machine, and with the aid of a splicing block and good film cement all tears or weak splices made whole. In splicing, the two members to be united should be so trimmed that when inserted in the splicing block they will be properly framed. The emulsion sides (dull) should be uppermost; about an eighth of an inch of the emulsion of one member of the splice should be first moistened, then scraped away with a sharp safety-razor blade, after which a small quantity of cement should be applied to the exposed surface, upon which the shiny side of the opposite member should be clamped down in the splicing block, there to be left (30 to 60 seconds) till the cement sets. If the overlap at the splice is very narrow, the film will run smoothly through the projection machine. Any badly torn sections of film should be cut out entirely and the gap bridged over by splicing.

The film inspector in each center should supply each borrower using his films with careful instructions for inspecting and mending films, insisting upon such inspection after every run whenever films are to be exhibited more than once while in his hands.

*Repairing slides.*—Each slide consists of two glasses—the slide proper, which bears the picture, and the cover glass. These two thin glasses are held together by means of a strip of binding paper, the emulsion or gelatine side of the slide being next to the cover. When slides are cracked, the damage may be in the cover glass only, which can be repaired by simply removing the binding strip and

substituting a new cover. This should be done at once, before the slide, weakened by a broken cover, also becomes broken. If the slide proper is broken it should be replaced by making or purchasing a new one.

*Shipment of films.*—Whether forwarded by express or parcel post, inter-State and postal regulations prescribe the use of a standard film shipping case, made of galvanized iron, fiber lined, metal hinged cover, and provided with hasp and snap. "Telescope" cases, or those with leather or web straps, are no longer permitted. Cases are made in sizes from 4-reel to 7-reel, inclusive. It is not required that reels should be in individual film cans when shipped in regulation cases.

In addition to the usual address label on a case of films, there should also be attached a "caution label," indicating the inflammable character of the contents. These cases, labels, etc., can be purchased of any motion-picture supply house, a list of which will be found on another page.

Films when sent by express are given an insurance valuation up to \$50 without payment for insurance beyond the regular express tariff. For a valuation above \$50 a charge of 10 cents for each additional \$100 or fraction thereof is made. Each reel of film should be entered in the express receipt with a valuation of \$50, although on a shipment not exceeding six reels a total declared valuation of \$150 is sufficient to insure proper precautions in transit. If sent parcel post, insurance must be taken out either with the Post Office Department or one of the regular insurance companies. The latter provide insurance books, which are most convenient and carry a lower rate than that written by the postal authorities.

*Storage of films.*—When not in use films should be filed in a vault or a cool, dry, fireproof storage room, preferably provided with outside flue or connection for the escape of gases which gradually emanate from the films. Each reel should be kept in an individual film can. These cans are supplied by the trade, either in tin or galvanized iron.

#### MOTION PICTURE AND LANTERN SLIDE SUPPLIES.

Various supplies, such as metal reels, shipping cases, vault cans, etc., will be required by distributing centers. Supply houses for such materials are located in all the larger cities.

*Motion picture machines.*—Following is a list of some of the leading manufacturers of motion picture machines. The motion picture projectors are grouped under three heads: "Professional," "portable," and "semiportable."

**Professional:**

Simplex—Precision Machine Co. (Inc.), 317, East Thirty-fourth Street, New York, N. Y.

Motograph—Enterprise Optical Manufacturing Co., 521 West Randolph Street, Chicago, Ill.

Cameragraph—Nicholas Power Co., 88 Gold Street, New York, N. Y.

Veriscope—Wilboken Manufacturing Co., 248 Reed Street, Milwaukee, Wis.

**Portable:**

American Projectoscope—American Projecting Co., 6235 Broadway, Chicago, Ill.

DeVry—The DeVry Corporation, 1250 Marianne Street, Chicago, Ill.

Aemo—United Theatre Equipment Corporation, 1002 Broadway, New York, N. Y.

**Semiportable:**

Graphoscope, Jr.—The Graphoscope Co., Washington, D. C.

Animatograph—Victor Animatograph Co., Davenport, Iowa.

Zenith—Consolidated Equipment Co., Duluth, Minn.

It should be pointed out that the fire regulations in most States require that *all* machines, whether professional or portable, which employ inflammable films must be housed in a fireproof booth. Thus far the great bulk of motion-picture films of standard width are on inflammable stock. This is true of practically all films supplied by the Government.

### III. A VISUAL INSTRUCTION SERVICE: FUNDAMENTAL CONSIDERATION.

#### VALUE OF CIRCUITS.

A fundamental consideration in building and administering a service in visual instruction is that of the function and value of circuits—their limitations in a pedagogical sense, their value in community education, their advantages as a stimulus to constant and unremitting effort and preparation on the part of borrowers; the disadvantages, if such there are, as well as the advantages of the arbitrary element in the circuit; the advisability of circuits for special classes of borrowers, such as industrial schools, and on special subjects, as agriculture, etc.

It may here be said that the circuit plan of distribution can be prosecuted successfully, as has been fully demonstrated in Wisconsin, where circuits have been in operation for six years, and with increasingly gratifying results. It is in line with systematic and constructive effort to have a yearly program worked out in advance, a program around and upon which borrowers can build and to which other instructional efforts in the schools and other centers served can to a large extent be made to bend and contribute.

Circuits, however, require more work than simply that of preparing sets of slides and films with descriptive manuscripts and then starting them to circulating. Borrowers must be instructed and educated

in their proper uses; the manuscripts must be in their hands long before the arrival of the slides and films, so that intelligent and thorough preparation can be made, involving the collection of supplementary material, such as free bulletins from Federal and State sources, of books from the library commission; the enlistment of the local library in placing on the current shelves at the proper times all available books and documents bearing on the subjects included in the circuit, and of advertising them by the usual methods employed by libraries; the securing of package libraries from the department of public discussion for the use of the one or the ones who are to discuss the slides and films.

#### CIRCUITS STIMULATE HOME STUDY.

Such a procedure inaugurated and persistently followed up by the ones directing the circuit will bear fruit in the awakening of an entire class or school or community to a preliminary study of the substance of a routing package, so that when the slides and films arrive they will be received like seed falling into fertile soil, which, being properly prepared, makes possible depth of root and the bringing forth of fruit, some 30, some 60, and some 100 fold.

Moreover, such a procedure makes possible self-activity, that most vital element in worth-while education, and the self-activity not only of the one or ones in the community directly in charge of the routing package for the week but of all involved, whether lecturers or listeners— it “blesseth him that gives and him that takes.”

Indeed, more lasting benefit has often been secured to a community through such organized activity of its own citizens, thus stimulated and directed and supplied with educational implements, than would have been possible by the employment of “outside talent” in the way of lecturers, institute workers, etc. Perhaps the secret of this lies in the fact that people prefer to work out their own schemes of life independent of authority rather than listen to the “thou shouldst” of an alien. One need under such circumstances have no fear of the “canned lecture.” It will, as a result of the treatment just suggested, have undergone so complete a fermentation as to show unmistakable evidence of vitality of the most virile and procreative kind.

#### COOPERATION WITH COMMERCIAL EDUCATIONAL AGENCIES.

A second general consideration relating to a visual education service that may well engage our serious thought is the work being done by the educational departments of some of the large industrial corporations, or associations of such corporations, throughout the country. One need only look at a map of the United States recently issued by one of these corporations, with its attendant legend, show-

ing slide and chart services in every State of the Union, circulating 125,000 slides and as many charts which were used in approximately 50,000 meetings, with an aggregate attendance of nearly 5,000,000 people, to have forced upon one the question, Are these educational forces more aggressive, more wide-awake, and efficient than those established by the State? And are they to set the pace, fix standards and ideals, and even to an extent dominate or supplant the work of the universities? Or should they have their natural outlet through and in cooperation with the departments of university extension? This is an important question, and should be considered by all visual education departments. It would seem as though well-organized visual instruction bureaus in universities, having the machinery to handle and distribute slides and films and educational exhibits, should by proper agreement on a definite policy be able not only to continue to use educational material from these sources, as many are already doing, but to set certain standards and conditions of cooperation on the part of these contributing organizations that would be wholesome and safe so far as university extension service is concerned, and that would be wholly acceptable, and indeed advantageous to these industrial organizations in furthering their educational efforts. At this particular juncture the problems involved in this question, together with the one of the systematic production of films by the university extension divisions, are of greater importance in their bearing on future visual instruction activities than any now before us.

#### PRODUCTION OF FILMS BY UNIVERSITY EXTENSION DIVISIONS.

University extension film service will never be raised to the dignified and efficient plane that it should occupy until it is equipped with camera and operator for the production of films. Most of the films in educational use to-day are isolated theater films having more or less instructional value, or industrial films produced for direct or indirect promotional purposes. Nearly all these films, of either class, contain elements which, to say the least, we would prefer to have different or omitted entirely. It is true a few producers are endeavoring to release for the market exclusively educational films, but the success of their efforts is problematical. Their producers either lack the proper pedagogical training or the capital to finance such an undertaking, or both. Their chief customers must be bureaus of visual education and educational film exchanges. Schools or societies would rarely be able to make so large an investment in film purchase would involve. If film producing companies of this sort succeed financially, it will be at the cost of that thorough study of the things most important to be taught, and of minute attention to details of instructional arrangement that films should have in order to meet the rigid demands of our university extension service.

The most logical solution of this problem, therefore, lies in producing ourselves a large proportion of the films we need. Not all, of course, but there is a wealth of subjects that can be organized and filmed more successfully in a great university, with its enthusiastic specialists and experts, than anywhere else. One university, for example, could produce a film on antitoxins, vaccines, and serums in their relation to communicable diseases far better suited to educational use than any on the market at present. An admirable film was recently produced on a biological subject, which would have much greater value and could be used with greater satisfaction if it were free from biological errors—errors that would not have crept in had its production been aided in and censored by men from the biology department of one of our universities. Illustrations could be multiplied almost indefinitely of films of the highest educational value that could be produced in the university and with the aid of the university staff.

#### STATE AND MUNICIPAL STUDIES POSSIBLE.

We must recognize also the tremendous value of having at our disposal the means of making studies of State institutions, State activities, and State problems. Here follows a list of films that could be produced under the central guiding direction of the bureau of visual instruction, if it were equipped for doing simply the camera work. The list is for Wisconsin. It can be modified to fit any State.

#### THE COMMONWEALTH.

Its scenery, State parks, natural resources, etc., could be planned and executed in cooperation with the Conservation Commission, State Federation of Women's Clubs, local park and outing clubs, etc.

Its industries—manufacturing, agricultural, commercial, etc.: The lumber industry could be made in cooperation with the lumber dealers' association, and in like manner the iron industry, the paper industry, the butter industry, the leather industry, the woolen industry, the ice industry, the furniture industry, the cheese industry, lead and zinc mining, and general agriculture. Films produced on correct pedagogical lines showing processes in these industries would have the utmost value. They could be made by interesting the proper associations.

Its history: Views taken on historic ground throughout the State. Historical pageants of different sections of the State could be worked out by the normal schools and larger high schools on historic ground, and be brought together and unified.

Its social conditions: The various "movements"—garden, infant welfare, good roads and highways, sanitation projects, bird study, libraries and library activities, playground, the boy problem, State and county fairs, etc.

Its charitable and penal institutions: State, county, and municipal. A thorough study of these would be most valuable.

Its educational institutions and forces: Ideal rural schools, consolidated schools, graded schools, high schools, continuation and industrial schools, county training schools, county agricultural schools, State normal schools, State university.

Its governmental machinery: State, county, and municipal—legislative, judicial, executive, commissions, etc. Films, in much the same manner as we are

now preparing slides, should be produced to supplement and illuminate the textbooks, as in botany and other sciences, physiology and hygiene, history, literature, agriculture, languages, etc.

#### COST OF FILM PRODUCTION.

It may not be profitable to devote space to a discussion of the cost of film production more than to give two or three illustrations. There was produced for a certain university by a film concern a film of 1,000 feet, costing \$250 for the negative and one positive. Another reel was made by a local camera man on the basis of furnishing him the stock (at a cost of \$35 for the negative film and \$32.50 for the positive film) plus \$2 per hour for his time and work. This film cost \$195. It is better than the one produced by contract. Assuming that an extension division has a camera and a man competent to operate it, but no equipment for developing the negative or printing and developing the positive, there would be an additional cost of 1½ cents per foot for printing and developing the positive, and of 1 cent per foot for developing the negative, or the total cost would be \$92.50 for the reel, including negative and positive. This, deducted from \$195, the lowest price paid under contract, leaves a margin of \$102.50.

It will be observed that this \$102.50 must all have gone to the camera man for his work with the camera alone. In the particular instance before us the camera work was distributed over three different days. This sum would nearly pay the salary of a camera man for a month. A camera of the highest grade can be purchased for \$600; one thoroughly practical for \$300. It would, therefore, be more economical to have a camera and a man to do the work, even on the basis of the production of only 12 reels per year. But note that the actual production of 12 reels would consume comparatively a small part of the man's time, leaving him free for other work, such as the care and repair of films. If films were made on a semicommercial basis for other organization, such as the historical society, State teachers' association, State and county fair associations, etc., the proposed position could be made in part self-supporting.

#### FILM PROGRAMS FROM RENTAL SOURCES.

An increasingly important type of service is that of the renting of films from the regular producers and film exchanges for university extension work. It is well understood by those who have had any experience in handling films that there are many subjects possessing distinct value in extension work that, even though it might have a film camera, could not be made by an extension division, because of intrinsic difficulties; neither can they be purchased, either because the cost is prohibitive or because of their not being purchasable at any price. We could not, for example, purchase the Francis X. Bushman production of *Romeo and Juliet* or the Mary Pickford

version of *Cinderella*, though they can be rented. A list of two or three hundred subjects, selected from various producers and exchanges, could readily be prepared, that could be made available for rental purposes through the university extension divisions—the extension division, indeed, acting in such a connection as an exchange, being entitled to the same discount rental terms as an exchange. The films could be offered to the schools and communities at cost, or at a slight advance over cost, and at a distinct saving to the schools on what they would have to pay were they to deal with the exchanges separately and individually.

These selected films would be the best that have been produced—best in the sense the term is used by the National Committee of Review, by the various committees from woman's clubs, civic clubs, etc., and who are passing resolutions, introducing bills in the legislatures, etc., to bring about reforms in the movie theater program. It would be sure constructive effort for good; and just as the introduction and free circulation of our best books into our communities and schools through the school and public libraries, and by the traveling libraries from the State library commission, have done so much to destroy a taste for the dime novel and other lurid literature, supplanting them with a craving for the best, so the theaters and producers would be forced to cater to the demand for a higher tone in films—a demand growing out of the systematic cultivation through the schools and civic centers of a taste for that which is clean and wholesome, and that will stimulate and satisfy one's nobler thoughts and feelings. The need for laws and boards of censorship to "regulate" would largely disappear.

This plan would have the added advantage of helping to shape and direct the taste of those working for community good who have occasion to rent films in addition to those owned and supplied by the extension division—and there are many who need this training. When a school has installed a standard motion-picture machine at a cost of \$300 or more, those in charge of it are like a child with a new toy; they want to run it frequently; they want more films and films of a different type than those offered in the usual way. These films are in demand for special occasions or needs, sometimes even for the production of revenue to be used in furthering a worthy community enterprise, such as the purchase of playground apparatus and the like. An extension division's sphere of service would be considerably enlarged if it had such a list from which to draw and which it could positively recommend. It would then not be obliged to turn inquiries for supplementary and special material over to the tender mercies of the film exchanges, subjecting them to the exchange's dangerous "sight unseen" policy.



## COOPERATIVE RENTING.

Here is a direction in which intervarsity cooperation, or cooperation with the visual instruction section at Washington, could be practiced to great advantage, and in a way perhaps in some degree resembling the cooperation now in vogue among the lecture departments of some of the universities. There are many film producers who would gladly print new copies of very desirable films for the exclusive use of our extension divisions if a few universities could get together on a program that would keep these films active for a reasonable length of time throughout a given season.

## IV. WISCONSIN PLAN—A TYPICAL BUREAU OF VISUAL INSTRUCTION.

Following is a brief account of the work in visual instruction as it is actually being carried on in the extension division of the University of Wisconsin:

The bureau referred to was established in January, 1914, for the purposes—

(a) Of making a thorough and systematic study of the various materials that may be employed in illustrative teaching, or in instruction through the medium of the eye;

(b) Of devising plans for placing such illustrative material within easy and constant reach of the schools and other social organizations of the State; and

(c) Of giving advice, direction, and personal assistance to schools and other organizations availing themselves of this service, in proper methods to be employed in the use of slides, films, and other visual instruction material to the end of accomplishing the maximum good, and in ways that will stand the test of educational criticism.

The work of the bureau involves the following features:

1. *Lantern slides.*—The accumulation of a carefully selected library or collection of educational lantern slides, arranged in definite sets to fit definite school and community subjects and problems. These are being lent to the schools of the State for use in connection with the regular class work in the schools, and to other organizations for community welfare work. These slides are to some extent purchased wherever available, but for the most part they are made in the bureau, which is equipped with an up-to-date photograph department in charge of a thoroughly competent slide maker and colorist. The material for the slides is collected and edited by members of the university faculty and others who are authorities on the subjects treated, and who also write the descriptive matter to accompany them.

2. *Motion picture films for schools.*—The extension division recognizes that the motion picture, which has thus far been a means primarily of entertainment and amusement, has vast educational possibilities, and should be brought into regular use in all departments of school work from the primary to the high school, as well as in community welfare work. To that end motion picture films are being constantly accumulated to lend to schools and other civic organizations throughout the State wherever provision in the way of machines, etc., is made for the use of such films.

The bureau keeps in close touch with such schools, and stands ready to render every assistance, both by correspondence and by personal visits, to the end of securing the most thorough and efficient organization of this work in the schools which undertake it.

3. *Films for community gatherings.*—Recognizing, as we must do, that to properly entertain the people is one of the most important functions of modern educational machinery, the bureau also provides, for free use throughout the State, sets of slides and films of somewhat popular subjects—travelogues, films on health, social problems, standard dramas, juvenile features, etc., suitable for more or less formal evening meetings, where all the people of a community can meet for enjoyment, recreation, and education.

4. *Other aids in visual instruction.*—In addition to the above the bureau serves as a clearing house and a source of information concerning all other sorts of material properly coming within its scope, such as pictures, plates, cabinet collections, microscope slides, working material in the various sciences, etc., the aim being to serve the schools and the people as fully and efficiently as possible, together with that economy that must result from a carefully conducted, centralized organization.

#### EXTENT OF SERVICE.

There are now in service something over 125,000 lantern slides on between 250 and 300 subjects, and about 4,000 reels of motion picture film of 1,000 feet each on over 200 subjects.

Two plans of administering the service are in practice—the “circuit” and the “individual service” plans.

#### CIRCUITS.

Circuits are established wherein the slides and films are forwarded from one school or community to the next in line, without first being returned to the bureau. By virtue of such a routing the material involved is used in the most economical way possible so far as time and labor and expense of transportation are concerned. It is moving systematically and at regular weekly intervals from place to

place; the stations on the circuits are comparatively close together, and expense of transportation is therefore light.

During the school year 1919-20 thirteen circuits were in operation, wherein service was extended to 275 communities, involving the circulation of 20,000 slides and 1,000 reels of film. Although the number of different slides and films was thus comparatively small, the number used amounted to 427,500 slides and 25,000 reels of film. This, obviously, is a convincing argument in favor of the establishment of circuits.

#### INDIVIDUAL OR SPECIAL SERVICE.

In the individual or special service plan slides and films are lent direct from the bureau. During the fiscal year 1918-19, 2,050 sets of slides averaging 75 slides to the set, and 4,560 reels of film were sent to 750 different organizations in 560 towns and cities. Obviously where shipment is made to more or less remote parts of the State, in each case to be returned to the university before going out on another trip, the time consumed in transit is much greater, which of necessity reduces the actual amount of use of the material. Again, the expense is greater, due to longer distances and the extra return shipment. So far as can be determined from the evidence at hand, the expense to the borrowers on the routing plan has averaged 40 to 60 cents per week, a total of about \$11 for the year. The average expense on the individual service plan amounts to about \$1 or \$1.50 for the round trip on each shipment.

An advantage of the direct or special service over the routing service plan lies in the fact that it is often desirable, and by this plan is possible, to get slides and films on a certain subject at the time that subject is under consideration. This can in part be met in the routing plan if the borrower will carefully study the year's routing schedule when it is issued, and thus learn when the various collections of slides and films will reach him. He can then plan ahead, and bend the school work in a degree to accommodate it to the service.

The following brief tabulation of the visual instruction work during the fiscal year July 1, 1918-July 1, 1919, may be of interest:

#### Circuit Service:

|   |         |
|---|---------|
| Number of circuits in operation.....  | 10      |
| Number of schools and centers on these circuits.....  | 250     |
| Number of slides on these circuits.....   | 21,400  |
| Number of films on these circuits (reels).....  | 700     |
| Number of schools and centers in these circuits receiving both slides and films weekly for school year..... | 100     |
| Number of schools and centers receiving films only.....   | 75      |
| Number of slides shown.....   | 427,500 |
| Number of reels of film shown.....  | 17,500  |
| Gross attendance at all meetings, as shown by weekly reports.....   | 482,000 |

*Special Service:*

|  |           |
|--|-----------|
| Number of schools and centers receiving direct or special service (many of these were also on the circuits)..... | 750       |
| Number of sets of slides thus supplied.....  | 2,060     |
| Number of slides shown.....  | 153,730   |
| Number of reels of film thus supplied.....   | 4,500     |
| Average number of people in the audiences where films and slides were used (as shown by weekly reports).....     | 500       |
| Gross attendance at all meetings.....  | 1,500,000 |
| Number of schools and other public organizations provided with stereopticians.....                               | 425       |
| Number of schools and centers provided with standard motion-picture machines using standard films.....           | 230       |
| Gross attendance at all meetings, both circuit and direct service.....   | 2,022,000 |
| Total number of bookings of films and slides, including circuit and direct service plans.....                    | 6,020     |

## DEFINITE TIME LIMIT ON LENDINGS.

Each place on a circuit, and each borrower of material direct from the bureau, has the privilege of holding the packages of slides and films *an entire week*. This arrangement obviates congestion or delay, and enables schools to make more abundant and thorough use of material.

The number of visits of slides and film packages in a given circuit is limited to 25, the circuits starting November 1 and closing May 25. The number of reels of film in each routing package varies with the subject. There are never, however, less than three full reels, and in many cases there are four to six reels. Industrial subjects for the most part are included as extra reels along with other films.

## EQUIPMENT OF SCHOOLS AND CENTERS.

A significant feature attending the establishment of the bureau of visual instruction was the prompt response which it immediately met from the schools and other centers throughout the State. Obviously, for a university-extension division to hesitate to purchase films and slides and offer such service to its State on the ground that so few schools are equipped with machines that it would not pay is putting the cart before the horse. Once establish a film and slide library and the machines will be installed faster than they can be given the service.

Requests are received frequently for advice in the matter of purchase and installation of a lantern or motion-picture outfit. Clearly it is not the function of the bureau to select machines for schools, or to recommend any particular make. The bureau takes the position, however, that an equipment installed in a school should be as efficient and standard in every way as one that goes into a theater. There are many cheap and inferior machines on the market that through mis-

taken ideas of economy are thought to be "good enough for schools." They are bound to be disappointing from the first, are more or less a source of danger, and are likely to injure the films. The bureau reserves the right to deny or withdraw film service to a school if it becomes apparent that the machine in use is unduly hard on the films.

All the institutions on the circuits have their own outfits. Indeed, the circuit service is not open to an organization that is without stereopticon or motion-picture machine, and would hence have to use the films in a theater. Films and slides on the direct-service plan may be used in theaters when handled by schools or community-welfare committees, and where all private commercialism is eliminated. The proceeds, if admission is charged, must all be devoted to public-welfare purposes. Fortunately most of the makers of standard machines give special educational terms and prices to schools, hence the cost of a suitable outfit need not be a serious problem.

A list of stereopticons and one of motion-picture machines approved by the bureau is available to those contemplating installing a machine. School authorities are advised to get catalogues from all these concerns and make careful investigation in the light of individual needs, such as kind of light necessary, whether to be used in the country or for experimental work, etc., before deciding upon what to purchase, advising with the bureau on doubtful questions.

#### FIREPROOF BOOTH REQUIRED.

The rules of the underwriters and the Industrial Commission, as well as ordinary precaution, prescribe that a motion-picture machine must be housed in a fireproof booth, constructed of metal, asbestos, or concrete. Inasmuch as most school assembly rooms can not spare floor space for such a purpose, it has been found expedient for that and other reasons to place the booth against the rear wall, partly suspended from the ceiling. Specifications of a booth which has received the O. K. of the Industrial Commission are furnished by the bureau. Often the booth can be built by the class in manual training.

#### SLIDES AND FILMS IN SCHOOLS v. IN COMMUNITY MEETINGS.

It must here be repeated that slides and films are sent out by the bureau in response to two needs—one the strictly pedagogical need for classroom instruction, and the other to meet the less technical, yet none the less educational purpose of instructing and edifying the whole people of the community through lecture sets of slides and through films on travel and welfare subjects, etc. We are fast giving up the notion that motion pictures mean nothing but "movies," and have gotten away from the old idea of a "magic-lantern show"; and we are now realizing that both have immense

educational possibilities. In order to accomplish their greatest good in either classroom or assembly hall, however, they must be handled and discussed and explained by one who has made a careful and thorough study of their contents. The class approach to the study of a topic through the aid of slides or motion-picture films should be essentially the same as a laboratory exercise in science. The exercise should have for its aim the teaching of a certain truth or truths. Particular observations should be made by the pupil, and clearly and accurately reported by him. Some conclusion or generalization should follow. In other words, visual instruction should be reduced to a pedagogical method. These statements refer to the use of lantern slides for formal classroom instructions or of pictures in any form for individual study, rather than to their use as a means of general community instruction or edification.

The bureau has prepared, with the coöperation of many of the university faculty, manuscript readings and descriptive notes to accompany the slides and films. These readings and notes and film assemblies are stenciled and printed in quantities sufficient to provide every borrower with a full series of manuscripts, covering all the slide sets and films scheduled for his use throughout the year. The readings are provided with copious library references and are intended merely as a basis for study and preparation on the part of the one who uses the slides or gives the illustrated lecture. He is urged to draw abundantly upon the local library for additional help, the package library department of the university extension division, the State Free Library Commission, and upon governmental departments for bulletins, reports, etc. The whole idea, in short, may be summed up in the following extract from a letter of advice to borrowers, sent out by the bureau.

Have the lectures given in your school or social center or other individual place of meeting, resorting to public halls or theaters only when absolutely necessary.

Select carefully, after looking over the whole school and community, the person best fitted by natural endowment and by interest in the subject to handle and deliver the lecture and discuss the films. The principal of the school will miss a great opportunity if he does not engage the interest and cooperation of a number of people, both in the school and in the community at large in this direction. To illustrate: There is doubtless some one person in your town who is more or less an authority on dairy cattle and dairying. Let him have the manuscript on that subject; urge him to collect all material possible (every manuscript has a list of references at the close), then study the lecture, assimilate it, work in his own experiences, discuss it with his neighbors, etc., so that finally he will speak with authority, and will not simply read in a parrotlike way a lecture somebody else has written. This suggestion applies most vitally to all the lectures in the series. You can soon have half the community not only going to school but contributing in no small measure to the educational advancement of its citizens.

And why should not the superintendent or principal of the school frequently call in other scholars of the community to give the school and its patrons the benefit of their studies and experiences? When the lecture on "American Art and Artists" is to be given, who better to handle it than the club woman who has studied the subject and who has a real enthusiasm for art? What more fitting than to invite a person who has visited Venice to give that lecture, even though he may not be a professional lecturer? There is no better way to develop and establish the community spirit. The young and old will assemble themselves together to learn and to commune with one another. The results where this plan has been followed, instead of one person's attempting to read in a necessarily indifferent way one lecture manuscript after another, have been more than gratifying. It is a working scheme that should be practiced wherever the service is received. But it is not a scheme that can be made automatic. Its direction calls for a man or woman or committee with a vision, and with executive ability of a high order, and with willingness to devote time and enthusiasm and unremitting effort to necessary details.

#### RURAL EXTENSION SERVICE.

In order to meet the increasing demand made by the high schools, the county superintendents, the county agricultural agents, and the State graded schools for opportunities to use educational slides and films in neighboring country schools, every borrower, whether on the routing circuits or receiving special service, is permitted to retain possession of a package for at least one week, and longer if needed. This makes it possible for members of the high-school teaching force to cooperate in extending this service to rural schools and communities in a most effective way. The college of agriculture of the university has assisted the bureau in collecting and organizing sets of slides and films of peculiar interest and value to rural communities. This phase of university extension work is becoming more and more active.

In order to receive the slide and film service from this bureau it is necessary for all borrowers to fill out and sign an application form. This form contains in detail the rules and conditions under which the service may be enjoyed, as follows:

1. As the service is free, supported by the State, its use in the community must be free—not commercialized in any way. Some exceptions are made, as when it is desired to raise the necessary funds to carry on the service to purchase a machine, to raise money for welfare work, as playground apparatus, etc.; but each case of that sort is made the subject of a special application, and is dealt with on its own merits.
2. Borrowers are required to pay transportation charges.
3. The slide and film service must not be made a feature of a local motion-picture show, but must be independent of all alliances or combinations.
4. *Routing or circuit service* will be extended only to schools equipped to use it; i. e., this type of service can not be used regularly in a motion-picture theater.
5. An annual registration fee of \$7 for either slide or film service, and \$12 for both films and slides is payable in advance. This fee is not to be regarded as a rental charge, but is to pay incidental expenses of the service. The fee

entitles the subscriber to unlimited borrowing for one year, not only on the circuits selected, but direct from the bureau, and at any time throughout the 12 months. Those not desiring circuit service will pay \$5 annually for slides or films, or \$7 for both.

6. Borrowers are required to pay cost of repair or replacement of slides broken or lost, or films lost or damaged, while in their possession.

7. Shipment must be made promptly on dates set forth in shipping schedule. Expense due to failure to make correct shipment, and on time, will be charged to the borrower responsible for the error.

8. Detailed report on the condition of slides and films when received and when forwarded is to be mailed to the bureau *when shipment is made*. When proper report is not made, any breakage or film damage reported by the next borrower, if on circuit, will be charged to the one failing to report.

The bureau offers to the schools and communities of the State other material for use in illustrative teaching, including—

(a) Photographic prints, post cards, stereoscopic views, educational pictures clipped from magazines, etc.

(b) Cabinet collections.—There is a large amount of material of this kind, not bulky or difficult to prepare and transport, but more or less inaccessible to the average teacher. Through the cooperation of the department of economic entomology, a number of cases of injurious insects have been placed in service. These sets are sent out on special application.

(c) Microscope slides.—Sets of microscope slides on botany and for use in the study of human anatomy are now ready.

(d) Wall pictures.—To use in art exhibits for the study of school-room and home adornment.

In order to meet a constantly growing demand for wholesome films of a more popular character for use in community gatherings—films which it is not the policy of the extension division to buy (most of them, indeed, not purchasable at any price)—arrangements have been entered into with leading producers whereby schools can secure through the bureau some of the best films—five or six reel “features”—as well as certain slide sets at prices considerably below what would have to be paid if obtained direct from the producers. A special list of such films and slides is furnished upon application.

A room in the university extension building has been fitted up and equipped with stereopticons, motion-picture machines, and projection apparatus of many of the leading makes. Teachers and committees are invited to come to Madison at any time to inspect these machines side by side and compare their respective merits with one another. It is also possible at the same time to become better acquainted with the visual instruction plans and purposes of the university extension division as well as with the stock of material.