

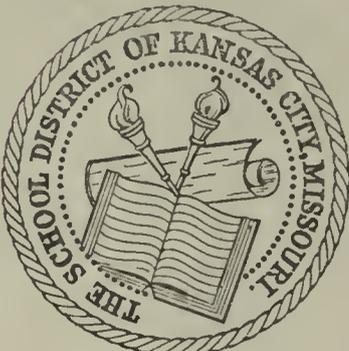
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EDUCATIONAL SCREEN

The Magazine Devoted Exclusively
to the Visual Idea in Education

JANUARY, 1938

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of the
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IN THIS ISSUE

*Visual Aids in
Physical Education*

*Present Status of Teacher
Training in Use of Visual Aids*

Why Visual Aids?

Learning at a Glance

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Index to Volume XVII (1938)

FORMAL ARTICLES

	No.	Page
(Arranged Alphabetically by Authors)		
Alexander, J. D., Visual Aids in Physical Education	Jan.	7
Anhalt, Edward, The Guidance Laboratory Production at Teachers' College	May	147
Astell, Louis A., The Development and Needs of Visual Aids in Chemical Education	May	150
Burdick, H. O. and Weaver, D. W., Jr., Microphotography	June	185
Byrne, Annette Glick, Why Visual Aids?	Jan.	8
Crawford, E. Winifred, Amateur Motion Pictures in the Schools	Apr.	117
Dale, Edgar, Looking Ahead in Visual Instruction	Mar.	82
A Close-up and a Long View	Sept.	222
Doane, Donald C., What I Want from the Producer of Educational Films	Oct.	257
What I Want from the Distributor of Educational Films	Nov.	289
Eldridge, Donald A., Vitalizing a Photoplay Club Program	Dec.	329
Evans, Marian, Visualizing Life—Today and Tomorrow	Nov.	288
Fenton, Belle B., Slides and Films in Correlation	Mar.	81
Finch, Hardy E., Film Production in the Schools	Sept.	216
Genskow, H. M., Visual Aids in Extension Classes	June	179
Gregory, William M., A New Method of Quality Production of Graphs and Diagrams on Lantern Slides	Apr.	121
Hansen, J. E., Need for National Planning in the Distribution of Visual Materials	Mar.	88
Hart, William G., Possibilities in the Use of the School Newsreel	June	185
Heflin, Arnold P., Audio Aids in a Visual Program	Feb.	39
Heil, Louis M., Visual Aids in Teaching Certain Elements of Critical Thinking	May	153
Hoffman, Charles W., The Candid Camera in Safety Teaching	Dec.	322
Hoban, Charles, F., Jr., Something Wrong with Films in General Education	Apr.	115
Hodge, Mary R., and McNulty, Lillian, Using the Movies as a Research Library	Sept.	223
Jordine, Alex., The Experimental Use of Visual Aids in Teaching Beginning Reading	Sept.	220
Jones, Gordon R., and Gilliland, John W., Audio-Visual Education on a Limited Budget	Mar.	79
Krows, Arthur Edwin, Motion Pictures—Not for Theatres	Sept. 211, Oct. 249, Nov. 291, Dec.	325
Lauton, Sherman P., The Administration of a Visual Education Program in a Small College	June	181
Livermon, Ruth, The Use of Motion Pictures in an Elementary School	Nov.	285
Mendenhall, James E., Problems in Preparing Pictorial Material for Classroom Use	Apr.	119
Messoud, Joseph, Facts and Fiction about the Educational Values of the Cinema	Dec.	319
Oertel, Ernest E., Student Camera Crew Makes a "Scop"	Feb.	42
Reed, Paul C., In-Service Teacher Training in Visual Instruction	Mar.	86
Reitze, Arnold, The Relationship of Acquired Information or Knowledge Obtained from Certain Educational Motion-Picture Films to the Intelligence, Grade, Age, Sex, and Type of Educational Training of the Pupils	Apr.	122
Sargent, Theodore, Some Uses of the Microprojector in Physics and Chemistry	Oct.	259
Schneider, Etta, Evaluation of the Literature in Visual Education	Mar.	84
Starnes, W. Gayle, The Present Status of Teacher Training in the Use of Visual Aids	Jan.	12
Thomas, Charles R., Preparing Sound Film Strips	Oct.	254
Von Aller, Holger and Dorothy, The Ocean Comes to School	Feb.	45
Webb, Mahlon R., and Wilson, Sterling O., Lantern Slides of Cellophane	Feb.	43
Whittinghill, W. W., Developing an Integrated Community Program by Use of Visual and Auditory Aids	June	183
Woodward, Ellen S., Learning at a Glance	Jan.	10
Worrell, F. Marshall, Selecting the Right Type of Visual Aid	Dec.	323
Zisman, S. B., Improving Illustrative Material in Textbooks	Sept.	218

THE DEPARTMENT OF VISUAL INSTRUCTION

Some Problems that Need Discussion at Meeting	Jan.	17
Program of the Department Meeting at Atlantic City	Feb.	51
What Happened at Atlantic City	Mar.	82
Papers from Annual Winter Meeting Reprinted in March and April issues		
President's Letter	Apr. 120, May	155
Membership Roster	May	156
President's Letter	June	187
Program of the Department Meeting in New York City	187	
Papers from Summer Meeting Reprinted in September issue		
Among Ourselves	Dec.	330

AMONG THE MAGAZINES AND BOOKS

The Film as an Agency of British-American Understanding (by Frank Dorvall); Interest of the League of Nations in Motion Pictures in Relation to Child Welfare (by Ruth Bloodgood); Educational Possibilities of Motion Pictures (by Mark May); Rescuing Civilization through Motion Pictures (by Marion C. Sheridan)—(in <i>Journal of Educational Sociology</i>)	Jan.	15
Mouse and Man (in <i>Time</i>)	Feb.	48
Learning through Film-Making (by Kerry Smith and Irene Lemon in <i>Teachers College Record</i>)	48	
Map Movies (by Kenneth F. Space in <i>Movie Makers</i>)	48	
Books We Read and Films We See (by Eleanor W. Moseman in <i>The School Executive</i>)	Mar.	92
Sound Projection in Schools (by Arthur A. Hebert in <i>Movie Makers</i>)	92	
From Script to Screen: Making Facts Dramatic (by Paul Rotha in <i>Scholastic</i>)	92	

No. Page

Projection and Filing of Microphotographic Reproductions (by James A. Austin and Harold P. Brown in <i>Journal of Chemical Education</i>)	92
Pictures You Can Afford (by George Hardley in <i>Church Management</i>)	92
Konrad Berceovici Visions Big Field in Film Scripts (by Frank Dougherty in <i>Christian Science Monitor</i>)	92
<i>Building America—News—Our Farmers—Labor</i>	93
Visual Review for 1938	103
Photo Slides as a Teaching Aid (by Victor D. Moseley in <i>Chicago Schools Journal</i>)	Apr. 128
The Making of Natural Habitat Exhibits (by Lillian D. Kennedy in <i>Progressive Education</i>)	128
Double Featuritis (an editorial in <i>Scientific American</i>)	128
Visual Education Is Seen Most Valuable in First Two Grades (by Mary A. Cummings in <i>Buffalo Courier-Express</i>)	128
College Geography Text-Books (by Robert B. Nixon in <i>School and Society</i>)	128
Recording the College (by Edwin Schwartz in <i>Movie Makers</i>)	128
The Use of Motion Pictures in Religious Education (by Mured MacParlane in <i>International Journal of Religious Education</i>)	130
Actuality in Education (by Catherine Fletcher and G. J. Coss); Psychology and the Educational Films (by Dr. W. B. Inglis); Light-hearted Vikings (by H. Forsyth Hardy)—(in <i>Sight and Sound</i>)	130
Will the Film and School Join Hands? (by P. Dean McClusky); The Literature in Visual Education (by F. W. Dunn and Etta Schneider); Seeking New Objectives through Use of Films (by Edgar Dale); And Still They Gazed (by Charles F. Hoban, Jr.); A Critical Evaluation of Teaching Films (by P. L. Lemler); Administrative Techniques for Effective School Use of Visual Materials (by L. L. Ramseyer); In-Service Training in Visual Instruction (by Paul C. Reed); Visual Instruction in Adult Education (by Hazel L. Gibbons); A Teaching Experiment with Visual Aids (by Joe Park and Ruth Stephenson); How to Make Lantern Slides (by W. T. R. Price)—(In special visual education issue of <i>Education</i>)	June 189
Teachers as Movie Makers (by J. Harry Adams in <i>Michigan Education Journal</i>)	189
A Picture Library and Its Use (by Nora Riley in <i>The Journal of Geography</i>)	189
A Camera Club for the Small High School (by Stephen A. Griffin in <i>The Journal of Education</i>)	189
X-Rays a Way to Better Health through Photography (by Walter E. Burton in <i>Hygeia</i>)	189
A Visual Education Program in a Small School (by George L. Berry in <i>The School Executive</i>)	Oct. 263
A Visual Education Program (by Clarence Funk in <i>Minnesota Journal of Education</i>)	263
Producing 16mm Sound Pictures (by William A. Palmer in <i>Camera Craft</i>)	263
<i>Building America—Education—Our Federal Government—Chemistry—War or Peace!—Seeing America</i>	263
Education by Film (by Henry Leach in <i>Forum</i>)	263
Visual Education and Nature Study (by T. D. A. Cokerell in <i>School and Society</i>)	Nov. 297
What of Catholic Movies? (by Katherine Brezy in <i>Commonweal</i>)	297
The Development of Visual and Auditory Aids in Santa Barbara County (by Lelia Ann Taggart in <i>California of Elementary Education</i>)	297
Worthwhile Music in the Movies (by Verna Arvey in <i>Etude</i>)	297
Northwestern Publishes Proceedings	297
The Value of Slides in Teaching Social Studies in the Junior High Schools (by Joe Park in <i>School and Society</i>)	Dec. 332
Amateur Motion Picture Projects (by Laura J. Huelster in <i>Journal of Health and Physical Education</i>)	332
Motion Picture Appreciation in the Junior High School (by Jeanne N. Bush in <i>High Points</i>)	332
Visual Aids in Business Training (by Alexander Selwyn) (in <i>High Points</i>)	332
Pointers on Daylight Projection (by Donald C. Doane in <i>Notion's Schools</i>)	332
Amateur Slide-Making (by R. B. Boals in <i>American Photography</i>)	332
<i>Building America—Aviation—Crime</i>	332

BOOK REVIEWS

Motion Pictures in Education—A Summary of the Literature (by Edgar Dale, Fannie W. Dunn, Charles F. Hoban, Jr., Etta Schneider)	Jan.	16
Talking Pictures—How They are Made—How to Appreciate Them (by Barrett C. Kiedling)	Feb.	48
The New Leica Manual (by Willard D. Morgon and Henry M. Lester)	49	
Excursion in Mathematics (by Ernst R. Bredich)	Apr.	131
Men and Oil—A Study Guide (by Robert B. Weaver)	June	190
The Stereograph and Lantern Slide in Education (by G. E. Hamilton)	Oct.	264
How to Use Talking Pictures in Business (by Lyne S. Metcalf and H. S. Christenson)	264	
School Use of Visual Aids (by Cline M. Koon)	Nov.	298
Proceedings and Addresses of National Conference on Visual Education	298	
A Guide to the Literature of the Motion Picture (by Frances Christeson)	Dec.	333
The Administration of Visual Aids (by a Committee of Graduate Students at Ohio State University)	333	
Optical Aids	333	

NEWS AND NOTES

(Conducted by JOSEPHINE HOFFMAN)

	No.	Page
American Council Committee Gets New Grant	Jan.	20
Film Teaching Plan		20
Visual Education on State Programs		20
Institute on Audio-Visual Aids (Reported by Harold C. Bauer)		22
Visual Education Meeting in South Carolina	Feb.	54
Source List of Visual Material		54
Survey on the Utilization of Visual Aids		54
Audio-Visual Education—Theme of Texas Conference (Reported by Arthur L. Maberry)		56
Ten Best Films of 1937		63
American Council Film Distribution Plan	Mar.	96
Syracuse Cooperative Film Library		96
Visual Aids with Radio Lectures		96
CCC Film Libraries		96
Peace Films Caravan		96
Visual Education Abroad		97
Regional Visual Education Meetings	Apr.	126
Huge Aquaria Built in Florida		126
Survey on the Utilization of Visual Aids		127
Harvard Develops Films to Improve Reading	May	162
A County Visual Service		162
Educators' Organization Pleads for Better Films		162
Visual Education Institute in New Jersey		162
Some Visual Aids Statistics		162
DeVry Visual Conference Program		163
Report of Northwestern Meeting	June	192
Nashville Audio-Visual Education Conference		192
Visual Progress in the Northwest		193
Texas Group Have Visual Program		193
Association of School Film Libraries	Sept.	226
New York University Courses		226
Audio Visual Work Introduced to South Dakota		226
Publications on Visual Aids		226
Forthcoming Report on School-Made Movies		228
Film Cost Compared with Books		228
DeVry Conference Proceedings Published		228
Bell & Howell N.E.A. Convention Report		228
Government Film Receives Award	Oct.	261
Developments in Radiovision Service		261
Directory of U.S. Government Films		261
Film Service for Washington Schools		261
New Additions to Peace Film Library		261
SMPE Meets in Detroit		261
Burying for the Future	Nov.	300
A New Film Distribution Service		300
Conference on School-Made Films		300
Western Mountains in Kodachrome		301
Southern Conference on Audio-Visual Education	Dec.	334
New Film Service		334
Government Film Strip Prices Lower		334
Lantern Slides of Canada Parks		336
International Federation of Film Archives		336
Illinois Education Association Visual Aids		336
Visual Progress Abroad		337
A School Reports on Visual Program		337

HAND-MADE LANTERN SLIDES

(Conducted by ANN GALE)

Trees in Winter	Jan.	18
Ancient Ruins in Mexico	Feb.	50
How to Hang Pictures	Mar.	94
Clark and the Northwest Territory	May	160
Farm Safety	June	189
Construction Principles	Sept.	225
Origin of Christmas Customs	Nov.	296

SCHOOL DEPARTMENT

(Conducted by WILBER EMMERT)

Course of Study in Photography	Jan.	24
Motion Picture Demonstration Lesson		24
A Model-Making Laboratory (by D. Paul Smay)	Feb.	58
The Technique of Molding and Finishing Plaster Casts (by D. Paul Smay)	Mar.	100
Transportation Project		102
Some Teaching Tragedies (by C. E. Hoban, Sr.)	Apr.	132
The Elementary School Museum (by George W. Wright)	May	164
Visual Geography Lessons (by Rhea B. Frank)		166
Planned School Exhibits Vitalize Instruction	June	194
Visual Aids in Kindergarten Work (by Caroline F. Fell)	Sept.	232
Photographs Permanently Portray Project Procedures (by Freida S. Harrell)	Oct.	266
Composing with a Camera (by Orval Kipp)	Nov.	302
	Dec.	340

CURRENT FILM RELEASES

Castle News Films	Jan.	26
Gutlohn Offerings		26
A Movie from the Women's Bureau		26
Film on Nursing Profession	Feb.	64
Additions to Garrison Library		65
Lenten and New Subjects from Ideal		66
Panay Bombing in 16mm		66
Short Subjects Edited from Features		66
Classroom Reading Projects on Foreign Films		66
Bell and Howell Releases	Mar.	98
A Timely Patriotic Subject		98
A 16mm Sound Film in Color		98
A New Baseball Subject		98
Additions to Gutlohn Library		99
Pictorial Library Releases		99
Motion Pictures on Virginia		99
Disney Color Cartoons in 16mm Sound	Apr.	134
Recent Castle Films Reviewed		134
New Film Sources		135

	No.	Page
Bell & Howell Exclusive "Universal" Features	May	168
New Gutlohn Releases		169
Eastin Adds Silly Symphonies		169
Two Erpi Pictures Announced		169
Museum of Modern Art Gets British Films		169
The Wedding of Palo—Film Review	June	198
"The Mail"—"Big Fish"—Series of Law Films		199
Children's Museum Activities Filmed	Sept.	230
Spanish Language Feature		230
Review of Spain Civil War Film		230
Gutlohn Adds to Library		234
Park Cine Buys Comedies		234
Motion Picture Takes Man Apart		235
Red Cross Safety Subject		235
Color Films for Children		235
New Series of Classroom Films	Oct.	270
Educational Features Released in 16mm		270
Lumbering Industry Filmed		271
New Castle Films Reviewed		272
Prize Documentary Film		272
Peace Film Released in 16mm		272
Another Distributor for Disney Cartoons		272
Additions to Bray Library		272
Ideal Catalog Ready		272
Two New Eastman Subjects	Nov.	308
English Educational Films from Gutlohn		308
News Parade for 1938		308
Health Subjects in Sound		311
Yale Drama Department Produces		311
Two More Health Productions		311
Modern Packaging Filmed		311
Teacher-Made Films		311
Leroy Dennis Film Bureau		311
Motion Pictures on Aluminum		311
The Ohio Travelogs	Dec.	338
Research Films in Biology		338
Garrison—"Professor Mamlock"		338
Gutlohn Releases French Pictures		343
Virginia Produces More Subjects		343

FILM ESTIMATES (full page or more in each issue)

AMONG THE PRODUCERS

Filmosound Improvements and Price Reductions	Jan.	28
Ampro Pamphlet		28
Well-Known Historical Slides Revised		28
Norman Alley Visits DeVry's Chicago Factory		29
New Continuous Projector Introduced		29
Pictures for the Social Studies	Feb.	68
Spencer Lens to Build New Plant		68
Central Camera Products		68
DeVry Centralized Control System		68
New Catalog of Film Accessories		68
Eastman Devices for Color-Film Users	Mar.	104
New Booklet on Movies in Education		104
For Home-Made Lantern Slides		104
Eighth DeVry Visual Conference		104
Leica International Exhibit		104
Ampro Announces New Projector	Apr.	136
Objectives of DeVry Visual Conference		136
Improvements in the Leica Camera		136
Low Price Victor Sound Projector		136
Royal Midget Tripod Ready		137
A Bausch and Lomb Optical Achievement		137
Kodak 16mm Enlarger	May	171
Leica Model G-1938		171
Central Photographic Almanac		171
New S.V.E. Device Rewinds Film Slides	June	200
Bell & Howell 16mm Arc Projector		200
Expansion of the Wm. H. Dudley Service		200
New Wenzel "Ace" Projector		201
Victor Announces Price Reductions		201
Ampro Adopts Fair Trade Agreement		201
New Visual Aids for U. S. Geography	Sept.	240
New Ampro Arc Projector		240
RCA Expands Activity in Educational Field		240
Bell & Howell Expands Line		242
Da-Lite's Electric Roll Screen		242
Central's Bargain Book Ready		242
Wattage Increased on Animatophones		242
Bausch & Lomb Viewer		242
Change in Leica Camera Names		242
General Science on Film Slides	Oct.	276
A New Viewer for Film Slides		276
RCA Announces New Sound Unit for Small Schools		276
Orton Hicks Joins Gutlohn		276
Lower Prices Announced by Bell & Howell		276
Important Reductions by Ampro		278
Three Dimensional Projection		278
New Delineascope Introduced	Nov.	310
Brochure on Making Movies		310
DeVry Price Reductions		310
Duplicates in Kodachrome		310
Lantern Slide Units in Science		310
Victor Continuous Projector	Dec.	343
New Case for Miniature Slides		343
Argus Contest for Students		343
S.V.E. Presents Model AA		343
DeVry Development		344

MISCELLANEOUS

Suggestions for Camera Clubs	Feb.	46
Film in Art Study (by Marie Zoe Mercier)		47
Alfred W. Abrams, 1866-1938	May	162
Summer Courses in Visual Instruction	May 157,	June 193
Editorial	Sept.	210
Stimulating Class Use of "The Educational Screen"		239

The EDUCATIONAL SCREEN

JANUARY, 1938

VOLUME XVII

NUMBER ONE

Contents

Visual Aids in Physical Education
 J. D. Alexander..... 7

Why Visual Aids? Annette Glick Byrne..... 8

Learning at a Glance. Ellen S. Woodward..... 10

The Present Status of Teacher Training in
 The Use of Visual Aids. W. Gayle Starnes..... 12

Among the Magazines and Books
 Conducted by Stella Evelyn Myers..... 15

Conducted by Stella Evelyn Myers..... 15

Trees in Winter—In Hand-Made Lantern Slides
 By Ann Gale..... 18

News and Notes. Conducted by Josephine Hoffman..... 20

School Department.
 Conducted by Wilber Emmert..... 24

Current Film Releases..... 26

Among the Producers..... 28

Film Estimates..... 30

Here They Are! A Trade Directory for the Visual Field..... 32

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MEADVILLE, PENNA.

Visual Aids in Physical Education

By J. D. ALEXANDER

Professor of Physical Education
East Carolina Teachers College, Greenville, N. C.

IN PRESENTING visual aids to the already overburdened teaching profession its pioneers have neglected to make it available to the group to which it offers the greatest opportunities; namely, the teacher of health and physical education. Here we have many comparatively inexperienced teachers attempting to teach a multitude of activities, many of which they are unable to demonstrate to an advantage. No individual teacher can master correctly the fundamental techniques of such innumerable activities as are offered in even the most modest secondary school physical education program. Imagine a person so versatile as to master tennis with the versatility of a Tilden or Budge; golf as demonstrated by the great Bobbie Jones; football end play as executed by the inimitable Dalrymple; basketball as personified by Davy Banks; swimming with the precision evidenced by Johnny Weismuller; and track and field fundamentals with the technical mastery of Jesse Owens, "Spec" Towns, or Glenn Hardin.

Yet, the teacher of physical education in many of our high schools has to be able to offer instruction in such a multiplicity of activities. His inability to demonstrate correctly such range of activities will handicap the future success of youngsters attempting to master correct fundamentals, unless a substitutive means of demonstration is provided. Financial limitations and the element of time make it impossible to secure a mastery of each activity to actually demonstrate the fundamentals and techniques required for proficient successful training. Here the burdened teacher has several options; he can resort to such demonstrations as he, himself, can present or as he can have demonstrated by his superior performers from older groups or the varsity squad, or he may provide visual instruction and visual aids which will enable the novice to establish certain models or criteria for attaining proficiency and efficient mastery of the various technical requirements of the activity.

Visual aids offer the perplexed, conscientious teacher a medium of instruction that appeals to the child's desire for perfection of achievement and at the same time sets up certain definite objectives in the form of correct techniques. The second contribution of visual aids comes through their power to motivate the interests of the learner and to create within him a desire for further activity, which within itself is worthy. Rulon¹ believes that motion pictures produced and wisely used have distinct pedagogical advantages over any other teaching medium now used. Trieb² suggests that the child learns through three avenues: (1) learn-

The author has used visual devices in teaching physical education and sports with marked success, and conducts courses in such teaching procedure at George Peabody College for Teachers Summer School.

ing by hearing; (2) learning by doing; and (3) learning by seeing. The right use of motion pictures and visual aids enables the wise teacher to make available to the child the latter two avenues by encouraging practice and by seeing the correct techniques demonstrated through the medium of the motion picture.

The physical education teacher will find that a well planned visual instruction program, including motion pictures, slides, still pictures, and progressive diagrams will improve his teaching in the following ways: (1) by giving correct concepts; (2) by broadening the sensory experiences of the pupils; (3) by intensifying impressions; (4) vitalizing instruction and motivating activity; (5) by giving the pupil vicarious experiences in activities outside his experience and environment; (6) by supplementing other learning activities; and (7) by giving correct impressions of form and technique.

Through slow motion pictures a time-movement analysis is possible and the learner can follow:

- a. The positions of the body and its parts
- b. Execution of movement
- c. The various planes of movement
- d. The relation between the various parts at a given stage of the technique
- e. The handling of equipment: shot put, discus, ball, etc.
- f. The amount and direction of muscular exertion
- g. Team play, team formations, and the relative position of each player in relation to other members of the team at any specific stage of a play or maneuver.
- h. The timing of individual and team movements

The administrative problems attached to carrying out such a program are similar to those in any other department, and center around securing equipment, suitable film, pictures, and instructional media. Many fine films suitable for instructional purposes in physical education are available and can be secured from numerous agencies at a most reasonable price or rental.

Much valuable instructional material can be made by making slow motion shots of skilled performers, and of teams, in action. Such shots, properly sequenced and carefully edited, have a very important place in the teaching of physical education activities. The initiative and ingenuity of the teacher determines the value of self-made materials.

1. Rulon, P. J.: *The Sound Picture In Science Teaching* Cambridge, Harvard University Press, 1933. p. 1.
2. Trieb, Carl F.: *The Professional Preparation of Teachers* Phi Delta Kappan, 19:161-4, Feb.-Mar., 1937.

3. Umstadd, J. G.: *Secondary School Teaching*
New York, Ginn & Co., 1937. p. 284-316.
4. Palmer, Gladys E.: *A Motion Picture Survey in the Field of Sports for Women*
Research Quarterly, A.P.E.A., 7:159-67, March, 1937.
5. Koon, Cline M.: *Motion Pictures in Education in the United States*
Chicago, University of Chicago Press, 1934.
6. Ruffa, Edward: *How Motion Pictures Help the Coach*
Athletic Journal, 17:20, May, 1937.
7. Prieb, Roy E.: *The Effectiveness of Motion Pictures As A Coaching Device*
Athletic Journal, April, 1936.
8. Roberts, Alvin B.: *Problems In Developing A Visual Aids Program*
Educational Screen, 16:179-81, June, 1937.
9. Dieffenbach, Charles T.: *Student Activity In A Visual Aid Program*
Educational Screen, 16:11-12, January, 1937.

Why Visual Aids?

Being a portion of a radio address given by Mrs. Byrne on a Los Angeles Educational Program.

By ANNETTE GLICK BYRNE
Assistant Director of Visual Education, Los Angeles.

I SHOULD like very briefly to present a few incidents which have happened to me in my own teaching experience to prove the need in modern education of giving the child something more than meaningless words to juggle with. Under the old education it didn't much matter whether the child understood or not the lesson he was intoning,—just so he repeated the facts and figures which he had memorized with satisfactory speed. Those were the days of "vague words, dim conceptions, and inexact abstractions."

But since then we have come to realize through psychological studies, that words in themselves are not a magic means of transmitting thought. In themselves they are not the channels for the supply of concrete experience. We have come to see that words, whether they are printed or spoken, are only a sign,—the symbol for an idea which has already been placed in the mind as a result of some real (or sensory) experience.

I may try the experiment of Dr. Ernest Carroll Moore, who for years used to spring on his students the perfectly acceptable word, "thrasonical," and then ask its meaning. The word itself was only an empty sound, for no student, ever, was found who had already placed in his mind any concept which gave that word meaning. The sound of the word itself was only so much noise.

In like manner I may use the word "dubaronical" which doesn't appear at all in the dictionary, but in my own mind it stands for a definite image,—the word is a symbol of a certain very clear idea to me. It means something very "katish,"—that is quite "ultra-ultra." If I happen to meet some other person who matches my word concept with his own word concept when I say, "That dress you have on is very dubaronical," then we may talk together with real understanding and communion of spirit.

Under the old education we paid very little attention to whether the child *understood* the words which he was reading or reciting. We didn't concern ourselves as teachers with means of insuring that ideas and images were placed in the mind by means of sensory

experiences which alone could give words real meaning. It was John Dewey who said that 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 enormously speeded up and made more effective.

In my own teaching experience I have had several amusing experiences resulting from instances where the child had failed to match up the correct mental concept with the word which stood for it. These are familiarly known as examination paper gems or "boners," but these that I want to tell you now have actually happened to me or have been repeated so often that people are telling them back to me now. They have gone the rounds.

One youngster asked me if Nero was the same God as Nero in "Nero My God to Thee!" Another one stated that Louis XVI was "gelatined" in the French Revolution. The classic is the statement in a composition that Anne Boleyn, one of the wives of Henry VIII was "ironed on." When the teacher traced that elusive statement to its source in the text-book, she found that the book read, "Henry the Eighth pressed his suit against Anne Boleyn." Sometimes, however, the concepts in the youngsters' minds are richer and more varied than our own, or that we give them credit for. Not long ago a student of mine at Venice High School was asked to state what the Golden Fleece was. He replied brightly, "Sunny California." Since this was in the midst of boom days, I have to confess that I marked the paper correct! So I might go on, multiplying these forever. You have heard of the student in college who said that "flora and fauna" were two chorus girls.

Funny as these stories are, they nevertheless emphasize the need for something more in the learning process than the mere jugglery of words by which one word is used merely to define another. What clear idea, for instance, does the child have of the papal bull, or the line of demarkation? How will we describe to the child from the dust bowl, using words only,

the rolling waves of the sea, or to the child from the rolling prairies, a carpet of pine needles?

So the old education was an encyclopedic, memorizer, recitative method, only concerned with the accumulation of vast store of unrelated, isolated facts where memory alone was identified with study. A recitation was what it was named,—a “re-citation,” and the sole criterion of good teaching was the silent and inert child in his seat, feet flat on the floor, and hands folded, where the highest form of activity known was the hand raised in the air and the voice asking timidly, “Please, may I speak?”

In my own schooling, back in a Middle West High School, I was an A-plus student. I knew Burke’s Speech on Conciliation and Washington’s Farewell Address by heart. I could recite the dates for the admission of all the states. I could stand on my head and recite them backwards. The ablative absolute, the hypotenuse of the triangle, and the cube root were all duly indexed and classified. But though I knew my lessons and could give them lip service, I *understood* very little of the lessons of life, or good citizenship. For one thing, I failed until very late in life, to take opposition, without girding my loins for the fray, without having an impossible combativeness aroused which blinded me to logic, rationality, and conviction. At long last, I hope I have learned, when opposed by someone legitimately and reasonably, to project myself through imagination into the other person’s mind, to see things with his eyes, to get his point of view. This is tolerance, one of the essentials in any democratic government and of tolerable living together.

These lessons, along with the purely factual, are learned by modern children, for in the modern schoolroom there are *things*—tools to work with; there are opportunities for sensory experiences which alone enrich the word and give it meaning, and there are opportunities for working together and for give-and-take. Miss Corinne Seeds, principal of the training school at the University of California at Westwood, showed me a small piece of writing which an A6 student had written for the school newspaper. This was it, “While the upper grades are lost in the world of growing up, there is another world, a smaller one, on the other side of the yard. It is the nursery school, where the small children are taught to live together without quarreling.”

So we may say that education is going through a revolutionary period of change. On the one side is the old formal education, the “hell-fire and brimstone method,” to use one of Superintendent Lane’s expressions, where facts were learned for their own sakes, and where children were given few opportunities to see and hear and experience things with their senses and with their emotions. This was the old listening school.

But in contrast to it, we have the seeing, doing school where the doctrine of interest is opposed to the old doctrine of difficulty. This is the school where the concrete experience is the basis of all effective learning, where if the child, from the dust bowl cannot be taken to see the rolling waves of the sea he sees a motion picture or studies lantern slides and study prints and stereographs so that he may understand what he reads about these foreign and strange things in his

books.

And the child is anything but bored today with school. He is interested, absorbed in the worthwhile-ness of the thing he is doing. Neither is the teacher a passive instrument while a motion picture is being shown. The teacher with these improved tools of teaching is a better teacher, more active, more effective, more interested herself in sharing and directing these vital learning experiences. My own teacher friends will universally testify that the skill necessary in the modern schoolroom far exceeds that necessary under the old formal memory system, because children are *living* while they are learning.

A significant experiment was tried by the child psychologist, by the scientific testers who wished exactly to determine, without surmise and hypothesis entering in, just how much interest had to do with effective learning. Among other experiments these Gestalt psychologists, as they are termed, wished to find out whether apes when they were interested, could learn more and learn this faster and more effectively.

Outside the cage of an ape which had been kept hungry, they threw a ripe, succulent banana. They put inside the cage several sticks with large ends and small ends which had to be fitted together in such a way that the stick would be made long enough to reach outside the cage to the banana. After some effort, trial and error—failing but keeping at it, the ape finally fitted the small end into the large sufficiently to make a stick long enough to reach the banana.

Now what did the ape do? The natural supposition would be that immediately the ape ate the banana. But he did not. He gave the appearance of being so thrilled with the satisfaction of learning, of having conquered a difficulty, of having progressed mentally, and physically in muscular adjustment, that he proceeded to pull the stick apart, throw the banana outside the cage, fit the stick together again, poke the banana inside the cage, and repeat the process until the thrill of learning had subsided! Then and only then did he eat the banana.

So we know that opportunities offered the modern child for activity, for the real experience interest him mightily. There is a new glow surrounding the things going on in a modern school room. There is the satisfaction, even exhilaration which comes from a sense of mastery, of achievement of getting on.

Visual aids mean not free movies which some persons wrongly suppose. They are simply the tools by which the child is given a real experience. A child studying communication is supplied with a telephone receiver which he may take apart to discover the magnet and so learn by direct experience, the magic of magnetism. Or a child studying wool may take a wool-card and actually card the tangled fibres of raw wool, and so learn through the muscles as well as the eyes the difficulty of pioneer living.

Objects, specimens, manipulative models, lantern slides, stereographs, colored charts and motion pictures both silent and sound are supplied as tools of teaching, to accompany the always indispensable book and give it life and meaning.

Learning at a Glance

UNDER the program of the Works Progress Administration, thousands of white collar workers have been given remunerative employment on projects which produce visual education aids for schools and museums. These visual education aids are designed primarily to make the world in which children live seem less remote. They are opening up a fertile field for educational advancement and pointing the way to new occupational possibilities.

To help schools obtain needed educational aids is the purpose of the museum extension and school curriculum projects set up under the WPA. Educational aids produced on WPA projects often deal with the historical and cultural background, as well as the economic resources, of the various States. Many leading educators believe that only upon such a foundation can the schools build a curriculum in keeping with the accepted philosophy that education begins with the known and intimate contacts of the pupil and expands from these focal points to the broader and more complicated outside world. When the child understands and interprets his own community and the social life of which he is a part, his experiences may be continuously expanded to increase his conception of other times, of other peoples, of other places.

When factual pictures fail to register with the children, the Project carries its message to the schools through three-dimensional objects. Pictures of dams and early transportation, Colonial rooms and historical settings, are oftentimes effective, but dioramas and models are admittedly better. No charts of levers, screws, or pulleys can demonstrate the fundamental principles of mechanics as clearly as working models. No drawing of an automobile motor can impress the child-mind so effectively as the four-cylinder engine that really works—even if it is a replica in wood and moves only upon cranking.

Clay models of men and women who have figured in our own history, plaster casts of zoo animals, ships carved in wood, modeled people of foreign lands, mounted specimens of shellfish from the beaches, and shrubs, plants and flowers from the back country—things with bulk which children can feel and look at from all sides—are some of the articles produced by Project specialists.

These visual aids are prepared in response to carefully evaluated requests from the various schools themselves for material in specific fields. Such leading educators as Dr. Paul Hanna of Stanford University believe that they meet the demands of progressive educational philosophy—that the child's intimate world of today is the proper starting point for all educational experience and interpretation. "You are blazing a

How the WPA museum extension projects provide schools with visual teaching aids.

By **ELLEN S. WOODWARD**

Director of Women's and Professional Projects.

trail which others will follow," Dr. Hanna told the Supervisor of the San Diego project.

California, Kansas, Pennsylvania and New York are among the States presenting outstanding examples of the use of WPA labor by local educational agencies to produce maps, charts, three-dimensional models, projection slides, moving pictures, and other devices for bringing within a child's sensory experience those things about which he reads and studies.

Most extensive of all such activities is Pennsylvania's Museum Extension Project at Pittsburgh, where as many as 600 white collar workers at a time have found use for handicraft skills in the production of visual aids. As a result of the work performed on this project, such materials as relief maps, architectural models, costume plates, marionettes and other articles are now available to all schools (including one-room rural schools), libraries, and museums in the State of Pennsylvania.

A set of miniature architectural models which the Pittsburgh project sends out is believed to be one of the most complete and authentic of any such sets ever produced. By making three-dimensional copies of typical human habitats, architects and craftsmen on the project have completely recorded the "History of the Home." Beginning with a replica of the "Hyena Den"—a prehistoric cave dwelling excavated in 1850 near Wells, England—the series illustrates architectural developments up to the present day. The group of primitive houses includes an Eskimo igloo, an African thatched hut, an Indian cliff dwelling, a bark covered wagon, a pueblo, and numerous other examples of the simple dwellings of primitive peoples.

Another set of models portrays the elaborate architecture developed by various European countries. They depict a Romanesque house of the twelfth century, an Italian Gothic of the fourteenth century, the French Renaissance type of the seventeenth century and numerous other structures. Project craftsmen have fashioned these miniatures to scale and added every authentic detail from a study of actual examples of each type of domicile.

A fascinating tale in itself is the story of how the colonists built their homes in a strange, new country and how their ideas in architecture were influenced by various European modes. The study of housing also lends new interest to history, geography and other related subjects.

In recording the "History of American Homes" project artists and sculptors followed blue prints of such typical dwellings as Capon House, early New England; Bacon's Castle, early Virginia country house; Pringle House at Charleston, South Carolina—Geor-

gian style; the Van Cortlandt manor house at Croton on the Hudson—a Dutch Colonial type.

No less fascinating than the history of homes in which people have lived is a study of the clothes they have worn. Costumes worn by man through the various eras of history form an interesting corollary to his thoughts and actions. With this in mind, the Museum Extension Project directors have worked out a series of costume plates which are being reproduced in color by workers on the project. A set of 114 pictures illustrates the "Development of Western Costume" from earliest recorded modes to present day fashions. Another set shows the costumes worn by the thirteen tribes of North American Indians which wandered through Pennsylvania at various periods of tribal migrations. Typical costumes worn by various Asiatic peoples comprise still another set of beautifully colored plates.

Since the project started in March, 1936, WPA illustrators, printers and artists have completed 127,000 of these handtinted plates on letter-head cardboard. Other workers have reproduced 25,400 larger plates through the silk-screen coloring method—an economical and artistic hand-printing process. Carefully authenticated by research workers, the costume pictures are accurate and dependable for classroom study and school dramatics. Accompanying each plate is a mimeographed description. A complete text of some 120,000



Diorama of a Sioux Indian Village
(Constructed on a Project in Pennsylvania)

words supplements the series on the Development of Western Costume, giving in detail the history of fashion modes in Western countries.

Puppets and marionettes—a type of visual aid both practical and effective—are also produced on the Pittsburgh Museum Extension Project. Puppet plays, like moving pictures, are used to teach lessons which through this method are stamped more indelibly upon the child-mind than would be possible through only the printed page.

In addition to the visual experience it offers, puppetry has another advantage in that it challenges the dramatic sense and ingenuity of the children who take part in producing the plays. The manual skills and artistic abilities of boys and girls are tested and developed when they are assigned to the task of making settings.

Six educational scripts with accompanying puppets or marionettes are now available for distribution from this Museum Extension Project to any educational institution in the State of Pennsylvania which will pay the expense of transportation.

One of these plays—"The Story of Anthracite Coal"—dramatizes the action of natural forces through geological ages. Stalking across its scenes in shadowgraph are such prehistoric animals as the amphibian, the brontosaurus, the mammoth and the saber-tooth tiger. These strange creatures on strings give graphic reality to the geological periods in which they lived and during which anthracite coal was in the process of formation. Seemingly unpronounceable names such as "cargoniferous" and "cenozoic" become familiar parts of a fascinating drama as the children participate in this type of socialized recitation. Each of the scripts impresses some special idea in the child's consciousness. "Punch Teaches a Lesson," a hand-puppet play, pleads for carefulness and fire prevention. "The Demon" illustrates the dangers of carbon monoxide gas. "The Magic Basket" gives some pertinent points on children's diet through the aid of personified vegetables and other edibles. "The Willow Plate," a poetic fantasy for hand-puppets, tells the legend of the Chinese Willow Plate.

In New York City also, WPA workers are carrying forward a notable project for the development of objective teaching materials and technique. Sponsored by the Board of Education, the project aims to provide live, colorful and incitive visual aids to teachers in New York City public schools.

One section, known as the Latin-American Department, is engaged in assembling every obtainable piece of information, the latest maps, and large quantities of pictures pertaining to Latin-America, the whole mass of information being available for teachers. This group has also completed a comprehensive showing of Latin-America in strip film. The project proposes to establish an educational clearing house between the educators of Latin-America and United States with an international loan service.

For visual education purposes, the project is building a number of models known as the Science Teaching Devices. Mechanical principles and natural laws are demonstrated through operable models of such machines as derricks; gas and steam engines; a miniature hot water supply system; a hot-air furnace; an open telephone with batteries showing actual operation; a vision model showing a large-sized cross section of the eye; and a planetarium showing relative positions and movements of the heavenly bodies. These and other educational materials are circulated among the city schools.

It is undeniably true that educational facilities connected with museums have been multiplied many times over by WPA assistance. Where, for example, the educational loan service of the American Museum of Natural History formerly reached only a few schools, the Museum now lends 65,000 educational motion picture films and 125,000 lantern slides annually to public schools, colleges, and universities. It reaches approximately 40,000,000 children and adults in 42 states.

In the Brooklyn Children's Museum the attendance has been increased by approximately 200,000 since 1929. Six hundred thousand children now visit it annually. Its American History Room with art models all around its walls to illustrate interesting events, is a product of relief labor. In every department WPA helpers augment the regular educational activities.

Pioneer and present-day history, industry, transportation, and production along many lines are being depicted through a general museum service provided under the WPA program in Kansas. Points of historic and geographic interest are being produced in watercolors. Kansas birds and trees are being used as designs in beautifully colored block prints.

The ingenuity of certain workers chosen from various projects for their particular ability, is shown in the construction of miniature looms, spinning wheels, period furniture, covered wagons, coaches, waterclocks, log cabins, etc. Models of oil derricks and model farm houses of steel construction bring the Kansas State history up to date.

There are ten workshops maintained by this project. No descriptive writing or pictorial representation interprets as graphically as modeled costumed dolls how people have looked and dressed in countries all over the world. In some workshops "rag dolls" about ten inches tall, representing residents of 24 different coun-

tries, are made. Sewing-room supervisors save scraps for this purpose, as well as for making copies of tapestries, rugs, quilt blocks, and other articles.

Among the California cities which have used WPA white collar workers to extend their visual education program is San Diego, where more than a score of books dealing with local topics have been placed in the city schools. The books include adventures in transportation, Mayan legends for neighboring Mexico and a first hand account of a cruise on a tuna clipper. In a book on lumber, sixty-odd prints show every local phase of the lumber industry from the arrival of the big loft rafts to the completion of a staircase finished in the mill and set up in a new house. The accuracy of these books is generally vouched for by outside authorities in such organizations as the Scripps Institute of Oceanography; Natural History Museum; Farm Bureau; Zoo; and City, County and State Departments of government. No book is considered satisfactory unless it leads the child's mind upon excursions over by-paths that branch out from the main educational trail.

Besides the text books the WPA workers at San Diego make educational pictures for school room walls, dioramas, costume figurines, mounted nature specimens, three dimensional models, and other visual aids to education—similar to those made on the Museum Extension Project in Pittsburgh and other cities.

The Present Status of Teacher Training in the Use of Visual Aids

(Concluded from December Issue)

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Summary and Conclusion

A SIGNIFICANT conclusion to be drawn from this study is the great diversity of opinion existing among instructors in visual aids courses as to what constitutes such a course, especially in regard to the time to be devoted to the various topics. Some variation would be expected and should exist because of local conditions but it is believed that these variations should not be as great as found, since the same underlying principles concerning the use of visual aids should be common to all, regardless of the method of instruction. This may be explained in part by the fact that these courses, as such, are comparatively new in the teacher training curriculum.

Another explanation was offered by several respondents who did not indicate the amount of time devoted to each topic in their courses. They said that each student in the course is permitted to work in the particular field in which he is interested. This is an excellent philosophy and is in accordance with modern educational practices, but the writer believes that there is enough fundamental material, common to all fields of

Presenting some interesting data obtained from a survey of visual instruction courses.

special interest, to occupy all the time devoted to one three credit course. It is doubtful whether the student can derive the maximum benefit from the study of the use of visual aids in his particular field without first being familiar with the fundamental subject matter that should be covered in a general course in visual aids. The work in special fields should be taken care of in one of two ways: extra reading, observation, and practice outside of and parallel with, the regular class work; or by offering specialized courses above the general course. There was no indication in the replies received of the number of institutions using the first method, but thirteen respondents said they are offering advanced courses.

Still another, and probably the most plausible, explanation, in view of the data, is the wide variation of fields in which the instructors in the courses are interested. For example, it is quite natural for a professor of physics to stress the physics of projectors and projection and for professors of agriculture and biology to emphasize the importance of field trips. This condition exists because individual college teachers have become interested in offering such a course before its

inclusion in the regular teacher training curricula. On visiting a large university in a neighboring state, the writer received the following explanation from the visual aids instructor, who is a professor in the College of Engineering: "I realize this course should be offered in the College of Education, but since they don't seem to be interested in offering such a course, I am teaching it."

Trends. The comparison of Stracke's report with the present study reveals several interesting and encouraging trends. The value of some of the less spectacular, though important, visual aids, such as object-specimen-model materials, flat pictures, blackboards, and textbook photographs and illustrations, is being recognized more today than in 1932. Stracke found that these topics were included in from three to five per cent of the courses, while the present study shows that these topics are now included in from seventy-five to eighty-seven per cent of the courses. Seventy-five per cent of the seventy-nine courses now being taught are giving attention to the administration of visual aids, while Stracke found that only nine per cent of the thirty-three courses included this topic.

The consideration of photoplay appreciation in these courses has been introduced since Stracke made his study. The report of the Payne Fund Studies no doubt greatly influenced the introduction of this topic. An excellent summary of these studies is given by Henry James Forman in his *Our Movie Made Children*. About seventy-five per cent of the courses now being taught include this subject.

The Average Course. It must be borne in mind that this study represents conditions as they are, not necessarily as they should be. The writer agrees that all the laboratory materials included in table 2 should be used, some of them probably to a greater extent than they are being used at present. He also believes that the topics listed in the average course (table 3) should be covered in a general course in visual instruction. However, he disagrees as to the amount of time that should be devoted to some of the topics. In the average course 36 per cent of the time is devoted to projection aids, while only 1.6 per cent of the time is devoted to the study of flat pictures, maps, globes, graphs, blackboards, and bulletin boards. From such variation in emphasis the prospective teachers get the wrong conception as to the relative values of the various visual aids, and when many of them go out to teach in schools in which projection apparatus is not available, they will feel that as far as visual aids are concerned their possible maximum efficiency would be 64 per cent.

The average course bears the title of *Visual Education*. Although it is an insignificant matter, it is believed that other titles such as *Visual Instruction*, or better still, *Visual-Auditory Aids in Teaching*, would better represent the purposes and content of the course.

It is evident from the results of the study that most institutions that offer a course in visual instruction believe that it should be offered on the senior college and graduate level only. This is in accordance with the theory that senior college standing should be

a prerequisite for professional courses. The student is sufficiently mature to derive the greatest benefit from the course, and the period of time between his taking the course, and the time when he will have the opportunity to put into practice what he has learned is not so long.

Suggested Outline for Course. A brief suggested outline for a course in visual instruction for teachers will be found in Appendix A. It includes the topics listed in the questionnaire*. These topics were taken from several outlines including one previously prepared by the writer. A suggested time allotment for each of the thirteen units is indicated, based upon the assumption that the class is in session fifty-four hours. The approximate time allotment as shown by the average course is also indicated. Since the use of projection apparatus will for some years be an impossibility for many teachers of the state because of the lack of finance and the availability of electricity, the writer believes that this subject should not consume a large portion of the time devoted to the course. On the other hand, most of the other visual aids are available to all teachers. A suggested minimum bibliography is given in Appendix B.

A Challenge. Educators are rapidly recognizing the value of visual materials as teaching aids. An increasing number of school systems is providing visual aids for their teachers. These aids, when placed in the hands of teachers who do not realize their value or understand the technique of their use, are of very little value. This condition constitutes a challenge to the teacher training institutions. All prospective teachers should be required to take at least one course in visual instruction.

APPENDIX A

Suggested Outline For Course In Visual Instruction

Unit I. Introduction (3*) (3½)

A. Nature of course

1. Objectives
2. Definition of terms
3. Some common misconceptions of visual aids

B. Brief history of visual instruction (Illustrate with as many visual aids as possible)

1. Primitive times
2. Egyptian hieroglyphics
3. Early Greeks
4. Early educators: Commenius, Pestalozzi, etc.
5. Science and invention
6. Organization of Department of Visual Education of N. E. A.

7. Developments since then

Unit II. Psychological Background for the Use of Visual Aids (3) (3½)

A. Modern philosophy and psychology

B. Role of visual experiences in human learning

C. Verbalism

D. Learning process and visual aids

E. Psychological dangers

1. Too many aids at one time
2. Possibility of waste in use of visual aids (No need to show Kentucky child picture of tobacco plant)

*A copy of the questionnaire may be obtained from the University of Kentucky, Department of University Extension.

*The number in the first parenthesis following each unit topic indicates the approximate number of hours to be devoted to the unit in the suggested outline. The number in the second parenthesis denotes the time allotment of the average course.

- F. Other sensory experiences
- Unit III. Some Results of Experimentation in the use of Visual Aids (2½) (2½)
- A. Briefly review such studies as those made by
1. Wood and Freeman
 2. McClusky
 3. Knowlton and Tilton
 4. Arnspiger
- Unit IV. Flat Pictures, Maps, Charts, Globes, Graphs, Blackboards, Bulletin Boards, Etc. (12) (10½)
- A. Textbook illustrations
1. Kinds, standards, purposes, technique for use
- B. Advantages and disadvantages of other aids in this unit
- C. Standards for evaluating these aids
- D. Technique in their use
- E. Sources, mounting, housing of cut-offs and other flat pictures
- F. Advantages and disadvantages of taking own photographs
- G. Brief discussion of mechanics of photography
- H. Reproduction devices: mimeograph, hectograph, etc.
- I. Application of the aids in this unit to various subject matter fields (Individual work)
- Unit V. Excursions (5) (3)
- A. Kinds
- B. Advantages
- C. Some dangers
- D. Technique
- E. Limitations
- F. Application to various subject matter fields (Individual work)
- Unit VI. Dramatization (3) (1)
- A. Advantages
- B. Disadvantages
- C. Technique
- D. Application to various subject matter fields (Individual work)
- Unit VII. Object-Specimen-Model Materials (4½) (4)
- A. Materials that may be borrowed from local museums
- B. The school museum
1. What it is
 2. How to start one
- C. The school fair
1. How to conduct it
- D. Advantages, disadvantages, technique of use, and sources of these aids
- E. Application of these aids to various subject matter fields (Individual work)
- Unit VIII. The Stereograph (4) (3)
- A. Brief history
- B. Explanation of construction
- C. Demonstration of Orthovis materials
- D. Advantages, disadvantages, technique of use and sources of materials
- E. Application of stereograph to various subject matter fields (Individual work)
- Unit IX. The Opaque Projector (5) (2)
- A. General discussion on projection
- B. Advantages, disadvantages, and technique in use of opaque projector
- C. Some dangers in its use
- D. Criteria for selection of opaque projector
- E. Application of opaque projector to various subject matter fields (Individual work)
- Unit X. Film and Glass Slides (3) (6)
- A. Difference between film slides and glass slides
- B. Advantages and disadvantages of each
- C. Technique in their use
- D. Standards for selection
- E. Teacher-and-pupil-made slides
- F. Sources of glass slides and film slides

- G. Projectors
1. Various combination projectors — advantages and disadvantages
 2. Criteria for selection
- Unit XI. The Motion Picture (6) (11)
- A. Brief history
- B. Influence of theatrical motion pictures on children
- C. Photoplay appreciation
- D. Films in the school
1. Classification of school films
 2. Technique in the use of the class room film
 3. Advantages and limitations of the class room film
 4. Criteria for selection of class room films
 5. Films and the assembly program
 6. Advertising films
 7. Sound vs. silent films
 8. Sources of school films
 9. Motion picture projectors
 - a. Criteria for selection
- E. Application of motion pictures to various subject matter fields (Individual work)
- F. Motion pictures in adult education
- Unit XII. Radio and Television (2) (1)
- A. The advantages of the radio as an educational aid
- B. Technique in its use
- C. The possibilities of television as a teaching aid
- Unit XIII. Administration of Visual Aids (4) (2)
- A. How to start a visual aids program
- B. Collecting, housing, and distributing visual aids
- C. The visual aids budget
- D. Qualifications and duties of visual aids director

APPENDIX B

Suggested Minimum Bibliography For Course In Visual Instruction

Books

- Arnspiger, Varney C., *Measuring the Effectiveness of Sound Pictures as Teaching Aids*. Bureau of Publications, Teachers College, Columbia University, New York, 1933. 156 pages.
- Dale, Edgar, *The Content of Motion Pictures*, combined with *Children's Attendance at Motion Pictures*. The MacMillan Company, New York, 1935. 143 and 81 pages.
- Dale, Edgar, and Ramseyer, Lloyd L., *Teaching with Motion Pictures: A Handbook of Administrative Practice*. American Council on Education, Washington, D. C., 1937. 59 pages.
- Devereux, Frederick L., *The Educational Talking Picture*. The University Press, Chicago, 1935. 222 pages.
- Forman, Henry James, *Our Movie Made Children*. The MacMillan Company, New York, 1934.
- Freeman, Frank N., *Visual Education*. The University of Chicago Press, Chicago, 1924. 388 pages.
- Hoban, Hoban, and Zisman. *Visualizing the Curriculum*. The Cordon Company, New York, 1937. 320 pages.
- Koon, Cline M., *Motion Pictures in Education in the United States*. The University of Chicago Press, Chicago, 1934. 106 pages.
- Knowlton and Tilton, *Motion Pictures in History Teaching*. Yale University Press, New Haven, 1929. 182 pages.
- Weber, Joseph J., *Picture Values in Education*. The Educational Screen, Chicago, 1928. 156 pages.
- Westfall, Leon H., *A Study of Verbal Accompaniments to Educational Motion Pictures*, Bureau of Publications, Teachers College, Columbia University, New York, 1934. 68 pages.
- Wood and Freeman, *Motion Pictures in the Classroom*. Houghton Mifflin Company, New York, 1929. 386 pages.
- BULLETINS, MONOGRAPHS, AND MISCELLANEOUS
- A Program for the Utilization of Audio-Visual Teaching Aids*, Erpi Consultants, 250 West 57th Street, New York, 1935. 183 pages.

(Concluded on page 17)

AMONG THE MAGAZINES AND BOOKS

Conducted by Stella Evelyn Myers

Journal of Educational Sociology (II:129-137, November, 1937) The entire issue of this magazine is devoted to the subject, "Educational Aspects of the Motion Picture," and is edited by Frederic M. Thrasher, New York University. We regret that space prohibits a full resumé of all the articles. Be it sufficient to say that the issue contains much that is worth the attention of those interested in the social and educational significance of motion pictures.

"The Film as an Agency of British-American Understanding," by Frank Darvall, English Speaking Union, London, is of particular interest. Four-fifths of the films used in England are of American make, hence they furnish the chief source of information on American life. Even the press has to cater to the desire for further information on the Wild West, the gangster-ridden city, and divorce-seeking society after the taste for such slants on life has been aroused by the motion pictures. This impact of the United States on Britain is altering the tempo of her life. She is demanding new comforts and new food à la American films. Hollywood is also responsible for presenting a picture of American life flitting about in high-powered cars, wearing lavish clothes, and indulging in cock-tails, and illicit love. Indians still trouble the West, one constantly dodges bullets on Chicago streets, and corruption is the rule in public life. Although the press may be aware of the distortion of news, it feels justified in giving the people what they want. Even radio and education are powerless to correct the erroneous impressions given by the films.

The matter of quota and "quota quickies" are clearly discussed in the article. The British product when sent abroad lacks many of the features that make American films go, and when it is really of high class, the average theater-goer is unaware that it is of foreign production as the attribution does not attract attention. Various bodies are working to bring about an international exchange of significant films which in a sense of fairness is much needed. On the average, an educational film needs about 4,000 showings to make a fair return on the cost of production. England cannot hope in a reasonable time for so large a distribution. If 250 million people of English speaking countries could unite in the use of educational films, the production would be financially feasible. By such means, the distorted view of other lands, using the same tongue, would be obviated.

"Interest of the League of Nations in Motion Pictures in Relation to Child Welfare," by Ruth Bloodgood, Children's Bureau, U. S. Department of Labor.

Since 1925, the relation of motion pictures to the welfare of children and youth has been a research

activity of the League of Nations. The result of questionnaires, sent to member and non-member states in 1925 and again in 1934, indicates that there is not sufficient control over children attendance, although most countries are attempting a certain amount of regulation. Special performances for young people are thought impossible because of the limited supply of available films. The reviewer believes that this is a mistake in the United States. Children are interested in nature pictures, especially those of animals, and in nearly all kinds of adventure. If programs are not copied after the theater, but are built in a simpler way, there seems no end of proper material. Slides, especially those well colored, can be combined with films most effectively as does Burton Holmes. To be sure, such programs require some considerable preparation. The old adage, "There is no excellence without labor," is true in this field as well in others. The Field Museum in Chicago for many years has been giving two performances for children on Saturdays and the auditorium is crowded. The entertainment is free, but draws crowds in all kinds of weather some distance from transportation lines.

In replies to the questionnaires, two remedies are suggested for lack of projection material, viz., international collaboration which may help to establish a profitable market, and government grants.

Educational Possibilities of Motion Pictures, by Mark May, Director, Institute of Human Relations, Yale University. An address before the National Education Association at Detroit, 1937.

There seems to be a promise that the motion picture, which since its inception has been devoted to entertainment, may assume a fuller rôle in the art of expression, since it is capable of service in saying whatever men have to say.

Edison, with his far vision, is quoted as saying in 1914 in connection with the release of the *Birth of the Nation*, "It is a big business now—it will be bigger yet. But away ahead is real work in education. That is the big ocean of opportunity. Educators are all book-minded now, but they will find the motion picture in time." The discrepancies between the use of theatrical and educational films are pointed out with figures to verify the statements.

"Even though numerous experiments have demonstrated the superior merits and teaching values of motion pictures, yet these experiments have not convinced the educational world of their absolute necessity for carrying on the work of the schools. The film is still regarded as a luxury and not a necessity." It is becoming increasingly apparent that there is crying need for better opportunities for teachers to get the necessary training in the use of films. Only about one out of twelve of our teacher-training institutions provides definite

training. Teachers Institutes are making a contribution in this direction.

Three recent movements give education some promise of success in using motion picture material. The first, was the "Secrets of Success" series produced by the committee of Social Values in Motion Pictures; the second, was the work of the Commission on Human Relations of the Progressive Education Association. The last large movement is the opening of the vaults of short subjects of the Motion Picture Producers and Distributors of America to an advisory committee of eight educators, including the author. No material is yet ready for distribution, nor is the method of distribution yet decided upon.

The writer closes with such thoughts of assurance as, "I predict that before many years have passed the motion picture will become an integral part of the course of study and be generally regarded as one of the indispensable elements in the curriculum."

"Rescuing Civilization through Motion Pictures," by Marion C. Sheridan, New Haven High School.

Quotations from Arnheim, Biaggini, Richards of Cambridge, and Orton of Smith College imply that the motion picture dulls perception. It looks down, rather than up, in respect to the intelligence of the audience; hence it blurs distinctions.

The proper use for the motion picture does not seem to be solely as a means of information about the world in which we live. It is a question if informing films may be kept free from prejudice or propaganda. There is a place for the imagination, with all kinds of people and in all ages, without the criticism that the motion picture is a narcotic. "Bitter criticism, in some cases without a foundation in fact, may be a way of hindering the advance of the motion picture and thereby perhaps of actually dulling the perceptions of the audience of the one art form that is most popular currently."

Other articles deserving attention are "Civic Education and the Motion Picture" by Thomas Baird, of the General Post Office Film Unit, London, and "Motion-Picture Appreciation in the New Haven Schools," by Donald A. Eldridge, and "Extending the Use of Motion Pictures for Physical Education," by Jay B. Nash, New York University.

Book Review

MOTION PICTURES IN EDUCATION—A Summary of the Literature—Source book for teachers and administrators. Compiled by Edgar Dale, Fannie W. Dunn, Charles F. Hoban, Jr., Etta Schneider—under the auspices of the Committee on Motion Pictures in Education of the American Council on Education. (472 pp.) Published by The H. W. Wilson Co., New York, 1937.

Here is a volume unique in the visual field to date, and it renders a service that should be welcomed by thousands. It stands somewhere between a "bibliography" and an "anthology"—the former telling too little about too many items, the latter giving too much of too few. MOTION PICTURES IN EDUCATION presents,

in the form of digests, abstracts and deft condensations, the gist of the best that has been published on visual education, during the last decade, including a few references to outstanding writings from still earlier years. Naturally the abstracts vary from a paragraph to several pages according to length and importance of the originals. The selections include some 300 articles from magazines, yearbooks, and pamphlets, some 24 theses for Masters' and Doctor's degrees at various colleges and universities, and nine books.

The authors have grouped the material in six convenient subject-heads—with logical subdivisions under each as follows: (Part One) The Administration of Visual Aids (91 pages) by Dunn and Schneider; (Part Two) Teaching With the Motion Picture and Other Visual Aids (136 pages) by Dunn and Schneider; (Part Three) Selecting Instructional Materials (24 pages) by Hoban; (Part Four) Film Production in Schools (36 pages) by Dale; (Part Five) Experimental Research in Instructional Films (62 pages) by Hoban; (Part Six) Teacher Preparation in Visual Education (88 pages) by Dunn and Schneider. Appendix and Index (15 pages).

A large admixture of editorial comment by the authors increases greatly the readableness and value of the volume. Part Five is almost wholly an editorial interpretation of some fifty investigations.

Incidentally, the book offers disturbing bits of evidence on the slow progress of publication in the visual field. Only nine books within fifteen years were found worthy of inclusion. Practically all theses (24) in this field remain "unpublished"—which means they are inaccessible to the field save through such summary publications as the present volume. The visual field should produce these as worthy of publication as any others. Finally, of more than 270 magazine articles over half are from THE EDUCATIONAL SCREEN. This magazine being devoted entirely to the visual field should naturally yield a preponderance of material, but the ratio is all wrong. THE EDUCATIONAL SCREEN furnished 140 articles and it required 63 other educational magazines to furnish 132 more—or about two articles apiece in ten years. Writings by the field should be multiplied enormously not only in these 63 magazines but in several hundred others which are evidently paying slight attention still to the visual movement in education.

MOTION PICTURES IN EDUCATION should exercise a happy influence on future writings in this field. Now available, within reasonable compass, is an epitome of the best that has so far been done, learned and imagined. The invaluable sifting process here completed has weeded out the mass of naiveté and repetition so prevalent in the early literature of any new movement. The contradictions, uncertainties, inadequacies that remain are now visible and invite further investigation and discussion without risk of repetition. This careful compendium of the dicta and facta of visual education's past makes easy a comprehensive picture of the present status quo. With decks thus cleared—and desks thus relieved—we should be ready for action and for a more significant literature on visual education in the years ahead.

N. L. G.

DEPARTMENT OF VISUAL INSTRUCTION

PLANS ARE now being developed for the meeting in Atlantic City. We shall meet on Monday morning, February 28, and Tuesday morning, March 1, in Room 13, Atlantic City Auditorium.

Our present plan for the program is to devote the sessions to broad questions of policy in the fields of teacher training, evaluation of visual materials, production, utilization, and research. The final program will be ready for the next issue of the EDUCATIONAL SCREEN.

The question of policy-making is an important one. I have just received a letter from a long-time member of the Department who raises such disturbing questions as these:

1. Just what does our Department of Visual Instruction stand for, anyway? What are our goals and objectives?
2. Are our efforts merely resulting in the indiscriminate use of visual aids or are we vitally affecting new and progressive trends in American education?
3. Why hasn't our society been instrumental in preparing yearbooks, developing research projects, and in essence acting as a spear-head for the effective utilization of visual aids in the schools?

These are questions which are well worth discussion at Atlantic City.

It seems to me, too, that we must begin at once the coordination of the various kinds of educational activity going on in the field of visual materials. I don't mean that we should be the co-ordinating agency, but we certainly do have some responsibility for seeing that this coordination is developed.

Let me give you some examples of the different types of motion-picture programs now going forward in the country. Miss Alice Keliher has prepared certain film teaching materials from theatrical subjects and is utilizing them in discussion and study with high-school students. Her problem is the utilization of film situations in dealing with work in human relations. Mr. John Abbott, of the Museum of Modern Art Film Library, has developed very fine series of programs showing the history of the motion picture as an art. Literally hundreds of educational institutions have co-operated in putting on this series.

The American Council on Education for the past several years has been engaged in setting up a clearing-house of information in the field of the motion picture and allied visual aids. The National Committee on the Teaching of Motion-Picture Appreciation has, since its inception, been concerned with the introduction of motion-picture discrimination into the schools. The National Congress of Parents and Teachers has had a Committee on Motion Pictures and Visual Education for many years.

The U. S. Office of Education has had, until just recently, a specialist in the field of visual instruction. Their Pamphlet No. 80, "Sources of Visual Aids and

"Equipment for Instruction Use in Schools" is an excellent example of the type of work which has been done by this department.

Two types of co-ordination can be effected between these groups concerned with visual materials. The first may be called physical coordination. This means clarifying the activities of the various groups so as to avoid duplication and to enhance concentration. Second, there is a mental co-ordination that might occur, a thinking together on common objectives.

This co-ordination would be especially valuable in the field of research. At the present time a national radio committee has a cooperative list of all research problems which are being worked upon and reports are made concerning the progress of the research. All co-operating members, therefore, know just exactly what is occurring in the research field throughout the country.

One other point deserves mention. I have visited many of the schools which have excellent libraries of visual materials. They have fine negatives from which duplicates could easily be made, but we have developed as yet no state, regional, or national clearing house, for effecting such changes. Why isn't it possible to arrange in some way to exchange duplicate materials from school to school?

I have discussed only one of the many problems which face us in developing national policies. Why not meet with us in Atlantic City and help us think these problems through?

The address of the Department of Visual Instruction is now Box 3046 University Station, Columbus, Ohio.

—Edgar Dale

Teacher Training in Visual Aids

(Concluded from page 14)

The Stereograph and Lantern Slide in Education. Keystone View Company, Meadville, Pennsylvania, 1936. 24 pages.

Motion Pictures in Education, Department of University Extension, University of Kentucky, Lexington, 1936. 23 pages.

Visual Instruction Monographs, Department of Public Instruction, Harrisburg, Pennsylvania.

Report of the Committee on Visual Education for Lexington Public Schools, Department of University Extension, University of Kentucky, Lexington, 1936. 21 pages.

National Education Association, *Proceedings*, from 1923.

Dale, Edgar, *Motion Picture Appreciation*, National Congress of Parents and Teachers, Washington, D. C., 1934. 16 pages.

Dale, Edgar, *Motion Pictures: Questions and Answers*, National Congress of Parents and Teachers, Washington, D. C., 1936. 16 pages.

Aids to Teaching in the Elementary Schools, Thirteenth Yearbook. The National Elementary Principal, Vol. XIII (June, 1934)

Visual Aids in the Schools, Bulletin IV, New York State Association of Elementary Principals, December, 1935, 160 pages.

Trees in Winter--In Hand Made Lantern Slides

By ANN GALE

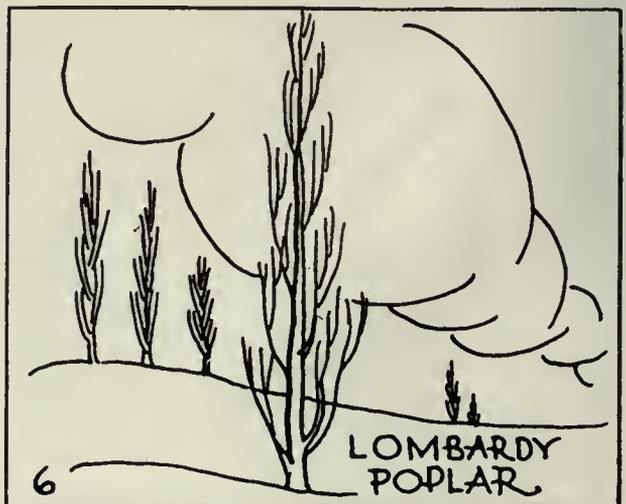
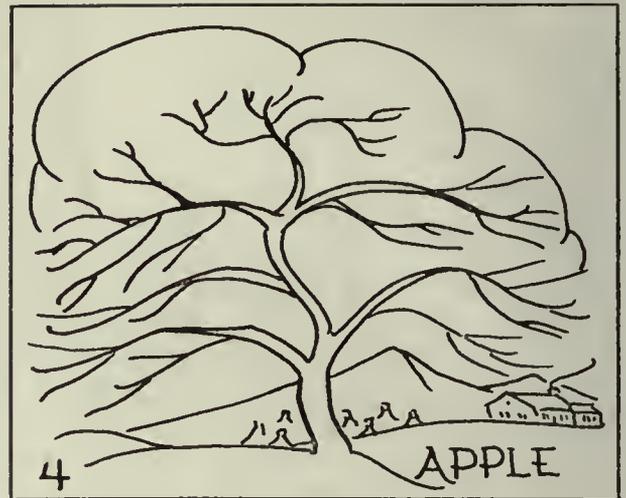
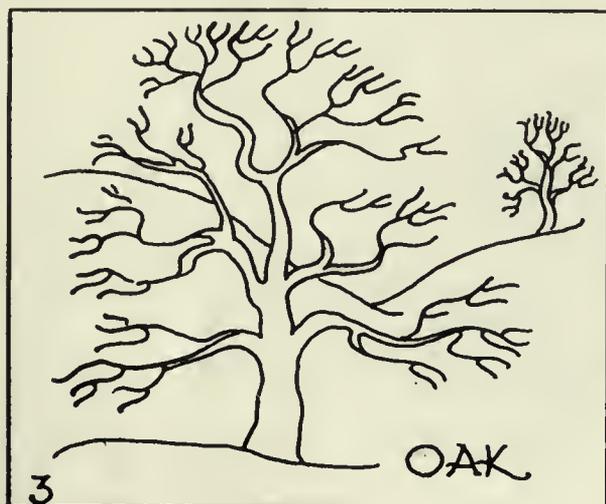
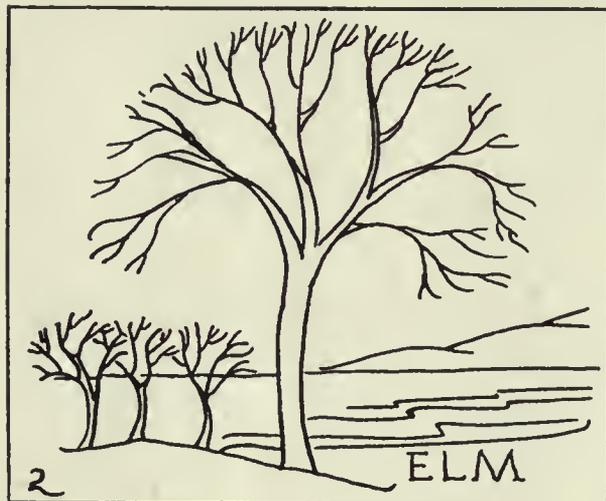
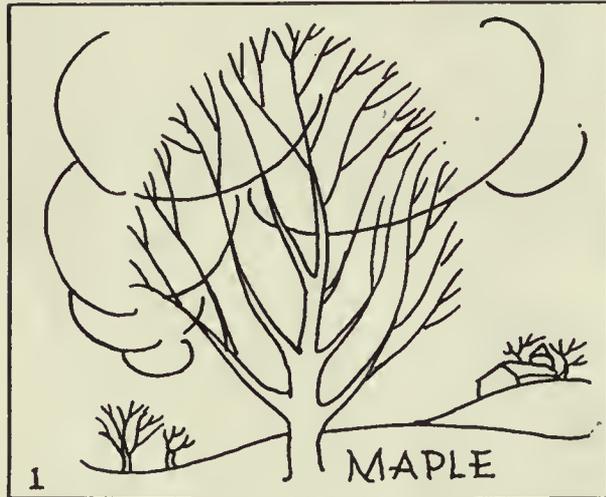
THE ARCHITECTURE of trees in winter is something that children in sixth and seventh grades can see and appreciate. They can recognize even that the branching system of each tree down to the smallest twig keeps the same angle of branching throughout.

These six slides will be helpful in pointing out distinctly different tree shapes and branching patterns before any outdoor excursions are taken.

(1) A maple tree with its oval shape, straight trunk which branches off at the top; and its acute angle of

branching. (2) An Elm tree with its fan-shaped top and gracefully shaped branches. (3) An Oak with its irregular shape, and its strongly curved angle of branching. (4) An Apple tree in a semi-circular shape, with its long horizontal branches. (5) A Pear tree with its tall center branches, and the slightly spreading lower branches. (6) A Lombardy poplar, tall and slender, with its straight vertical branches.

Keystone crayons may be used to make the trees stand out against the background.



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.

NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

American Council Committee Gets New Grant

A grant of \$135,000 from the General Education Board of the Rockefeller Foundation for the three year support of the activities of the Committee on Motion Pictures in Education was announced last month in Washington by George F. Zook, president of the American Council on Education. With this grant a clearing house of information and activity on visual problems, as they relate to general education, will be established under the direction of Charles F. Hoban, Jr., associate in motion picture education.

The American Council on Education, with the financial support of the Payne Fund and the General Education Board, has carried on a number of activities in this area during the past several years. As part of its new clearing house function, the Committee on Motion Pictures in Education plans to coordinate the work of other centers interested in films. The Committee will (1) establish reviewing panels of experts in various educational fields to view and appraise educational films which are now available, and outline areas for needed film production; (2) establish experimental centers in various institutions to study techniques related to the use of films in educational programs; (3) sponsor a series of institutes and conferences in which results of evaluation and experimental activities will be made widely available to teachers and administrators.

The Committee is made up of the following persons: John E. Abbott, Museum of Modern Art, New York City; W. W. Charters, Bureau of Educational Research, Ohio State University, Columbus; Frank N. Freeman, University of Chicago; Ben G. Graham, chairman, superintendent of schools, Pittsburgh; Mrs. B. F. Langworthy, former president, National Congress of Parents and Teachers, Chicago; and Mark A. May, director, Institute of Human Relations, Yale University.

Film Teaching Plan

The Commission on Human Relations of the Progressive Association, through its chairman, Dr. Alice V. Keliher, has been conducting an experimental program of specially edited 16mm sequences from well-known films in twenty selected high schools and colleges through the country as a means of helping adolescents solve their personal problems and develop a keen insight into human relations and needs.

Feature pictures containing "real life" problems, such as *The Devil Is a Sissy*, *Winterset*, *The Informer*, *Fury*, and others, have been re-edited into two or three short subjects each, stressing the main points of social interest in the films. Exhibition of these sequences to the students are followed by oral or written discussion

of the problems involved, under the guidance of the teacher. It is expected that sixty of these short subjects will be in circulation by July 1938.

Dr. Keliher believes that the project will educate a new audience to "films of significant type" by making young people more critical of thematic material. She further states that a long period of observation must precede any attempt to evaluate exactly the educational value of these films.

Visual Education on State Programs

The fifth annual meeting of the School Administrators and Executives of Texas, called by the State Superintendent of Education, met in Austin Thursday and Friday, January 6 and 7, 1938. This session was especially significant as it was devoted largely to a discussion of audio-visual education. The program (which we hope to report in greater detail in a later issue) included three prominent out-of-state speakers, namely, Mr. Ellsworth C. Dent, educational director, Victor Division, Radio Corporation of America; Mr. V. C. Arnsperger, Erpi Picture Consultants; and Walter S. Bell, Visual Education Supervisor, Atlanta City Schools.



Principals in attendance at the annual meeting of the Department of Secondary School Principals of the Michigan Education Association December 9-10, heard a panel discussion on visual education in Michigan. Members of the panel were: W. F. Head, Principal Central High School, Kalamazoo, Chairman Committee on Visual Education; E. L. Austin, Professor of Education, Michigan State College; C. A. Fisher, Director of Extension Division, University of Mich.; Robert Sharer, Principal Coldwater High School; Mrs. Helen Rand Miller, University High School, Chairman of the Committee on Standards for Motion Pictures, National Council of Teachers of English; George Stracke, Visual Education Specialist, Flint Public Schools.

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The Healer.....	8 reels	The Viking.....	6 reels
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Institute on Audio-Visual Aids

Reported by HAROLD C. BAUER

Chairman of the Northwest Audio-Visual Committee

EDUCATORS from the seven Northwest states of Minnesota, Michigan, Wisconsin, Iowa, North Dakota, South Dakota, and Montana held a challenging audio-visual institute at the University of Minnesota's Center for Continuation Study, December 2, 3, and 4. The three day institute offered a varied program of demonstrations and discussions dealing with teaching techniques and problems pertinent to administration, distribution and training of teachers in service. Robert A. Kissack, Director, Department of Visual Education, University of Minnesota and Mr. J. M. Nolte, Director for Continuation Study, were responsible for arranging the institute program. Illness prevented Professor Kissack's attendance however, and in his absence Herbert Jensen of the Visual Education Service, University of Minnesota, made the arrangements necessary to the smooth functioning of the meetings.

Dr. Edgar Dale, Director, Bureau of Educational Research, Ohio State University, discussed the *Needs and Problems of Teacher Training*. "Teacher training, like too much of the work in public schools, colleges, and universities, is often verbalistic," said Dr. Dale. "Our students are constantly presented with shadow of meaning without its reality, the husks without the kernel. Teacher education is excessively verbalistic because it is not sufficiently concerned with the needs and interests of the prospective teachers. It tends to substitute words for experience." Dr. Charles Hoban, Secretary, American Council of Education, Washington, D. C. gave a resumé of what had been done in the field of adapting motion pictures to education. He further outlined the Educational Motion Picture Project for the next three years. Miss Florence Keliher, President of the Committee on Human Relations, Progressive Education Association, conducted a demonstration with a short film *Men In White*, re-edited by the committee. Harold C. Bauer, Supt. of Schools, Lakefield, Minnesota, reported the results of a questionnaire mailed to seventeen hundred forty five Northwest educators, and summarized the *Trends in Educational Thinking as They Related to Audio-Visual Aids*, indicated by this questionnaire. Dr. H. A. Gray, Research Associate, Erpi Picture Consultants, was assisted in the presentation of a sound film by Mr. Burgert of the University High School. "The terms Visual Education, Audio-Visual Instruction, etc. are misnomers," said Dr. Gray, "since the individual reacts to life situations as a whole and not solely through the senses of seeing and hearing. More objective terminology would be Audio-Visual learning aids and their uses." Ella C. Clark, State Teachers College, Winona, Minnesota, discussed *Gaining Complete and Accurate Concepts through the Use of Pictures*. "Among the things which must be read into a well selected picture," said Miss Clark, "are size, color, odor, speed, temperature, moisture, weight, sound, and motion." Mr. C. P. Archer, Head of the Department of Education, Moorhead State Teachers

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College. in his review of *Courses for Training Teachers in the Use of Visual Aids*, pointed out the great variation that exists in the teaching procedure of visual instruction courses. However, "all agree that much use should be made of class demonstrations and actual practice with children." Donald K. Lewis, Red Wing Minnesota, High School, demonstrated the *Use of Models and Museum Materials*. J. E. Hansen, Chief Bureau of Visual Instruction, University of Wisconsin, discussed *In-Service Training Methods*. Ella C. Probst, Instructor, Minneapolis Public Schools, gave a demonstration on the *Use of Lantern Slides*. M. I. Smith of Hibbing, Minnesota, presented the topic *The Mechanics of Distribution*. Mr. G. L. Berry of Glencoe, Minnesota, outlined the *Organization of a Visual Education Program for a Small School*. "No constructive educational work in visual instruction can be carried on in any school without some organized working plan, and some one person responsible for the functioning of such a plan," he stated. H. B. McCarty, Director of radio station WHO, University of Wisconsin, discussed *The Use of the Radio in the Classroom*. David E. Strom, in charge of Visual-Education, Minneapolis Public Schools, spoke on *The Silent Motion Picture*, pointing out the value and place of motion pictures in general, and the silent film specifically.

The following resolutions were unanimously adopted:

1. The committee composed of Supt. Harold C. Bauer, Dr. C. P. Archer, Miss Ella C. Clark, Mr. Donald K. Lewis, and Mr. M. I. Smith, be instructed and encouraged to use every effort to promote the immediate extension of a more

effective use of visual aids in the educational program: by contacting superintendents, principals, supervisors, teachers and parents; by requesting consideration of audio-visual education on educational programs; by using radio, public press, and other means of reaching the general public; by contacting University Departments of Visual Education to ascertain if films can not be made more easily available both as to rental and cost of transportation; by trying to work out a practical plan of setting up an economical and efficient system of distribution of films and other visual aids.

2. That State Departments of Education be urged: To give visual education appropriate emphasis in the Manual of Standards, bulletins, courses of study, and syllabi; to study the advisability of organizing a division of visual education on a part-time or full-time basis; to prepare an outline for distribution to the schools of the state on visual education with suggestions as to its nature, purpose, scope, and use.

3. That the teacher training institutions of the state, private and public, be urged to set up courses of instruction in the use of visual aids as an integral part of the teacher training program and that special attention be given to the needs of teachers now in service who must rely upon extension or summer school work for help from teacher training institutions in building for their professional improvement and growth; further, that teacher training institutions arrange, so far as possible, for regional conferences or institutes in visual education and for evening and Saturday classes where needs may be met through such opportunities.

The following educators were named to serve on the general committee as state chairmen: Iowa — H. L. Kooser, Iowa State College, Ames; Montana—Don G. Williams, Great Falls; Wisconsin—J. E. Hansen, University of Wisconsin, Madison; North Dakota—O. S. Anderson, High School, Fargo; South Dakota—Paul G. Tschetter, Webster; Michigan—Mary MacDonald, Wakefield.

SCHOOL DEPARTMENT

Conducted by **Wilber Emmert**

Director Visual Education, State Teachers College, Indiana, Pa.

Course of Study in Photography

IF a school is contemplating a course of study in photography for the beginners, it can do no better, in the writer's opinion, than follow the plan outlined in Eastman Kodak Company's new syllabus, *PHOTOGRAPHY—A Syllabus and Guide for Teacher Training*. This publication presents a most thorough plan for systematic progress, including five well planned units subdivided into twenty-three separate problems. There is a list of references as well as an objective test for each of the units. The book is really a self-administering laboratory manual which the pupils can use individually and independently if so desired. The course includes the following items:

Unit One (First Cycle)

Fundamental Operations of Photography as Introduced by the Pinhole Camera

- I. Making the pinhole camera. Basic Theory and Practice
- II. Picture taking with the pinhole camera. Theory of Composition lighting and exposure
- III. Developing the film
- IV. Making the print.
- V. Mounting the print

Unit Two (Second Cycle)

Theory and Practice of Photography as Involved in the Use of the Hand Camera

- VI. Fundamental theories involved in unit One explained.
- VII. Theory and practice involved in the use of camera lenses.
- VIII. Applications of lens theories in the use of hand cameras
- IX. The theory and practice of exposure
- X. The theory and practice involved in modern films and filters

Unit Three

Theory and Practice Involved in the Production of Good Negatives

- XI. The chemistry of developing and fixing solutions
- XII. The theory of development
- XIII. The practice of development
- XIV. Judging the quality of negatives and learning the causes of defects
- XV. Improvement of negative through intensification, reduction and retouching

Unit Four

Theory and Practice of Tone Reproduction

- XVI. Theory of printing papers and their selection
- XVII. Theory and practice of printing
- XVIII. Theory and practice of enlargements
- XIX. More about mounting

Unit Five

Theory and Practice in Special Phases of Photography

- XXI. Portraiture by daylight
- XXII. Interiors by daylight
- XXIII. Portraiture and Interiors using Photofloods and Photo-flash Lamps.

Motion Picture Demonstration Lesson

A demonstration lesson was presented in the Atlantic City Auditorium in connection with the meetings of the New Jersey State Teachers Association November 13th. Dr. Lawrence R. Winchell, Superintendent of Schools of Vineland, N. J., conducted the discussion with a group of 9th grade students in Social Studies from the Vineland High School. This was the only demonstration held and was attended by thousands of teachers from all over the State. Dr. Winchell has conducted extension courses in Visual Instruction for teachers at Rutgers University for eight years.

Before the actual demonstration, Dr. Winchell outlined the purposes and the objectives of the experiment. The particular film which was used in the demonstration was on the subject of Irrigation. Since these students were studying this subject at this particular time in the Vineland High School, it was necessary to introduce the film at the psychological time in the discussion to clear up mistaken ideas, to convey accurate information, to answer questions which were raised by the students. The problem to be solved was—Shall the Nation reach

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LEWIS FILM SERVICE
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its hand into the desert? In order to solve this problem, the following questions had to be answered.

1. Should large sums of money be spent for irrigation projects?
2. Can crops be made to grow in irrigated regions?
3. How do these projects operate?

The discussion was largely between students guided only by the teacher. Certain questions were raised which could only be answered by actually seeing the film. The discussion centered around the pupil-made colored lantern slides on irrigation which were prepared by committees of students beforehand. The pupil chairman of each group led the discussion which brought out pupil participation.

The students had gathered material from all sources, such as the government Bureau of Reclamation, the irrigated regions, libraries and reference books. The demonstration revealed real abstract thinking and reasoning on the visual aids used.

That visual instruction by means of films is to be regarded as a supplement to good teaching, and not as a substitute was maintained by Dr. Winchell in the evaluation of the lesson.

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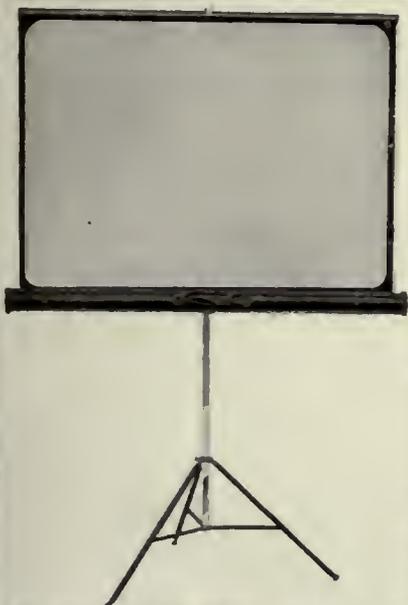
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The Da-Lite Challenger can be set up instantly anywhere. It folds compactly for easy carrying. 11 sizes, 30" by 40" to 72" by 72". From \$15.00 up. The Standard model has an extension support that locks automatically in place. The DeLuxe model has a crank and gear lift.

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Will accommodate all sizes of lantern slides. Beautiful black and chrome finish.

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PRINCIPLES OF PHYSICS **PRINCIPLES OF CHEMISTRY**
 The visualization of high school physics on 35 mm. film slides for classroom use. The core of the year's work in chemistry especially adapted for review.

Descriptive literature and sample strip of typical frames sent on request. Address:

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A few of our Large Catalogue of
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THE LOST JUNGLE ★ KEEPER OF THE BEES ★ GALLANT FOOL ★ THE GIRL OF THE LIMBERLOST ★ I CONQUER THE SEA ★ MILLION DOLLAR BABY ★ IN OLD SANTA FE ★ EAT 'EM ALIVE ★ CITY LIMITS ★ MAN'S BEST FRIEND ★ KENTUCKY BLUE STREAK ★ SILENT ENEMY ★ JANE EYRE ★ KLONDIKE ★ RUSTLER'S PARADISE ★ HEARTS OF HUMANITY ★ RETURN OF CASEY JONES ★ MIDNIGHT PHANTOM ★ NOW OR NEVER ★ THIRTEENTH GUEST ★ RED HAIRED ALI ★ all PETER B. KYNE'S SUBJECTS ★ all TOM TYLER, JACK PERRIN and JACK HOXIE'S WEST-ERNS ★ all RICHARD TALMADGE'S pictures ★ and RIN TIN TIN, Jr.

Altogether 150 Features and 400 Shorts from which to pick your programs

Not One Mediocre Picture in Our Library

Film Rental Catalogue — Film Sale Catalogue

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TYPEWRITER SLIDES

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USE RADIO MATS
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 1819 Broadway, Dept. V. New York City

Back Issues Wanted

We are in need of the following back issues

January 1933 through January 1934

January through September 1936

If any of our readers can supply these numbers, a fair price will be paid for them, if received in good condition.

Current Film Releases

Castle News Films

To meet the growing need of schools for newsfilms, Castle Films, Inc., New York City, is releasing professionally edited *News Parades*, *Sports Parades*, travel pictures and topical short features well adapted for use in schools. Both silent and sound versions are available in 8 and 16 mm width, and at prices school systems can afford.

Mr. Castle got his idea for large scale production of popular-priced films from an opportunity to buy professional newsreels depicting the story of England's Coronation last year. Other films of geographical interest are his *Paris the Beautiful*, *Venice the Magnificent* and *Exotic Egypt*, telling the story of these far-away places in a way that professor Pitkin of Columbia University maintains is twice as effective as any geography book could be. Issued twice monthly, the *News Parade* series started with a compilation called the *News Parade of the Year*, has caught such events as the American Legion Parade in New York, and offers sports subjects stimulating to school youngsters.

Gutlohn Offerings

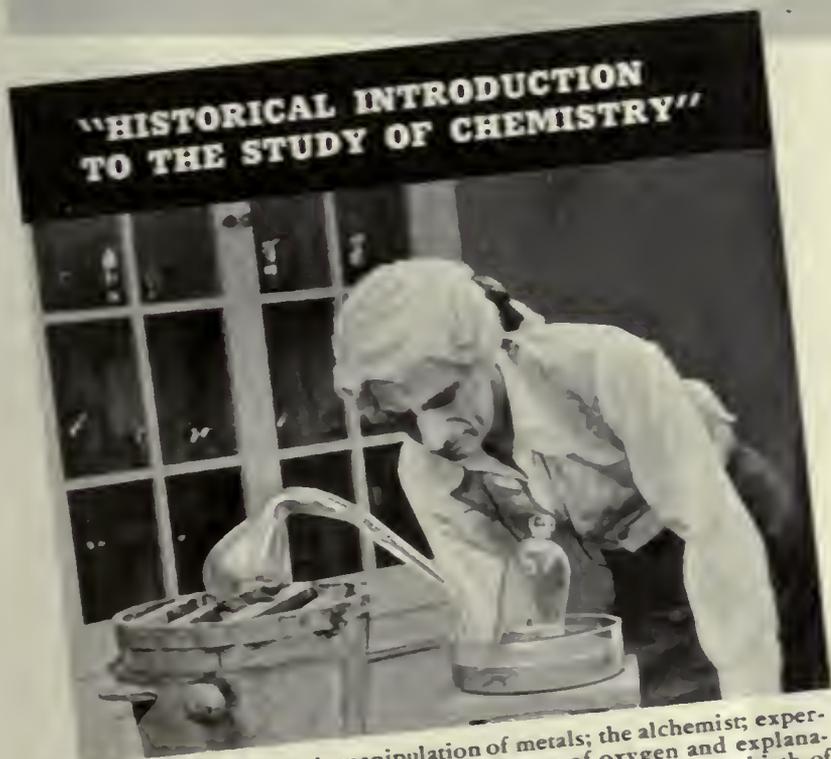
The January issue of *The Monthly News Digest*, released in 16mm. sound-on-film by Walter O. Gutlohn Inc., consists of a dramatic review of the outstanding events that have occurred during the year 1937. *The Monthly News Digest* is a one reel condensed version of the current Pathe News and is issued regularly each month. The material is carefully edited to make it of the greatest possible value to schools as well as to general audiences.

A new Gutlohn catalog of Entertainment Pictures in 16mm sound-on-film is just off the press, double the size of the previous edition and containing the largest selection of features and short subjects ever offered by this firm. It may be obtained free by writing to Walter O. Gutlohn, Inc., 35 W. 45th Street, New York City.

A Movie from The Women's Bureau

The woman shopper buying her street frock and evening gown little guesses the history and drama behind them. The main features of the whole story are set forth in a new silent movie entitled *What's in a Dress*, now available free in 16 mm and 35 mm from the Women's Bureau, U. S. Department of Labor. The film deals with old problems in the dress industry and new ways of meeting them. Legislative action and cooperative efforts of employers and employees are represented as measures now in force in most of the plants. In contrast to such progress are the sweatshop practices featured in the film as still prevailing in some places. Other problems characteristic of the clothing industry, such as seasonal unemployment, chiseling, and the speed-up system, are stressed as requiring for solution the efforts of all concerned. The role of the Women's Bureau in investigating conditions and formulating standards also is pictured in its new movie

Three New Eastman Science Films... Including the First of a Series on Chemistry



The primitive savage's manipulation of metals; the alchemist; experiments of Priestley and Lavoisier; discovery of oxygen and explanation of burning. A scientifically accurate presentation of the birth of modern chemistry. 1 reel—\$24.

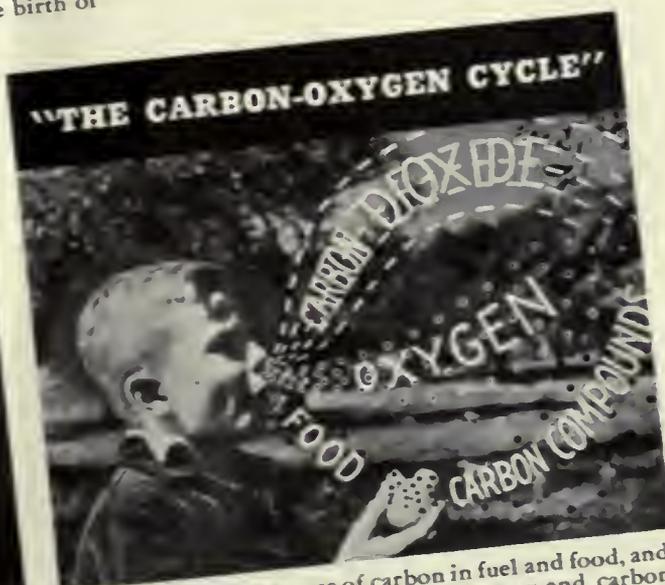
Historical Introduction to the Study of Chemistry is the first of a new series of films being produced at the suggestion and with the coöperation of the New York Chemistry Teachers' Club. It provides a vivid background and a strong stimulus for students beginning the study of chemistry.

Eastman also announces *The Nitrogen Cycle* and *The Carbon-Oxygen Cycle*... equally important additions to the science section of every school's film library.

Each of these films is in one reel; each is priced at \$24, transportation included. Order now for early delivery... Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.



Shows the relation of nitrogen to plant and animal growth. Scenes presenting the formation of natural and commercial fertilizers complete the story of the nitrogen cycle "through living and non-living things." 1 reel—\$24.



Dramatically presents use of carbon in fuel and food, and the function of oxygen in releasing energy and carbon dioxide. The energy cycle is involved, hence this picture forms a sequence to other science films. 1 reel—\$24.

Eastman Classroom Films

AMONG THE PRODUCERS *Where the commercial firms announce new products and developments of interest to the field.*

Filmosound Improvements and Price Reductions

With the announcement of great improvements throughout the entire line of Filmosounds, Bell & Howell is now producing four standard models of 16 mm. sound-on-film projectors, one Model 120, two model 138's, and one Model 130. All embody a host of new features lending greater flexibility.

The new 750-watt Filmosound 120-G has an electric rewind, a still-picture clutch and a reverse gear, two speeds, sound and silent, and an improved amplifier providing 18 watts with greater fidelity than before. The take-up mechanism is designed to require no changing of belts to run reels of various sizes. This model is also available with a special amplifier to operate on 25-to 60-cycle alternating current.

The new Model 138-F is the same single-case Filmosound which has been popular for home and smaller-audience use, but to it have been added a reverse gear and a still-picture clutch, as well as many minor improvements. The Filmosound 138-J is the Bell & Howell answer to the demand for an enclosed 138. It is a two-case job, with its projector fully enclosed in a "blimp" case. The second case contains a twelve-inch speaker. The projector provides both clutch and reverse and may be used for silent as well as sound films. Volume production has permitted a substantial in the price of these two machines, the new price of Model 138-F being \$385, and that of 138-J \$410.

The very newest of the improved Filmosounds is the 130-D, the powerful 1000-watt Auditorium model. A completely redesigned amplifier is the outstanding new feature of the 130.

Ampro Pamphlet

The Ampro Corporation of Chicago, manufacturers 16mm silent and sound motion picture projectors has just completed a four-page folder which is to be distributed throughout the field of Audio-Visual Education. This brochure, lithographed in colors, is graphic and holds interest for every educator. A copy of this pamphlet will be sent to any school official or executive who requests it.

Well Known Historical Slides Revised

The Pageant of America Lantern Slide collection has been thoroughly revised, and a new 32-page catalog listing these excellent slides prepared by the Yale University Press, 386 Fourth Avenue, New York City. In harmony with suggestions received from schools and museums throughout the country, changes have been made and new slides added until the material represents a unique and comprehensive collection of authentic prints, drawings, paintings, photographs, maps, etc., invaluable for teachers of American history and the social studies.

One thousand black and white slides have been selected by members of the Department of Education of Yale University from 11,500 illustrations which appear in the fifteen volumes of *The Pageant of America*. Of this number, 625 have been edited and classified into 24 convenient teaching units by Dr. Daniel C. Knowlton of New York University, and 375 have been grouped under 15 general headings such as "Portraits," "Maps," "Charts and Diagrams," "Papers and Documents," etc. Throughout, one general principle has been followed—the slides, individually and in groups, must be of interest to the child as well as the trained historian. They have been selected with the idea of bringing the pupil into as close a physical or sensory contact with history as the topic permits.

Each slide bears a key number which refers to the corresponding illustration in the *Pageant of America* volume, in which also appears an interesting and authentic explanatory text with the picture. Dr. Knowlton's introduction to the slide catalog gives some helpful suggestions for teaching procedure, including specimen lessons on units and individual slides.



"Lee after the Surrender at Appomattox"
(No. 257, Unit XI, "Slavery and the War between the States,"
from *The Pageant of America Lantern Slide* collection)

Norman Alley Visits DeVry's Chicago Factory

Norman Alley, enroute to New York, visited his friend Herman A. DeVry, pioneer manufacturer, and inventor of the famous Model "A" Newsreel Camera which secured many of the already-famous motion pictures of the unfortunate Panay incident.



Mr. Alley, H. A. DeVry, and D. C. Beaulieu, DeVry foreign representative, who is holding the camera.

H. A. DeVry holds in his possession a letter which will always be cherished . . . among the first sent after Alley reached American shores . . . "I wish to take this opportunity of telling you that had it not been for my faithful DeVry Camera, the valuable scenes of the Panay incident might not have been as accurate and clear as they were."

New Continuous Projector Introduced

J. Kenfield Morley has resigned as Sales Promotion Manager of Bell & Howell Company to become Vice President and General Manager of the Advitagraph Corporation, producers of motion picture advertising and manufacturers of Flo-Lite continuous advertising movie projectors. The general offices of the company are located at 540 North Michigan Avenue, Chicago, another at Louisville, Kentucky, and the factory at Rochester, New York.

The company will provide a complete advertising script and dialogue. It will supervise all filming and laboratory production and handle all distribution, theatrical and non-theatrical. It will supply its own Flo-Lite continuous advertising projectors, sound and silent, developed by Jack Moranz, President of the corporation. These machines operate on a new principle, eliminating the conventional shutter and the intermittent motion. The picture is projected through a revolutionary principle, utilizing pyramidal mirrors. The mirrors travel in a continuous flowing circuit, taking the place of the old style shutter, and recast the images from the film indirectly to the screen, thereby entirely eliminating intermittent motion.

Standard intermittent projectors, both sound and silent, of reputable manufacturers will also be used for regular screen projection.

The company is launching a national organization of distributors and exhibitors who will service this equipment as well as provide simultaneous showings of films as required by the advertiser, both to theatrical as well as non-theatrical audiences.

SEEING IS BELIEVING!

No matter what the subject taught . . . the mind receives fullest significance, understands with greatest clarity — if the lesson has been conveyed by the eyes!

**YOU WILL EDUCATE BEST
IF YOU EDUCATE
PICTORIALLY!**

Available After January 15th

NORMAN ALLEY'S

"Bombing of the U. S. S. Panay"

(Produced by Chas. E. Ford)

Three Thrilling Reels!

**FOR ENTERTAINMENT, NO
GREATER PICTURES ARE
AVAILABLE THAN THESE:**

MERRY-GO-ROUND OF 1938

SHOW BOAT

MY MAN GODFREY

THREE KIDS AND A QUEEN

THE ROAD BACK

—and Deanna Durbin's great pictures—

THREE SMART GIRLS

100 MEN AND A GIRL

(Catalogue 15)

Write to Universal's Non-Theatrical Department for further information regarding short and feature-length pictures, travelogues, cartoons and other motion pictures.

**UNIVERSAL PICTURES
COMPANY, INC.**

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New York, N. Y.

CIRCLE 7-7100

THE FILM ESTIMATES

Bad Man of Brimstone (Wallace Beery, Virginia Bruce) (MGM) Super-Western with Beery an ultra-bad hombre dealing sudden death throughout. Violence, brutality, treachery, deafening noise in the old two-gun Western style. Unconvincing father-son relation, and distorted motivation. Hero sadly inadequate. 1-11-37
(A) Depends on taste (Y) Doubtful value (C) No

Beg, Borrow or Steal (F. Morgan, Janet Beecher, Florence Rice) (MGM) Light, entertaining, deftly-acted comedy. Impoverished American of shady habits, living in France, feigns wealth to impress visiting relatives, with inevitable disclosure. Crookedness made very amusing and appealing, but effect probably harmless. 12-21-37
(A) Very gd. of kd. (Y) Probably good (C) No

Blossoms on Broadway (Edw. Arnold, Shirley Ross) (Para) Dizzy, incoherent, ill-conceived hodge-podge of absurdly burlesqued situations and vaudeville acts. Leading players are tricksters with plan of wholesale swindling which meets final defeat in imitation "Gilbert and Sullivan-style" climax. 12-21-37
(A) and (Y) Stupid (C) No

Bride for Henry, A (Anne Nagel, Warren Hull) (Monogram) Elementary, frivolous farce. Spoiled heiress, left waiting at altar by sappy fiancé, marries family lawyer for spite and plans quick divorce. Obvious climax, however, when latter's unsuspected social graces and popularity show up ex-fiance's shortcomings. 12-28-37
(A) Hardly (Y) Passable (C) No

Conquerors of the Arctic (Amkino) Detailed record of Soviet expedition to North Pole by planes last spring, simply told, naturally acted, effectively photographed. Illuminating views of physical aspects of polar region and hardships of life there. Accompanied by explanatory English commentary. 12-21-37
(A) Interesting (Y) and (C) Good

Danger - Love at Work (Ann Sothern, Jack Haley, Boland, Horton) (Universal) Provides some laughs in its burlesqued nonsense, but eccentricities of assorted characters are overdrawn to point of mere silliness, and the one sudden musical interlude in stable is quite startling. 12-14-37
(A) Hardly (Y) May amuse (C) Doubtful value

Dark Journey (Conrad Veidt, Vivien Leigh) (U.A.) Well-made British film of spy activities in neutral Stockholm and on the sea during World War, with appealing romance between enemy agents. Complex, suspenseful, plausible plot, fine acting by principals, restrained treatment, authentic atmosphere. 12-28-37
(A) and (Y) Good of kind (C) Too mature

Dinner at the Ritz (Annabella, David Niven, Paul Lukas) (Fox) Exciting blend of adventure, romance and tragedy, made in England, attractively set and capably acted. Rather involved plot as heroine dons disguises and tracks down father's murderer, who is captured in highly melodramatic climax. 12-14-37
(A) Good of kind (Y) Perhaps (C) No

Daughter of Shanghai (Anna May Wong, Philip Ahn) (Para) Super-thrilling action melodrama concerning efforts of heroine and Chinese G-Man to capture ring of alien smugglers who have killed her father. Successful after many harrowing experiences and miraculous escapes. Illogical and unpleasant story. 12-28-37
(A) Hardly (Y) Unsuited (C) No

Doctor Knock (Louis Jouvet) (French, with full English titles) Hilarious satire of medical commercialism. Romain's novel made into typical continental farce comedy. Unscrupulous doctor transforms whole village of healthy mountaineers into hypochondriacs and profits accordingly. Fine for French students. 12-14-37
(A) Very gd. of kind (Y-C) More or less amus.

Duke Comes Back, The (Allan Lane, Heather Angel) (Republic) Ring champ, college cultured, leaves ring after victory, according to his promise, to marry heiress. Her genial father proves crooked, so hero returns to ring for money to save him—and all is forgiven. Misplaced melodrama helps little. 1-11-37
(A) Mediocre (Y) No (C) No

Every Day's a Holiday (Mae West, and fine cast) (Para) Same "West" stuff, laid 40 years ago to conceal staleness and absurdity. As gorgeous-gowned, hip-wriggling, pocket-picking crook, Mae supposedly adles all brains, defeats justice, debauches politics, elects her own mayor of New York and marries him! 1-4-38
(A) Depends on taste (Y) and (C) By no means

Being the Combined Judgments of a National Committee on Current Theatrical Films
(A) Discriminating Adults (Y) Youth (C) Children
Date of mailing on weekly service is shown on each film.
(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Fit for a King (Joe E. Brown) (RKO) Typical Joe E. Brown nonsense farce with Joe as dumb, blundering, engaging reporter who stumbles through an assignment that involves him with mythical kingdom in Europe. Despite rival reporter's interference, he finally scoops him and wins princess. 12-28-37
(A) Good of kind (Y) Amusing (C) Amusing

Fury Over Spain (Official Loyalist Pictures) Grim, authentic film of actualities in Spain. Some real "battle" scenes are shown, but largely a dreary land of desolation, misery and building ruins. Loyalist propaganda, with voice chanting heroism of pitifully untrained citizenry. More depressing than impressive. 12-21-37
(A) Hardly (Y) Hardly (C) No

Girl Said No, The (Rob't Armstrong, Irene Hervey) (Grand Nat'l) For revenge on gold-digger taxi-dancer heroine, hero puts her in fake show with former troupers which turns out a surprise hit and everybody's happy. Simple, undistinguished story, but enjoyable Gilbert & Sullivan music a good feature. 12-14-37
(A) and (Y) Fairly good of kind (C) No

GI-1 With Ideas, A (Wendy Barrie, W. Pidgeon, K. Taylor) (Univ) Brisk, light-hearted, humorous newspaper story concerning society girl's successful management of paper won in libel suit despite tricks of former owner to recover it. Unconvincing and absurd, of course, but has some original twists. 12-21-37
(A) and (Y) Fairly amusing (C) No interest

Hitting a New High (Pons, Oakie, Blore, Horton) (RKO) Inane, artificial plot for Lily's thrills and cadenzas. Press agent arranges for her discovery as famous "bird girl" singer by "planting" her in African jungle dressed in feathers and imitating birds! Follow success comic complications, ultimate disclosure. 12-28-37
(A) Inane (Y) & (C) Probably amusing

I'll Take Romance (Grace Moore, Melvyn Douglas, Stuart Irwin) (MGM) Light, gay musical romance, lavishly costumed and set. Excerpts from several operas beautifully sung. Grace charming, plot quite wholesome and entertaining, with amusing situations and subordinate roles. 12-14-37
(A) and (Y) Very good (C) Good if it interests

Living on Love (James Dunne, Whitney Bourne) (RKO) Weak, stereotyped comedy built on poor boy and girl sharing same room in cheap boarding house, but strangers to each other as one works nights, the other days. For obvious solution they meet outside. Stilted comedy and poor acting. 1-11-37
(A) Stupid (Y) Poor (C) No

Love and Hisses (Winchell, Bernie, Simone Simon) (Fox) Rollicking, loosely knit compound of Winchell-Bernie feud and Simone's romance with a third hero inserted for the purpose. Little drama but much hilarity in feudists' efforts to outwit each other. Simone's singing role a feature. 12-28-37
(A) Very gd. of kd. (Y) Very amus. (C) If it int.

Man Proof (Loy, Tone, Pidgeon) (MGM) Smart, modern comedy, sophisticated dialog, much drinking. Heroine's infatuation for cad continues even after he jilts her for mere money marriage. Her eyes eventually opened, she finds her real love is for faithful family friend. 12-28-37
(A) Good of kind (Y) Better not (C) No

Manhattan Merry-go-round (Carrillo, Dvorak, Phil Regan) (Republic) Lively, far-fetched farce, combined with assorted "acts" of swing bands and a dash of opera. Genial racketeer-loan-shark and strong arm henchmen take over operation of recording studio and cause various complications. Hilarious exaggeration, hardly harmful. 1-11-37
(A) Fair of kind (Y) Prob. amusing (C) Doubtful

Navy Blue and Gold (Stewart, Tom Brown, R. Young, F. Rice) (MGM) Annapolis life made vivid and amusing. Navy ideals moving and impressive, in expertly done romantic drama that rings true. Fine balance of wisecrack, horseplay, sentiment and pathos in strongly human character comedy. Navy propaganda of the best. 12-21-37
(A) Very Good (Y) Excellent (C) Good

Peter the First (Russian production) (Lenfilm) Strong presentation by splendid cast of times and deeds of Peter the Great. Primitive, violent, brutal, licentious, Peter still has vision and sheer power to lift Russia from utter crudity toward better things. 1-4-38
(A) Notable (Y) Mature (C) No

Prescription for Romance (Mischn Auer, Wendy Barrie, Kent Taylor) (Univ) Secret Service hero chases crook through Europe. Heroine, thinking crook innocent tries to thwart hero, but finally loses both struggle and heart. Artificial mixture of hokum and romance. Succeeds in aim to amuse, not to convince. 1-4-38
(A) Hardly (Y) Fair (C) No

Rosalie (Nelson Eddy, Eleanor Powell) (MGM) Elaborate musical comedy romance between incognito princess and "mature" West Point cadet (good West Point propaganda). Charming music and dance, but some comedy in bad taste. Gorgeous settings too "Hollywood" for tiny, mythical kingdom in Balkans. 12-28-37
(A) Good of kind (Y) Good (C) Hardly

She Loved a Fireman (Diek Foran, Ann Sheridan) (Warner) Ordinary little film about boasting braggart who first sneers at, then learns respect for work of firemen. Punctuated by many "socks-to-the-jaw." Some interest and value in scenes showing training, responsibility and courage of firemen. 1-4-38
(A) Hardly (Y) Fair (C) Doubtful

52nd Street (Ian Hunter, Kenny Baker, Pat Patterson) (U.A.) Rambling, disjointed musical, mixing serious theme with song-and-dance sequences. Concerns transition of street from aristocratic to night club center, and follows career of prominent family. Some good bits by Zasu Pitts and Carrillo. 12-14-37
(A) Perhaps (Y) Not the best (C) No

They Won't Forget (Claude Rains, Edw. Norris) (Warner) Finely acted, impressive and challenging indictment of mob violence, sectional hatred, political expediency and sensational journalism. Grimly tragic story, based on facts, told with simple clarity, restrained but terrible forcefulness. 12-21-37
(A) Notable (Y) Too strong (C) No

Thoroughbreds Don't Cry (Ronald Sinclair, Sophie Tucker, Mickey Rooney) (MGM) Lively, well-acted racing story with notable character interest, but race track ethics unusually low. Contemptible father tricking jockey son into disgrace is mainspring of plot. Poor taste overdoes smart-aleck humor. 12-14-37
(A) Good of kind (Y) Doubtful (C) No

Tovarich (Boyer, Colbert, Rathbone) (Warner) Light, sparkling, mature, thoroly delightful comedy, deftly acted, directed and produced. Boyer and Colbert excellent as royal Russian refugees working as servants in wealthy Parisian home. Slow start and Boyer's poor enunciation in opening scenes only flaws. 1-4-38
(A) Excellent (Y) Very Good (C) No

True Confession (Lombard, MacMurray, J. Barrymore) (Para) Crazy, incredible, fast-moving, sophisticated comedy. Heroine, a chronic liar is unjustly accused of murder, but confesses to charge so that lawyer-husband, who believes her lie, can clear her on self-defense plea. Zestful comedy role by Barrymore. 12-21-37
(A) Amusing (Y) and (C) Unsuited

Wells Fargo (Joel McCrae, Frances Dee) (Para) Vivid, realistic history—occasionally overshadowed by romance—depicting stirring, exciting national events during development of famous pioneer express service. Violence commendably restrained and whole decidedly worthwhile. 1-4-38
(A) and (Y) Very good (C) Prob. too exciting

Westland Case, The (Preston Foster, Carol Hughes) (Universal) Mediocre murder film which labors to be sprightly and amusing. Action is trite, plot complicated and rather incoherent, and detective-hero strives vainly to be debonair and impressive. Many cheap touches. 12-14-37
(A) Poor (Y) Poor (C) No

Women Men Marry (Geo. Murphy, Josephine Hutchinson) (MGM) Unsavory jumble about reporter-detective tracking down fake religious leader, while a cheap, tawdry love-affair goes on between hero's wife and his contemptible boss. Some clever and amusing bits are slight compensation for the rest of it. 1-4-38
(A) Trash (Y) and (C) No

You're a Sweetheart (Alice Faye, Geo. Murphy, Ken Murray) (Diverting, attractively set musical comedy with well-knit story and some entertaining specialty acts. Old backstage theme, concerning producers' difficulties in putting on show, gets fresh treatment. Murphy's dancing a feature. Overlong, however. 1-4-38
(A) Fairly good (Y) Entertaining (C) Perhaps

Publications on Visual Instruction

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Magazine Devoted Exclusively
to the Visual Idea in Education

FEBRUARY, 1938

VOLUME XVII, NUMBER 2

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IN THIS ISSUE

*Audio Aids in a
Visual Program*

*Student Camera Crew
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*Lantern Slides
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NUMBER TWO

Contents

Audio Aids in a Visual Program. Arnold P. Heflin.....	39
Student Camera Crew Makes a "Scoop." Ernest E. Oertel.....	42
Lantern Slides of Cellophane. Mahlon R. Webb and Sterling O. Wilson.....	43
The Ocean Comes to School. Holger and Dorothy Van Aller.....	45
Foreign Films for Educational Institutions. Conducted by Marie Zoe Mercier.....	47
Among the Magazines and Books Conducted by Stella Evelyn Myers.....	48
Ancient Ruins in Mexico—In Hand Made Lantern Slides. Ann Gale.....	50
Department of Visual Instruction.....	51
News and Notes.....	54
School Department. Conducted by Wilber Emmert.....	58
Current Film Releases.....	64
Among the Producers.....	68
Film Estimates.....	70
Here They are! A Trade Directory for the Visual Field....	72

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Audio Aids In A Visual Program

Visual aids can be supplemented by many audio devices, most of which are used by the large modern High School.

By ARNOLD P. HEFLIN

Director of Visual Education, Lane Technical High School, Chicago.

EDUCATION as a whole tends to lag behind industry in availing itself of technical advances in equipment. Nowhere is this more evident than in the field of visual aids, and more especially in connection with the audio devices which have been developed to accompany the visual aid, such as the sound-on-film motion picture. The automobile industry, one of the most progressive in the country, now presents practically all of its film with sound. It does this not only in the field of direct selling and propaganda, but also in its teaching films to be used in its sales departments. Now as sound film is much more expensive to produce, there must be good business reasons for using it; and if there are, educators must consider these reasons also, and not accept too readily the dictum of those who say that the sound film is not as well adapted to instructional purposes as the silent film. Other audio aids, such as public address systems, power amplifiers, and various devices operating in conjunction with phonograph records of various types, are common adjuncts of many types of business today. They are used in connection with radio, with still film projectors, with photographs, charts and diagrams, and also with actual exhibits of products. If it pays business to use these devices, it will also pay the country in the long run to use these devices, in proper form and degree, in education.

Inertia has much to do with the supremacy of the book in the classroom. It is supreme there, and will probably remain so; but it is no longer the absolute monarch it once was. As the cost of devices to aid the teacher becomes lower, and as more and more practical devices are being developed commercially, we find the heavy bookish atmosphere of the old style classroom dispelled by the laboratory atmosphere, where teacher and pupil learn together by seeing, hearing, and doing things. Charts, pictures, slides, films, records—all these are a part of the scene; and the more they are home-made by the pupil himself, the greater the interest and the value they have to the pupil. Life today moves at a faster tempo than it did in the youth of many of our teachers; and by keeping up with it, we shall find our pupils loath to leave our classrooms rather than loath to enter them. And while most of my readers will agree as to the value of visual aids in such a program, many will not be familiar with the benefits to be derived from audio aids used in connection with a visual program. Inasmuch as we are both using and experimenting with such audio aids in our school, an account of our experiences may prove of interest.

Although it is quite freely admitted,—more especially by those connected with the smaller school—that the large high school “cannot hope to do as good work

as the smaller school” it is a fact that our high school of over 8000 pupils is far less handicapped in the matter of visual and audio aids than the smaller school. This is primarily because we are able to finance our work to a large extent in the school itself. Being a technical school, our faculty and student body are interested in mechanical things, and the audio-visual program is well supported by them. Monthly showings of sound films are given after school hours, with music and stunts by various student organizations. An admission of five cents is charged, and with the attendance running from one thousand to three thousand we are able to purchase many items, such as film-slide projectors, film-slides, records, amplifiers, microphones, lighting equipment, motion picture negative, motion picture cameras and sound projectors. These items are not furnished by the board of education, and would not be available to us if we could not purchase them ourselves. We are able to do this, and also help out in the financial needs of other clubs and organizations in the school not having the opportunity which we have for making money. Interest in the work is growing among the teachers, several of whom are at present at work on scripts for teaching films of their own, which will be produced and financed by the audio-visual organization, and directed by the teacher.

The growth of the use of visual aids in the school has been greatly increased in the last two years, as is shown by the increase in the number of films ordered from the central visual education department maintained by the city Board of Education. The use of stereopticon slides furnished by the board is also increasing, but not at the same rate as the use of films. We are not at the top of the list as far as the number of films used goes. Over a representative period, we find the number of films used per thousand pupils in the Harrison High School was 65; in Crane Technical High School 31, and in Lane Technical 28. However we hope by efficient showing of the films to increase the number of pupils seeing the film, with the idea in mind that anything worth showing to one class in a department should be shown to all, and that any film not good enough to be shown to a whole department should not be shown by individual teachers. This is not a rule of the school, and is open to exceptions; but we believe it tends to discourage the showing of films in classrooms as a mere pastime.

During a typical week, we shall receive from the board on Monday, 20 sets of slides, 6 sound films, and 31 silent films. These will be retained for one week, and be returned on the following Monday. A complete list of these aids will be issued in the teacher's bulletin during the preceding week, so that all may know what material will be available. While many of the films

have been ordered by individual teachers, large group showings enable us to cover a whole department in one day; after which the film may be used by other departments, classes, or clubs if they wish. We may state parenthetically here that we also obtain film from various rental services at times, all our "entertainment film" for after-school sessions being obtained in this way. Since film must be ordered a semester in advance, it sometimes happens that a teacher will need a certain type of film which is not available on the week it is wanted. Hence the rentals.

After the purchase of our 16mm. portable sound projector, we found somewhat to our surprise that it was equally valuable in projecting silent pictures as it was in projecting sound pictures, especially where larger groups were concerned. In our experience, an oral preface to the showing of any film is always desirable, and by the use of the microphone in connection with the sound system of the projector any size audience can be reached easily with a minimum of effort on the part of the teacher. This was especially the case when showings were made in the auditorium, which seats over 2500; the percentage of attention was definitely higher when the amplifier was used. In the case of silent films, accompanying comment could now be made through the microphone by any teacher, no matter how small his voice, with the assurance that every pupil in the room could hear what was being said.

An experimental showing of the picture "Sign of the Cross" was an early project in the use of the sound projector. It was believed that there was much material of educational value in this picture, which was historically accurate in practically all details. In showing it, we felt we were coming close to taking the student back 2000 years in time and across 3000 miles of space, so that he might see what the dress, customs, and life of the ancient Romans were really like. However such a strong attitude has been built up connecting sound pictures with theatrical entertainment, that teachers and pupils alike were more interested in the story than in the scenes considered as educational material, despite our efforts to obtain a new attitude on their part. Since the picture as we showed it consisted of three 1600 foot reels, each one showing for one period, it was necessary to show one reel all day, the second reel the next day, and the third reel the final day. This plan, making a serial of the picture, was objected to by some teachers, on the ground that the interruptions occurred at the most thrilling parts of the story. We plan to use the film again, this time not showing it to the general study hall, but to special groups, as Latin, History, English. We will show only selected parts in which the group viewing the picture are most interested, and we shall have the sound cut off (by removing the exciter lamp) and comments on the film made by a teacher qualified to do so, bringing out the things which are of importance to the group comprising the audience. For some groups, and for certain scenes, it may be decided to use the sound track. That such a presentation involves much more thought and planning than a mere showing of the picture is obvious.

We believe many critics of the sound film are also

theatre minded, and forget the ease with which the sound may be dispensed with, thus making the film silent. If sound is to be used, the preparation of the lesson will be more difficult, but the results obtained will be better. Utilizing the eye-gate plus the ear-gate *at the same time* seems to give a result decidedly greater than either one used alone. Just how much greater the effect is depends upon the individual, and the question may be thrown to the psychologists. We are at present experimenting with the use of slides and films bearing on the same topic, using the film for the overview, and the slide for assimilative or discussion material. In some cases we are making both the film and the slide in our own school. We hope to have something interesting to report on such coordination when the work has been carried further.

In this connection we are often asked why we do not attempt to make sound film in our school. At the present time recording equipment is very expensive, very delicate in adjustment, and becomes obsolete rapidly. Cameras recording sound on the same negative as the picture are not satisfactory for our purposes, as the difficulty of cutting and editing the film are too great. This type of camera is seldom used in Hollywood at present. Sound should be recorded on a separate film, and then printed on the final negative after the scenes have been arranged in their proper sequence. This process, technically known as "dubbing" is expensive, and beyond the reach of the average school. The equipment to go with our Cine Special will cost in the neighborhood of \$2500. Hence, if we should need to have sound put on any of our pictures, we should go to some laboratory making a specialty of this work, and pay their fee for it. Prices quoted on this work vary amazingly. In general they are too prohibitive for the budgets of most schools. It would apparently be cheaper for us to take a whole cast of characters to New York and pay their expenses at the best hotel for a week rather than have the work done at a local commercial laboratory.

Our senior class which was graduated in January, 1938, produced a motion picture entitled "Farewell to Lane" which was shown at the graduation exercises. Every boy in the class appeared on the screen, engaged in some favorite activity about the school. The student director of the picture, Kenneth Mansfield, wrote a narrative which he read in a microphone while the picture was showing. This was simpler, cheaper, and quicker to produce than the recorded sound track. This type of narrative is usually all that is needed for educational films, and we can recommend the plan as a practical solution which the average school can use. It would be easily possible to use two or more voices, and synchronization with lip movements is possible, but should usually be avoided, as it easily can be. We hope that some day sound recording devices will be simplified, and made more reasonable in price. When that time comes, we shall certainly avail ourselves of a sound track on most of our films. It provides a carefully planned, well synchronized, clearly enunciated lecture, no part of which can be omitted accidentally. The sound track never has a cold, it is instantly ready, it never loses its place. Its voice can be easily adjusted both for loudness and pitch to suit the largest

auditorium or the smallest classroom; and as has been said, it need not be used for every showing of the film. In our own work, after the first showing the teacher often turns off the sound and attempts to repeat the lecture, or, better still, give a deliberately modified version. Then ambitious members of the class will try to do a better job of it than the teacher did. The sound can be turned on at times for a brief bit of coaching. In this way, a personal interest is added, which enables the film to be shown over and over several times, without the feeling of monotony and boredom which accompany mere repetition. As our machine will project at both 16 and 24 frames per second, when students are lecturing on the film we usually project at the lower speed, to give them more time to think.

An interesting and amusing variation of this technique which we believe originated with us, is that in which the picture is removed from the screen by shutting off the projection lamp, and the sound is allowed to go on at somewhat reduced volume. A pupil tells the class what the picture would be if the light were on; and this is tested from time to time by the projectionists, who flashes the light on and off again. Both



Using the microphone before the showing of a sound film to a Physics class.

these procedures are well adapted to the socialized recitation, which is used extensively in many departments of our school.

Our Victor sound projector is equipped with a phonograph turntable which has two speeds, 78 r.p.m. for the ordinary record, and $33\frac{1}{2}$ r.p.m. for the larger radio transcription discs, which play for 15 minutes on each side. We find this attachment most useful. In connection with showings of silent film there are many cases where phonograph records are very valuable. While a group of pupils are entering the room, a properly selected record will improve order and eliminate much of the noise and confusion often connected with this process. If no teacher comments are to be made with the picture, a soft and appropriate musical background seems to add interest to the showing. By using such selections as the *Andante Cantabile* by Tschaiikowsky, or the *Unfinished Symphony* by Schubert, we believe we can do something toward improving the musical taste of our audience. Even though the attention is not primarily centered on the

music, it becomes a part of the individual, and being good music, the more it is heard the more it is enjoyed. On occasion large groups use the assembly hall when it is not practicable to assemble the band or orchestra. A record of a good march speeds up the process of emptying the hall, and reduces talking and disorder. At social functions held by various clubs the equipment can provide not only a talking picture for entertainment, but also music for dancing.

We are experimenting at present with a recording machine which enables us to prepare our own phonograph records. Our experience with it in the field of visual education has been limited, as the largest record it produces is the ordinary 12 inch record. For satisfactory visual work, a machine capable of handling the 16 inch radio transcription disc should be used. One side of this disc will play for 15 minutes, or practically the same time as one 400 foot reel of 16mm. film. This makes an ideal combination for experimental purposes, and we hope to have such equipment available later. However our music department is using the present machine in training instrumental soloists and ensembles. It is found that the soloist who listens to himself on a record can have his faults pointed out to him much more forcibly, than while he is performing. Records are made of some of the outstanding performers of our National Championship Orchestra so that future members of the orchestra may be inspired to reach similar high levels of accomplishment. We are beginning the study of microphone placement and the effect of sound deadening material which is of intense interest to the modern youth with ideas of a radio career.

We have done some rather interesting things in connection with the large radio transcription discs. A large advertising organization in New York sent us a set of transcriptions giving 15 minute dramatized lives of great men of science. We have used these with considerable success as lectures in the classroom; but we hope to go further, and with the cooperation of our dramatic club, the stage crew, and some shop group of scenery construction, make a motion picture to accompany some of the best of these dramatizations. The time element is our worst hindrance here. Also through the courtesy and cooperation of the University of Chicago Broadcasting Council, we have obtained the use of some of their transcriptions of the Round Table discussions held every Sunday morning. Some of these discussions are of great interest to our Social Science classes, and provoke very interesting discussions in the classroom.

One audio aid which we are fortunate in possessing in the school is a public address system which enables us to broadcast into every room in the school. Radio programs, assembly programs, and addresses by the principal can be heard by every member of the school if desired. This equipment is quite distinct from the visual aid program. Few radio programs at the present time seem of sufficient value to justify incorporation into the crowded curriculum. The advent of television may change this situation, but progress of television in the schools is not apt to be rapid, as the expense of such devices will probably be high in proportion to the benefits derived.

In conclusion, it is our experience that the fascination which the microphone has for the youth of today should be utilized. If pupils can use the "mike," they like to speak; and they soon become conscious of the fact that a speaker must have something to say, and be careful how he says it. Classes pay better attention and learn more, because they can hear what is being said. Larger classes can be taught without the common phenomenon of finding all the good students in the front seats and all the poor ones in the

rear. The class can be brought to order very quickly. Pupils like to become class chairmen so they may use the microphone. Schools may easily produce their own audio aids for a visual program, merely by purchasing a sound projector, which has a surprising way of paying for itself in a very short time. We are convinced that as more and more schools add the audio-element to visual instruction they will find it eminently worth while.

Student Camera Crew Makes A "Scoop"

A high school class supplements its visual aids with student-produced teaching films.

By ERNEST E. OERTEL, Ph.D.
Extension Division, University of California.

AMATEUR motion picture production in high schools is not new. Innumerable pictures have been made of football teams in action and of other school activities. Dramatizations have been filmed creditably, and commendable news reels have been made of the intra-mural life of some of the larger secondary schools of the country.

Now comes the instructional film, produced by teacher and students. By the instructional film is meant the motion picture which is designed to be used as a direct teaching aid in some special unit of study. Commercial producers of educational films have made available to teachers all over the country a great number of instructional pictures on many different subjects. But there are some fields which, naturally enough, they have not yet covered.

It was in such unexplored territory that the motion picture crew of the Eagle Rock (California) High School found it possible recently to score a "scoop" in the production of a highly serviceable educational film. The crew is made up of eleventh and twelfth grade boys who are members of a regular curricular Graphic Arts class. Their teacher and advisor is Miss Edith Frost.

A biology class in Eagle Rock High School, one of a group of selected high schools participating currently in a state-wide experiment in progressive education, wished to engage several months ago in a unit of study on date cultivation. Visual aids of the type desired were not available. Date culture is restricted to a small area in the Imperial Valley in California. Commercial producers of teaching films had not got around to making a film on this special subject to accompany the many excellent pictures they have made on other agricultural products.

The biology class did not wish to wait until a commercially-produced film could be made available. The class believed there was a unique and valuable study to be made on date cultivation and that that study, with the aid of the camera crew, could be made by themselves. It seemed appropriate that California students should make this particular study. They wanted to get some first-hand information about an interest-

ing California product which is rapidly gaining importance economically. Perhaps, they thought, other science students in other states would be interested too.

Miss Frost and her camera crew drove to the Imperial Valley from Los Angeles (Eagle Rock High School is part of the Los Angeles City High School District) to get pictures for the biology class on this subject. They "shot" motion pictures of the date gardens in various stages of growth and cultivation. A complete story of the production of the famed California natural, unprocessed dates was recorded on 16mm. film. The crew made a special point of photographing carefully the process of hand pollination, an artificial method of fertilization unique in plant life, in



Miss Frost and her Camera Crew

which the biology class was particularly interested. The science students were so pleased and interested in the pictures obtained that much creditable detailed research work was done in this unit of study and excellent study guides were prepared to accompany the film.

The photography throughout the film is unusually good, meeting, and in some respects surpassing, standards held to in the typical commercially-produced film

(Concluded on page 44)

Lantern Slides of Cellophane

Suggestions for varied and systematic uses of hand-made slides for effective teaching

By MAHLON R. WEBB and STERLING O. WILSON
Collinwood High School, Cleveland, Ohio.

NO single type of materials and no one method can ever meet the needs of all teachers or all learners. Teachers, oftimes, develop special techniques that prove particularly valuable and useful. But single patterns, as such, do not apply in the field of "human engineering." Only a variety of patterns can satisfy a diversity of needs. Individual differences are best provided for in devious ways through liberal use of a wide selection of methods and materials. After all, the personality and enthusiasm of the teacher coupled with zestful variety of material seem to have about as much to do with success in method as any relevant factors.

The approach outlined here, therefore, is simply another way of doing things that seems to be bringing results. There is nothing new about student or teacher-made lantern slides. They have long been utilized. But the lantern slides that can be made easily and quickly by student or teacher on cheap transparent cellophane, either dashed off on a typewriter, traced in india ink, or colored in rich Japanese color inks is another matter, and should bid fair to arrest some attention.

For instance, if typewritten slides are desired cellophane sheets of proper size, under radio carbon mats, are inserted in the typewriter and run off exactly like any other carbon copies. The typewritten cellophane sheets are then inserted between the two slide glasses, bound top and bottom with adhesive passe partout, and the slides are ready for projection. By this simple procedure slides are quickly available for purposes of reviews, objective tests, drills, vocabularies, and similar uses.

Should illustrated diagrams or drawings be needed, the slide is drawn on the cellophane with India ink. The transparent cellophane is placed over the drawing or illustration and traced with India ink. A crow quill pen proves most satisfactory. If desired, original figures or diagrams of the proper size can first be made on regular drawing paper. Cellophane is then placed over the original drawing, thumbtacked to the drawing board, and then traced onto the cellophane.

In the case of colored slides the India ink outline on the cellophane can be filled in with brilliant Japanese color inks by means of a quill pen. For example, in the schematic outline of the circulatory system it is advantageous to color the arteries red, capillaries pink, and veins blue. These colors show up most beautifully without any diminution when projected on the screen, and the various parts are accentuated and stand out in bold relief. Any printing or labeling may be done free hand directly on the cellophane slides by having sheets with guide lines immediately beneath the transparent cellophane.

Slides can be shown in a lighted room and notes taken while they are on the screen. The screen should be shaded from any direct light at the front of the room. In this way, the illumination on the screen and the notebook are about equal. This avoids eye strain which would occur if pupils were constantly looking back and forth from a brightly illuminated screen to poorly illuminated paper or notebooks. A small pointer may be used at the lantern. The sharply defined shadow of the pointer appears on the screen, and may be used to direct and focus attention upon any particular point or area.

One of the favorable features of these easily made slides is the fact that if the subject is changed, or improved drawings used, the only money loss is that of the cellophane. This loss is negligible as the two plates of slide glass and top binding can be used over again with any new cellophane drawings or diagrams. On the other hand, should a valuable slide meet with accident through careless handling only the outside glass plates can be broken. The enclosed sheet of cellophane, on which appears the drawing or illustration in color, is still available as the cellophane is unbreakable. All that is required is to place the preserved cellophane between two new glass plates, and the same slide is ready for use.

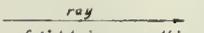
Rolls of cellophane and Japanese color inks can be secured at any five and ten, drug or department store. The inexpensive adhesive passe partout, and the radio carbon mats can be purchased at any stationery store, supply house, or such firms as Radio Mat Slide Company and Keystone View Company, which handle materials of this kind. The clear glass slide plates, three and a quarter inches wide by four inches long, cost \$1.80 a hundred. This brings the cost per slide between three and four cents, depending somewhat upon the type of slide desired. This does not take into consideration the substantial saving that is effected by the elimination of the cost of stencils and mimeographed paper that would otherwise be necessitated in lieu of the cellophane slides. Slides keep indefinitely, but stencils do not. The larger the classes the greater is the saving in both paper and stencils.

Six slides may be drawn on one sheet of cellophane, eight inches wide by nine and three quarters inches long. Before cutting the six drawings apart it is especially advantageous to either make a blue print or print the intact drawing on a sheet of photographic paper. The transparent inked cellophane is similar to photographic negative and may be printed on either photographic or blueprinting paper. The six drawings are easily accommodated on a single sheet of blueprint, the same size as a sheet of typewriter paper, eight and a half by eleven inches.

When these blueprints are bound together they

make cheap and ready reference books which may be used by teacher or pupils. The books provide handy references for the teacher. It aids pupils, who have been absent, in making up any lost work. Pupils, for instance, who have missed a regular test can come into the classroom, during any one of their study periods, and make it up. One decided advantage, here, lies in the fact that the pupil may take the test individually while the teacher conducts the regular recitation, without any appreciable loss of time by either student or teacher.

As one way in which these easily made slides may be used along with regular class room procedures, a

<p><i>Answers on T5E</i></p> <p>A number of these thin lines of light all going in the same direction are called a <u>4</u>. A ray of light coming from a source and striking a surface is called an <u>5</u>. After this ray bounces off it is a <u>6</u>. The angle of incidence is the space between the <u>7</u> and the <u>8</u> to the surface.</p> <p>T5B</p>	 <p>A ray of light is a very thin line of light, much thinner than a very fine pencil line.</p>  <p>A beam of light is made up of a large number of rays, like the light made by a searchlight.</p> <p>3</p>
<p><i>Answers on T5E</i></p> <p>The angle of reflection is the space between the <u>9</u> and the <u>10</u> to the surface at the point where the light strikes the surface.</p> <p>How do the angle of incidence and the angle of reflection compare in size? <u>11</u>.</p> <p>T5C</p>	 <p>In regular reflection a beam of light remains a beam after it is reflected. Regular reflection takes place only from a very smooth, polished surface.</p> <p>3A</p>
<p>Answers Word Questions (T5B, B, C)</p> <ol style="list-style-type: none"> 1. Angle 2. Normal 3. Ray 4. Beam 5. Incident ray 6. Reflected ray 7. Incident ray 8. Normal 9. Reflected ray 10. Normal 11. Equal <p>T5E</p>	 <p>In diffuse reflection the rays which make a beam of light are scattered in all directions. Diffusion is caused by a rough reflecting surface.</p> <p>3B</p>

Reproduction of a group of six cellophane slides, about half actual size

ninth grade lesson on the reflection of light will serve to illustrate how cellophane slides may supplement and lend variety to instruction, demonstration, review and testing.

Ninth grade pupils usually do not have clean-cut conceptions of such geometrical terms as "angle." They have probably never heard the word "normal." Frequently they fail to clearly distinguish between "ray of light" and "beam of light." The terms "incident ray" and "reflected ray" are entirely new to them.

These new terms are introduced to them by means of class demonstration. The slide projection lantern is set up in a darkened room. The word "ray" is introduced to them by using a piece of cardboard or metal the size of a slide. This opaque slide has a small hole in the middle of it and the light shines through the hole onto the screen or wall. This gives a pencil of light which serves to illustrate a ray of light, when properly explained. By removing the

metal slide the word "beam" is illustrated. Chalk dust in the air makes the course of the ray or the beam visible.

The convenience of the use of rays in studying light is explained. The ray is then reflected from a mirror and more chalk dust used to make its course visible. The incident ray and reflected ray are clearly seen. A yardstick perpendicular to the mirror at the point where the ray strikes it illustrates the normal. The angle of incidence and the angle of reflection are seen, and are seen to be equal.

The room is then illuminated with daylight by raising the shades, except the shade nearest the screen. The screen is in shadow. The lantern is turned on, the first slide is projected on the screen and may be copied in the notebook of the pupils. The same procedure may be followed for each slide in the series. As shown in the accompanying blueprint illustration the slides follow each other in numerical sequence. The slides of objective tests are of course based upon the preceding instructional slides used in the visual demonstrations and classroom experiments.

Thus, does cellophane become an inexpensive and readily accessible medium that may be used in a great variety of ways for translating, quickly and conveniently to the lighted screen, facts, concepts, and principles that all can see and understand.

Student Camera Crew Makes A "Scoop"

(Concluded from page 42)

of this kind. The film served its purpose admirably at Eagle Rock, but new titles and editorial material would have to be introduced to make the film altogether acceptable in other places.

The Eagle Rock camera crew is now working on a teaching film on avocado culture. Here again they are working on a unit of study in practically unexplored territory. And here again it is fitting that they, as Californians, should make this study. The crew is engaged also in completing a film on historic spots of early California. Field trips already taken have yielded excellent pictures of Monterey and several others of the more important missions.

The crew is given training in photography, motion picture projection, motion picture camera operation, unique camera angles, light and color values, balance, subject relationships, continuity, sequences, composition, and editing. And, as may be expected, the students, struggling to obtain excellence in their own pictures, are found to be unusually critical and appreciative of the commercial films they see.

The equipment used at Eagle Rock, much of it privately owned, is of excellent quality. Careful use of this equipment is insisted upon at all times. The crew works with a diligence and regard for responsibility that is noteworthy even for a highly selected group of older high school boys. Yet work is informal and cooperative. There is no barrier of a teacher's desk here, either in the classroom or in the field. In this creative activity at Eagle Rock, teacher and students pool their resources in an absorbing study of how they together can make each picture the finest possible educational experience for both producer and user.

The Ocean Comes to School

The growing use of camera by teachers illustrated in the field of biological science

By HOLGER and DOROTHY VAN ALLER*
High School, Saratoga Springs, New York

HIGH school biology courses no longer require memorization of innumerable scientific names of orders and classes, and the intricate study of the anatomy of an organism representing each type. Syllabi called variously General Biology, Social Biology, Functional Biology, are rapidly replacing the old structural type of zoology-botany. But even in these new courses—which attempt to bring out the unity of life, and the relationship and interdependence of man with all other organisms,—there remains of necessity a unit describing the variety of living forms. Students meet the names of the phyla, and attempt to classify the animals they know in the proper places. This is easy enough with the horse, oyster, daddy-long-legs, and even bat. They know what they look like, and with a bit of logical reasoning can fit them into the descriptions of the phyla and important classes. Yet they are asked also to classify the sea anemone, sea-urchin, barnacle and starfish. No amount of logic will allow them to locate sensibly animals which are to them only names. Mere rote is the only solution. And mere rote does not help to establish an organized understanding of biologic principles, nor even a lasting knowledge of simple facts.

Our first solution for this problem was the purchase of an aquarium assortment of living marine forms through a supply house from Woods Hole Marine Biological Laboratory. Here was the perfect demonstration of tide water animals unknown to our inland pupils. Radially symmetrical starfish with spiny skins crawled along the glass, even digested bits of clam in plain sight of observers; spiny-skinned sea-cucumbers occasionally waved radially symmetrical tentacles in search of food; sea-urchins flourished on invisible nourishment. All were readily identifiable as echinoderms. Hermit crabs scuttled about the bottom. Self-cemented to the glass, clams early became permanent residents. A horse-shoe crab, with its prominent exoskeleton and two-sectional body, burrowed often in the sand. When disturbed, sea-anemones demonstrated their complete lack of skeleton by contracting to a naval-like button; yet they expanded again to take food into their hollow interior and cast off the remains through the same mouth through which they had received it.

This was teaching material of the best visual type. It had, however, one serious drawback. Familiarity should precede induced principles, and the children should know the animals before they attempted to classify them. But marine aquaria will not live in warm weather, and our unit on the variety of life was first in the course and came in mild September. We

could not, if we wished to keep the specimens alive for more than a day or two, buy the animals until December or January. They had not then their maximum value.

The next year's pupils had more help at a better time. Starfish again crawled on the glass and pushed their stomachs out and around a bit of food; anemones again contracted and expanded; hermit crabs again scuttled on the sand. Now, however, they were demonstrating their habits of living on the screen instead of on the windowsill; and they were doing it in September when their study gave most incentive to learning. We had taken movies of the animals with the aid of the title-card attachment on our inexpensive camera. When freezing weather and our marine assortment came together, there was even more interest than before in the living animals. Upon their death, at various times from two weeks to six months, the animals were preserved in formalin as permanent study specimens.

It took still another year for our tide-water exhibit to reach its present form. We had the opportunity to visit Acadia National Park on Mt. Desert Island during the summer. From the top of Mt. Cadillac the far-reaching view of Maine's infinitely repeated inlets and islands enraptured us, though not so much as

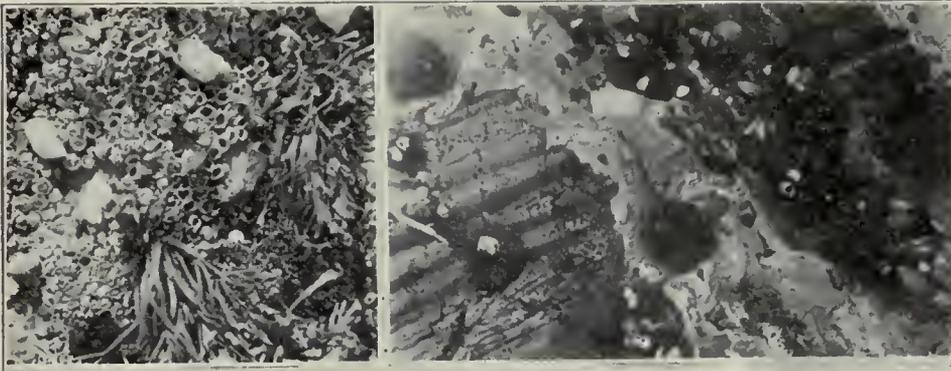


On the Maine Coast, where photos of tide-water animals were made at low tide.

did the closeups of the shore from Otter Point Drive. There pink granite rocks were sprayed with blue water splashing white. In pools left by the lowered tide cursory examination showed life; and more thorough inspection, anemones and limpets and urchins. We walked on barnacles and on whelks clinging to slippery rockwort. Anemone Cave we found appropriately named.

A week later we returned after careful study of the

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Upper Left—Bottom of tidal pool, featuring Mussels, Limpets, Sea Urchins
Upper Right—Barnacles and Whelks



Sea Cucumber partly extended but without tenacles showing

Sea Anemones Expanded

tide tables. We wished maximum time for photographing these animals which are revealed only when the water is at its lowest point. Rushing about from rock to rock, we managed to obtain movies and stills of much that we wanted before the water returned. There were barnacles feeding in shallow water, barnacles tight shut on rocks temporarily dry; urchins righting themselves when turned upon their backs; a whelk struggling to release itself from the tube feet of an urchin; pink anemones closing after a stick had disturbed them; limpets immobile on stone. We wanted,

too, shots of a more general nature, for biology must show where organisms live, how they are as they are because they live where they do. The water changed levels on the cliff as it rose to cover a pool we had worked in. Spray dashed high to provide its water with the abundant oxygen the animals need even in an aquarium. To the rocks above the sea clung wind-contorted evergreens. We had used both a still and a movie camera, black-and-white and Kodachrome film. As a result our pupils now have slides and natural-color films of echinoderms and coelenterates in their natural environment as well as in an aquarium.

Our marine visual unit is not yet complete. We want to again visit the University of Maine's biological laboratory, this time when conditions are right for photography. There starfish and giant cucumbers are scraped up from deep piers, salasters and jelly fish are brought in from excursions through the bays. We have enjoyed watching this for ourselves, and we can describe it to our students. But no vocal exposition can approach the vividness of a good motion picture. We are neither great marine biologists nor professional photographers. It is only an amateur interest that we have in both fields. Yet our pupils have profited by this product of the combination of our hobbies.

Suggestions for Camera Clubs

By WILBER EMMERT
State Teachers College, Indiana, Pa.

THROUGH the formation of school camera clubs those pupils who have taken up photography can employ their leisure time advantageously. The club might augment its membership by inviting others, carefully chosen, to participate in the activities of the organization. If the club is to be successful and justify its existence, it must have a definite, well planned program of action for the school term. In addition to securing individual personal benefits from the organization, the club must stand ready to render some service to the school sponsoring it.

One suggested list of club program topics includes the following items: History of photography; Picture taking with a pin-hole camera; Light lenses, and exposures; Sources of photographic equipment and ma-

terials; Composition in pictures; Constructing the dark room; Developing the film; Making the prints; Experience with various kinds of cameras; Action pictures of athletic events, etc.; Formal and informal group pictures; A visit to the local photo gallery; Portrait picture with portrait lens; Interiors with flash light and photoflood lamps; Theory and practice of enlarging; Amateur motion picture photography; Photographic amusements and oddities; Open house exhibit of results of camera contest.

The bibliography published in the EDUCATIONAL SCREEN, October, 1937, page 266, furnished a list of reference books and materials covering the field of photography and of value to the camera club advisor.

Laboratory guides and direction sheets can be devised by the club leader to assist the students with their problems. Such a plan will put the work on a laboratory basis and allow the pupils to do their own work, using the advisor as a laboratory assistant.

FOREIGN FILMS FOR EDUCATIONAL INSTITUTIONS

Conducted by Marie Zoe Mercier

Film in Art Study

IN THE field of art study perhaps more than in any other, does the use of film, itself the product of a creative activity, offer almost indispensable aid. A few of the more recent foreign film productions suggest several new methods for class presentation.

When *La Kermesse Heroique*, directed by Jacques Feyder and starring Francoise Rosay, was scheduled for a showing in Cambridge, by the French Talking Films Committee, Mrs. Belle P. Rand, Chairman of the Committee, arranged with the Fogg Art Museum at Harvard to exhibit a few of its more valuable Dutch prints in order to illustrate the film's unusually successful representation of life in seventeenth century Holland. We have chosen for comparison here a Frans Hals portrait in the Art Institute of Chicago. This type of comfortable, blustering burgher, so easily a



Willem Van Heythuyzen by Frans Hals
(owned by the Art Institute of Chicago)

prey to his own vanity and bravado comes to life as the chief bait in the delightful and witty satire. All the men in the Dutch town of Boom

decide to hide and the mayor to play dead one day in 1616 when Spanish couriers thunder by to the town hall and announce that Spanish soldiers will be quartered in the town that night. The women, led by Madame Burgomaster, take the situation in hand, dress up in their best finery and organize a feast of welcome.

Their hearts may have quaked as shamefully as the men's but they soon find them melting delightfully to the unexpected charm of such an invasion of gay and colorful



The Mayor of the Dutch Town of Boom

cavaliers. As a reward the Spanish duke on his departure, exempts the town from taxation for a year.

There is a disturbing note in the fact that the young painter named Breughel paints a group portrait of the town worthies that immediately suggests Hals' famous Guild paintings. However many of the less recognized derivations are obviously inspired by the Breughel tradition with all its transitions through Van Ostade and Jan Steen. Feyder, the Director, and Meerson, architect and decorator who designed sets for the famous Rene Clair films, have written of the care with which they authenticated as much detail as possible from existing prints and paintings. Perhaps the fact that the story is eminently a fantasy makes its adherence to familiar genre pictures the more gratifying and aesthetically satisfying. We expect almost too much accuracy, for instance, when Alexander Korda reconstructs an actual life like that of Rembrandt. We may even sympathize with the antiquarians who remark that with all the healthy and boisterous drinking going on none of it is appropriately out of "Rembrandt," "Jan Steen" or "Frans Hals" flagons but out of Swiss, Scottish and German varieties; also that iron baking stoves like that in which Rembrandt unconcernedly roasts a goose, aren't known to have existed before 1660.

So much for the suggestions for study in the carefully constructed costume play. Another entirely dif-

(Concluded on Page 49)

AMONG THE MAGAZINES AND BOOKS

Conducted by Stella Evelyn Myers

Time (30:19-21, Dec. 27, '37) "Mouse and Man."

Even artists are recognizing Walter Disney as an artist. His works are certainly better known and more widely appreciated than those of any other artist in all history. His "Mickey Mouse" recently created a crisis in the government of Yugoslavia; as "Miki-san" he has been Japan's patron saint. In Russia, he is a social satirist, depicting the "capitalist world under the masks of mice and pigs."

"Snow White and the Seven Dwarfs" was three years in the making. Being the most ambitious animated cartoon ever attempted, it dipped into the Disney pocket for \$1,600,000, and the project was dubbed "Disney's Folly." Hollywood wondered if a fairy story could contain enough suspense to become a feature. If this might prove true, would an audience care about the fate of characters that were just mere drawings,—even if there were a quarter of a million of them? "A combination of Hollywood, the Grimm Brothers, and the sad, searching fantasy of universal childhood, it is an authentic masterpiece, to be shown in theaters and beloved by new generations."

An interesting description is given of the difficult technique used. Sound engineers synchronize three tracks of sound that have been variously recorded. It takes two weeks simply to photograph a 750-foot short.

Teachers College Record (39: 207-217, Dec. '37) "Learning through Film-making," by Kerry Smith and Irene Lemon, both of Horace Mann School, Teachers College.

A complete description of how a tenth grade class composed and produced an 800-foot film serves to indicate a cogent way of sensitizing pupils to important social problems. The subject of the film is that of an Italian immigrant family and their adjustment to their adopted country.

A synopsis of the motion picture is included in the article, and a full treatise on the "Values of the Film Medium." The latter is highly recommended to any instructor considering film production. A section devoted to "Suggestions at Large," includes hints for sound production (although the Horace Mann film was silent) the filming of animated graphs, maps, and cartoons, and the recording on celluloid of telling scenes observed on excursions. Many other splendid visions for the future will tempt wide-awake educators.

Movie Makers (12:536, Nov. '37) "Map Movies" by Kenneth F. Space.

It has been discovered that, by using a definite technique, the filming of maps in a travel picture can be greatly enhanced. Map illustrations are given to clarify the conclusions. Route animation is described, and various clever substitutes for it, one being the use of a magnet, and others more simple but as effective. Double exposure stunts furnish many help-

ful hints. For filming relief maps suggestions are also given.

Book Reviews

TALKING PICTURES—HOW THEY ARE MADE—HOW TO APPRECIATE THEM. By Barrett C. Kiesling. Published by Johnson Publishing Company. 340 pages. cloth. Price, \$1.40.

Here is the most comprehensive and complete presentation of Hollywood motion picture production yet made. It covers not only major points in history and process but all the nooks and corners; it is beautifully illustrated; it retails vividly and readably countless facts and anecdotes, the important and the trivial, the scientific and the merely sensational; it includes an unusually complete Glossary of technical terms and of the industry's jargon; it affords easy and accurate reference to specific details through a well-itemized Index; it aims to inform and obviously also to impress, and contains withal a sufficient proportion of error to prove the author thoroughly human. One educational magazine pronounces it "the first textbook written from inside the motion picture industry . . . for classes in visual education, English, dramatics, guidance, social studies, and science." It is certainly done from the "inside" and should be read by every student of the field, but as a "textbook" for naive readers it needs to be taken with many a grain of salt.

The second sub-title, "How to appreciate them," merely continues the industry's ancient device for turning the public's critical attention away from picture content to the vast intricacies of the producing business. It is repeatedly stated and implied throughout the volume that motion pictures cannot be appreciated or critically appraised unless all these marvelous facts are known. As well claim that a literary work cannot be appreciated unless the reader knows all details of printer's ink, press-work and paper-making; or that one must know all the workings of a paint factory and just what part of a camel produces camel's hair brushes before he can appreciate a painting. Appreciation of a finished motion picture must base on what appears on the screen. It has nothing to do with antecedent facts however wonderful or colossal, such as the thousands of extras who are starving in Hollywood, or the property building that contains "350,000 separate articles," or the miles of film left on the cutting room floor, or the thousands or millions or billions of anything, nor even with the Assistant Director's "Set Secretary" who records all details of every shot "even to the size and number of dots in the leading man's tie." Breath-taking feats of "research" and "check-up" are most desirable, of course, to keep General Grant from riding in an automobile or Julius Caesar from wearing spats. But more research, or mere intelligence, put upon the mental content and emotional truth of pictures would yield still better

dividends. A wrong button on the sleeve of a uniform in a good picture is about as important as a misprint in a good book. It is the intellectual content of each that counts.

We could wish the book had been made less startling and more accurate. The thrilling information that "276 arts, professions and vocations" are involved in production is quite awe-inspiring until we look over the 276. We expected "musicians," for example, to be one of them. But, no! Instead, we find that (singularly and plurally) *bass violin player, cellist, cornetists, flutist, harpist, pianist, violinist, orchestra leader, voice coach, singing instructor, music arranger, music copyist, music composer, alto, soprano, baritone, and basso* are 17 of the 276. But why not *saxophone, clarinet, drum,* and above all the *tenor*? Evidently the oft-quoted figure 276 is meaningless, and could be expanded or contracted at will. And the author treats the great fundamental chemical facts of all photography as follows! Speaking of the silver nitrate emulsion he says, "When it is exposed to the light its white crystals turn black." (!) (But it is the developing that does this, not the exposing). Then, "Put this exposed film in a bath of special chemical formula and it is 'developed,' that is to say, the unexposed nitrate of silver is removed." (!) (But it is the hypo that does this, not the developer). And then he does not mention the supremely important hypo at all!

The author denies any intention of "stimulating the importance" (sic!) of the industry in the reader's mind by big facts and figures. But, as an example of what we consider decidedly quaint "textbook" material, to put it mildly, we quote from his preoration the following arithmetical rhapsody:

"The world investment in studios and theatres is \$2,650,000,000. To earn that sum at a salary of \$2500 a year would take a man 1,060,000 years. . . . Estimated weekly world attendance upon photoplays, 220,000,000 people. If these photoplay attendants stood six feet apart, number one would have his feet in Lake Michigan while the last looked out upon a sunset over the Pacific Ocean. Such comparisons to illustrate the Gargantuan size of the film could be indefinitely prolonged." Isn't it all just too wonderful! N. L. G.

THE NEW LEICA MANUAL, by Willard D. Morgan and Henry M. Lester, New York City (580 pp. cloth. Publisher's price, \$4.00)

The extraordinary advances made in miniature camera photography during recent years have been aided in no small degree by the original "Leica Manual," published by the above authors three years ago. In the EDUCATIONAL SCREEN for November, 1935, we reviewed at some length that volume as a "noteworthy book in all respects." Immediate and continuous success carried the book through two editions and four reprintings. The current volume, issued last fall, is the "third edition revised" and shows notable additions and improvements over all preceding editions.

The book has now grown to 580 pages; nearly 200 new photographs have been added; revisions throughout, affecting practically every page, have brought the subject-matter up to date in this field where change and development are swift and incessant; and many

entirely new chapters have been added. Four of these, of particular interest to the educational field, are "Leica Adventures in Russia and the Far East" by the eminent traveler-lecturer-photographer, Julien Bryan—a chapter on the making of stereoscopic pictures through a single lens, by Augustus Wolfman—another, by Henry Lester on the use of Kodachrome in color photography—an extremely well-written chapter on the use of cameras in Archaeology and Exploration, by Charles Breasted, son of the famous head of the Oriental Institute in Chicago—and an able presentation by Roy E. Stryker of the possibilities of still pictures in series done expressly for teaching purposes.

The range of content in the volume is amazing. Camera technique in all its phases is covered in detail, from the elementary facts and procedures needed by the amateur, to the intricate processes and formulae required by the professional. Index and references make it simple for any user, tyro or expert, to find quickly what he wants amid this mass of comprehensive and interesting data. As the use of cameras for educational purposes in school and college increases, this New Leica Manual will prove invaluable however modest or elaborate the scale of work projected. Both beginners and veterans will profit by its pages. The price (\$4.00) remains unchanged from the first printing in 1935.

N. L. G.

Film in Art Study

(Concluded from page 47)

ferent approach to the place of film in Art study is suggested by the short *Schwarz, Weiss, Grau* by L. Moholy Nagy, recently appointed head of the New Bauhaus American School of Design. This film is a painting in which light is used as the medium of expression instead of pigment and the camera as a tool instead of a brush, in which the variations of black and white and grey become as exciting as color because of the movement with which they are invested. Mirrors, prisms, transparent celluloid, construction of glass, quicksilver and gleaming chromium that reflect, transmit and break up the light into new patterns and forms are the active elements involved. At a recent lecture before the Chicago Institute for Color Research, Mr. Maholy Nagy demonstrated the dramatic light qualities obtainable from a sheet of five hundred rectangular pieces of mirror attached to a common felt base but unattached to each other, a device which he designed for producing some of his special effects in the film *Things To Come*. The result of the proper manipulation before a light source is that of a solid brick wall suddenly flying to all corners of the room with a kind of fairy tale magic.

His short film *English Zoo Architecture*, made for the Museum of Modern Art and Harvard University, is an excellent example of the record type of film which always has its appropriate illustrative place. Lubetkin, designer of the Zoo, is a Russian architect at the head of a young group in London who are responsible just now for some of the most interesting architectural productions in England. The Penguin pool especially is a masterful bit of constructivist design and is reported visually as such by Mr. Moholy Nagy in one of his most successful shots.

Ancient Ruins in Mexico - - - In Hand-Made Lantern Slides

By ANN GALE

Art Department, Lindblom High School, Chicago

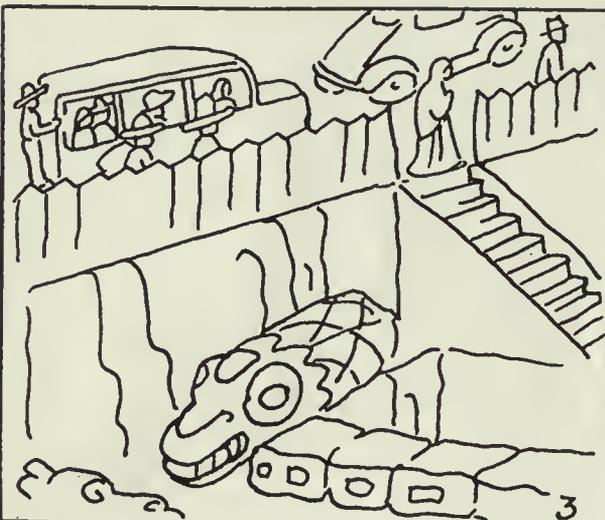
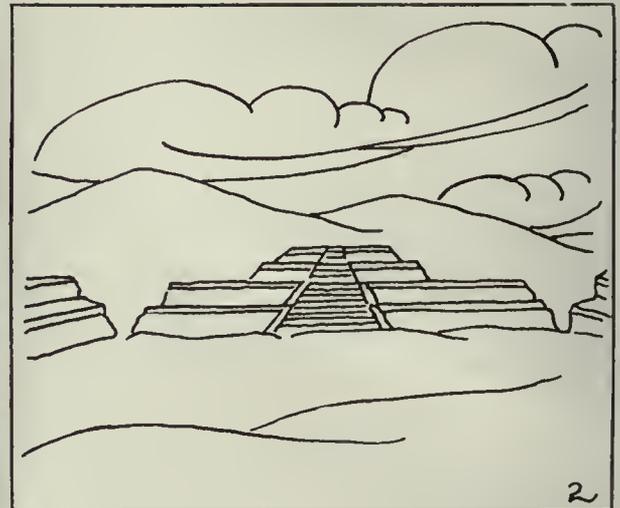
IN sixth grade when children study older civilizations it would be possible to study the ancient culture of Mexico. Mexico City and the region around it are full of the ruins of Toltec and Aztec civilizations. These slides could form the basis of a discussion of pre-Cortes civilization in Mexico.

(1) Twenty miles from Mexico City are the Toltec pyramids of the Sun and Moon. (2) In this same place is the large temple of Quetzalcoatl, the Mexican God of agriculture. (3) The ruins of an Aztec temple were found right in the middle

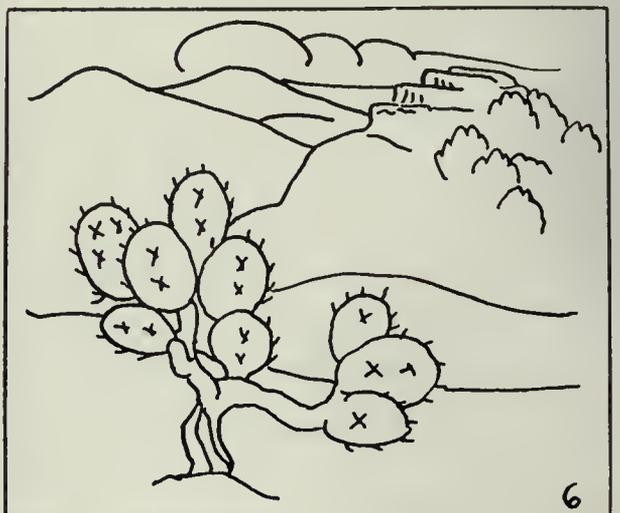
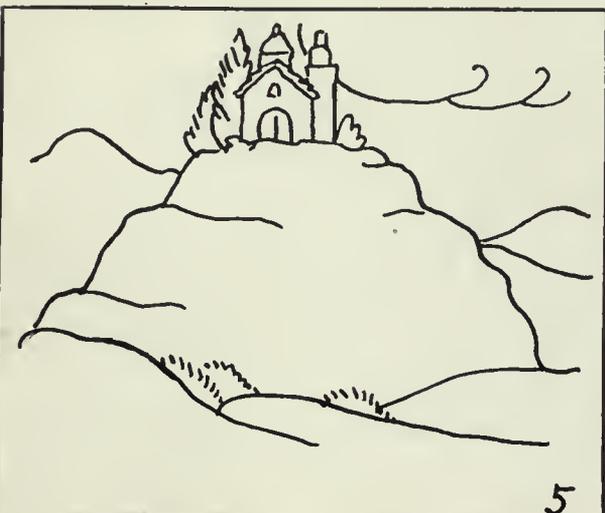
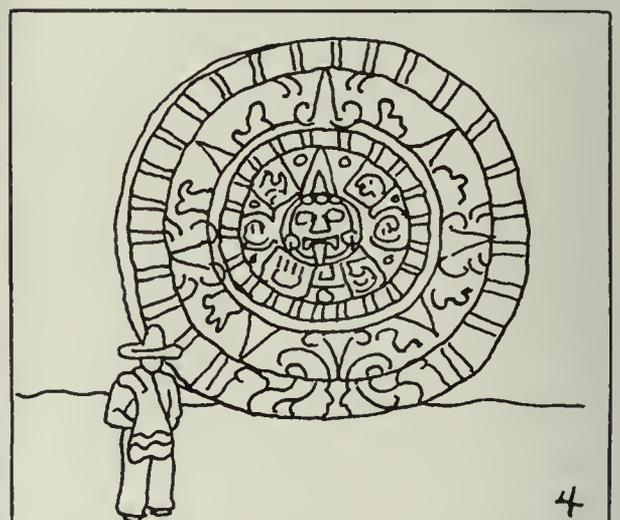
of Mexico City's busiest section. (4) In the National Museum is the Aztec calendar stone showing the Aztec symbol for the months and the day of their year. (5) A church stands on top of an overgrown pyramid in Cholula, a town about fifty miles from Mexico City. Cortes had razed to the ground the Aztec temple which originally stood there and replaced it with the church. (6) Perched high on a mountain top is the Aztec pyramid of Xochicalco.



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.



DEPARTMENT OF VISUAL INSTRUCTION

IF THERE is one thing that has been discovered in research in the field of learning, it is that there are very great individual differences in the way that students learn. Some learn best by listening, by asking questions, by talking with others about the problem. Some take readily to books and have great skill in getting information and understanding from the printed page. Some find understanding through laboratory and manipulative activity. Some learn by getting ideas visualized, charted, graphed, pictorialized. There is no royal, no single road to learning.

If these statements are accepted as true or even as partially true, it would seem to argue for much greater flexibility in the learning materials used in our classrooms. We would avoid any strait-jacket of methods, whether it be recitation, laboratory, lecture, or what not. Instead, we would set up clear-cut goals in co-operation with our students, let them discover by self-testing methods just what progress they had already made in reaching these goals, and then with the guidance of the teacher determine the kinds of experiences which they believed would lead them to fuller understanding. Careful evaluation programs would enable the student and the teacher to work out co-operatively a continuous testing program to determine what progress was being made.

Under such a scheme we would put far more dependence upon libraries and laboratories than we have in the past, not merely libraries with a rich supply of excellent books and periodicals, but libraries well equipped with phonograph records, radio recordings, silent and sound films, slides, mounted photographs, charts, maps, models, plans for excursions, and the like.

I am arguing, then, for richer learning experiences. I am suggesting getting away from stereotyped recitation or lecture methods. I am suggesting a greater participation of the student in selecting his own diet—a diet far more varied than at the present time.

Impractical and visionary? Not at all. Many schools have made fine steps in this direction. Would it require smaller classes? Of course it would. And how would we afford it? Let me make one brief statement. Technological change has made it absolutely necessary that we use fewer people in the production of goods and several million more people in the service areas—health, medicine, the arts, teaching, recreation, and the like. There is no choice here. We must either put them in these service occupations, put them on a dole or let them starve. There is no reason why these hundreds of thousands of persons could not be put to work preparing the kinds of materials that I have been thinking about, and hundreds of thousands more could be used to make it possible to reduce class size, not from 37 to 35, but down to 20 students a class. To really do a fine diagnostic job, to plan for and with each student, to provide a far richer learning experience than we have at the present time, makes such reduction in class size necessary. Can we afford it? Rather, can we afford not to do it? —EDGAR DALE.

PROGRAM

Department of Visual Instruction
of the N. E. A.

Room 13, Atlantic City Auditorium

February 28—March 1, 1938
Looking Ahead in Visual Instruction

February 28, 1938—9:00 A. M.

Evaluating the Literature in Visual Instruction

Etta Schneider, Teachers College, Columbia University

Problems in Preparing Pictorial Material for Classroom Use

James Mendenhall, Editor, "Building America"

The Motion Picture in General Education

Charles F. Hoban, Jr., American Council on Education

In-Service Teacher Training in Visual Instruction

Paul Reed, Rochester (New York) Public Schools

President's Address—Edgar Dale

March 1, 1938—9:00 A. M.

Teaching Problem Solving Through the Use of Visual Materials

Louise Heil, Bureau of Educational Research, Ohio State University

Amateur Motion Pictures in the Schools

E. Winifred Crawford, Director of Visual Education, Montclair (New Jersey) Public Schools

Producing Visual Aids

Herbert S. Walsh, New York City Public Schools

Need for National Planning in the Distribution of Visual Materials

J. E. Hansen, Bureau of Visual Instruction, University of Wisconsin

Panel Discussion: *Planning for the Future in Visual Instruction*

Application for Membership

Department of Visual Instruction
National Education Association
Box 3046 University Station
Columbus, Ohio

Gentlemen:

I hereby apply for Membership in the Department of Visual Instruction and attach a remittance for \$2 to cover dues for 1938, including magazine subscription and other services.

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Address:.....

Position:.....

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RCA Victor Public Address Systems are designed for interior or exterior use. Special weather-proofed loudspeakers available for permanent installations to serve playgrounds, football and baseball fields. Wherever a school gathering is held, a public address system is of great aid to those who listen. It is usually a necessity.

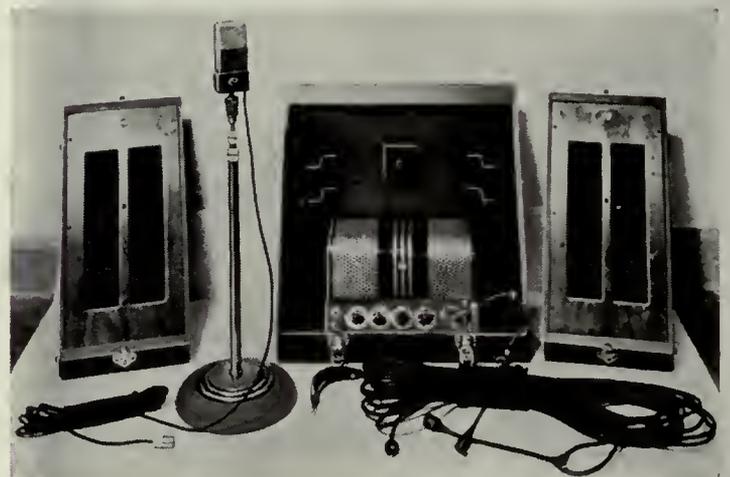
Equipment illustrated at right is Model PG-112 which includes RCA Junior Velocity Microphone, two heavy-duty permanent Magnet Speakers. May be used from either 110-volt AC outlet or from 6-volt storage battery in conjunction with a dynamotor. Provides enough volume for audiences up to 2,000 persons. May be carried from room to room and set up in a few minutes.



RCA Sound Motion Picture Projectors

RCA has a complete line of 35 mm. sound motion picture projectors to cover every possible requirement. This equipment profits by the same research that makes RCA Photophone installations in theatres throughout the country so successful. Trouble-free performance such as these theatres enjoy, is assured to you.

At left is RCA Photophone Portable Projector, Model PG-81 with 900 or 1,000 watt incandescent lamp. Ample illumination for average room or auditorium.



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The world's most complete collection from which to choose. For elementary grades, for intermediate grades, for high schools, for music schools, colleges and universities. Write for catalogs.



The R-96 Electrola (right), a portable instrument designed for classroom use, is the most inexpensive quality instrument available.



RCA Victor Instruments

The R-99 Electrola (left) provides unequalled reproduction of Victor Records. Here is an instrument offering thrilling, life-like performance at economical cost.

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NEWS AND NOTES *Being brief notations on significant doings and events in the visual field.*

Conducted by Josephine Hoffman

Visual Education Meeting in South Carolina

"Does South Carolina Need an Audio-Visual Program?" was the theme of a significant Visual Education Conference held at the University of South Carolina, on December 10-11, with Mr. W. H. Ward, Director of the Extension Service, presiding. Dr. Paul Reed of Rochester, New York, spoke at the two Friday sessions and gave the audience the benefit of his many years of experience as supervisor of Visual and Radio Education, Rochester City Schools. As the topic of his first address he chose "The Factors Essential to the Most Effective Use of Audio Visual Aids." In the evening, Dr. Reed cited some practical experiences in administering and organizing the Rochester school system for visual instruction, emphasizing the greater value of having duplicate copies of good films that would be used constantly than a great number of different titles. He also stressed the need for teacher-training classes in visual aids. At the same session Dr. Thomas W. Morgan of Clemson College spoke on the "Visual Instruction Program of the Clemson College Extension Service," which was started in 1936 as an experiment and has proved so gratifying in connection with educational campaigns among the farmers that the motion picture outfits are in great demand by County and Home Demonstration Agents throughout the state.

Saturday morning, Dr. H. A. Gray, Erpi Picture Consultants, showed the film "Adventures of Bunny Rabbit," which was prepared specifically for use in the primary grades, and Miss Julia P. Gaillard and her group of second grade pupils demonstrated classroom use of the subject. Mr. Ward then introduced Mr. Milner of the University of North Carolina Extension Division, who described the establishment and functioning of that Division's recently formed film library. The rest of this session was devoted to a group discussion of the situation in South Carolina and the possibilities for the acquisition of a state film library to be located at the University.

It was recommended that the Extension Committee make a survey of the schools of the state to find out the amount of interest existing in such a library; to evaluate the possibility of the library's paying for itself; and to present its conclusions to the South Carolina Education Association and to the General Assembly.

Source List of Visual Material

The office of Education, United States Department of the Interior, has issued a valuable little pamphlet, No. 80, on "Sources of Visual Aids and Equipment for Instructional Use in Schools," compiled by Cline M. Koon, Senior Specialist in Radio and Visual Education. It classifies visual and auditory aids under

seventeen headings and gives the following seven groups of sources for each: Federal Departments, State Departments, Colleges and Universities, Libraries, Museums, Voluntary Associations, and Commercial Dealers. The lists of governmental and educational agencies are far more nearly complete than the commercial sources. Further information is given on composite lists of educational films, organizations and government agencies interested in the educational use of motion pictures, and periodicals dealing with the educational use and influence of motion pictures.

The booklet may be obtained for 10c from the Superintendent of Documents, Washington, D. C.

Survey on the Utilization of Visual Aids

Ten thousand questionnaires were mailed to users of visual aids on January 15, 1938 by Victor Animatograph Corporation. The list was made up from the National Visual Education Directory, compiled by the American Council of Education in 1936, and supplemented by those schools which were known to have purchased either sound or silent motion picture equipment since the publication of the Directory. A report on the final returns will be compiled and ready for distribution about February 15th.

The survey was designed to serve as a basis for setting up an Educational Department to counsel schools in the selection and utilization of visual aids. Since the wide range of material included in this field makes it impossible to cover each phase completely in a survey of this nature, emphasis is placed on the most recent development—the motion picture. The questionnaire includes the following significant features: what films are schools now using—what other visual aids are schools using in addition to the motion picture and to what extent—what administrative provisions are made for the use of visual aids—what teaching techniques are followed—what support can be expected from teacher training institutions within the state—what provisions are made for keeping in touch with current developments in the field—what are their specific problems and what kind of films are recommended as most needed for school use?

It is anticipated that the questionnaire will serve to accomplish the following objectives: (1) Provide practical information for schools contemplating the use of visual aids. (2) Indicate the difficulties which schools are now experiencing in their visual education program in order that ways for overcoming these obstacles may be suggested. (3) Make available to motion picture producers a list of the films that equipment owners want to use in their schools so that they may be guided in their future production programs. Copies of the final report will be supplied on requests sent to the Victor Animatograph Corporation, Davenport, Iowa.



Note the very large periodical being used without mutilation.

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saves money—improves grades—reduces failures

While reading a magazine a teacher recently discovered 12 new and unusual illustrations on the very subject she planned teaching the following day. How could the entire class see these pictures while she explained them?

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The subject was presented more vividly. Pupils displayed unusual interest and attention. An examination on the subject produced unusually high grades.

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Audio-Visual Education Theme of Texas Conference

By ARTHUR L. MABERRY
Deputy State Superintendent, District No. 12, Tyler, Texas

AUDIO-visual education started taking on real life in the State Department of Education during the spring and summer of 1937. It started gaining impetus soon after the New Orleans' meeting of the Department of Visual Instruction of the National Education Association. The programs there inspired the State Superintendent, Dr. L. A. Woods, to start a movement for the purpose of increasing the use of these modern teaching tools.

The first actual results came to light during the summer, when three of the deputy state superintendents, Miss Madge Stanford, Mr. Ozelle Murdock, and Mr. Arthur L. Maberry, selected the subject of audio-visual education to work on in a curriculum installation course given in the University of Texas. Miss Stanford and Mr. Murdock were students in the course, while the third member of the trio was working purely because of his interest in curriculum revision and audio-visual education.

This committee classified all of the visual aids in the University of Texas visual instruction library according to the five core areas of the state's new tentative course of study, made up a bibliography of free and useful materials, secured an agreement with the University whereby a twenty-five dollar group rental fee per school would pay for the use of all 16mm. films in the University library, with the aid of Dr. L. A. Woods, state superintendent, acquired for salary aid schools a sum of five dollars per teacher, but not to exceed thirty-five dollars per school, to be used for purchasing visual aids equipment and supplies, and secured provision that the state score card for standardized schools, for the first time, allow fifteen points of credit for schools having and using audio-visual aids in teaching.

Mr. J. Fred Horn, Supervisor of school plants, made a study of radio education in Texas during the winter and spring of 1937. This interest and work led to two radio courses at Southern Methodist University and The University of Texas, conducted by Mr. Ben H. Darrow, in the summer of that same year. Practically all of the twenty-four supervisory districts now have at least one radio program each week; District Number Twelve has three radio programs each week. These are thirty minute programs conducted by the school pupils and made up of music, new flashes, short talks, short dramas, and reports of interesting Parent Teacher Association work being done in the community. The programs are sponsored by the State Department of Education under the direction of the deputy state superintendents.

The interest in audio-visual education has been growing rapidly, so rapidly that it was decided to make the central theme of the fourth Annual Conference of School Administrators a study of audio-visual education. The Conference was held January 6 and 7, 1938. A splendid program was planned by the first assistant state superintendent, Dr. Jeremiah

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Rhodes, who never saw it carried out because of his death at seven o'clock on the morning of January 6. His work had been done so efficiently and his guiding spirit was felt so greatly throughout the program that the meeting was more successful than any had expected. There were at least one thousand Texas school administrators in attendance. These administrators considered carefully all of the instructive lectures and demonstrations that were given. The attendance at each meeting of the conference was large.

Practically every phase of audio-visual education was well demonstrated and adequately discussed. Mr. E. C. Dent, Director of Educational Department, RCA Manufacturing Company, reviewed the "Recent Developments in the Use of Visual Aids to Instruction." Mr. V. C. Arnsperger, Erpi Picture Consultants, gave two addresses, entitled "Introducing the Film in the Curriculum" and "Using the Film on the High School Level." Sound-film demonstrations by Prin. J. J. Vincent, Beaumont, Texas, and Mr. Arnsperger, showed how this valuable teaching aid can be used from the first grade through the most technical higher educational courses. Slides and film strips were also demonstrated as teaching aids, and the possibilities for teacher-made slides were discussed. Mr. Walter S. Bell, Board of Education, Atlanta, Georgia, gave a resumé of the "Problems of Presentation and Distribution of Filmstrips." Mr. L. L. Perry, Director of

(Continued on page 63)

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A Model-Making Laboratory

By **D. PAUL SMAY**

Art Instructor, High School, Indiana, Pa.

WITHOUT a doubt the filling-station type of education is well on its way out. The school, wherein the degree of one's success is dependent upon one's capacity to absorb facts, is definitely out of tune with the demands of the world today. The raw and unsoftened question that falls over our graduates like a shower of cold water is, "What can you do?" Sound education to meet this need must continue to place increased emphasis upon supplementing "factual and principle" education with expressive activities of some type. This philosophy is being developed in several fields of education and has been christened many different names such as "expressionism," "integrated activities," etc. One such experiment in this direction of educational development was the establishment of a *craft room laboratory*.

This original craftroom was established in a janitorial stock room without access to outside light and entirely without any equipment, seats, tables or cupboards. Nothing could have been more primitive than

our original set-up—an empty room with four walls. Hardly any school district could boast of less. Before the end of the term the room had grown into a laboratory work shop with tables, bins, shelves, tools and supplies adequate to the construction of projects similar to those to be described. Similar results are within the possible reach of most schools with an alert teacher in charge.

Unquestionably the primal purpose of such a work room was to include in the school program a definite place wherein expression in creative activity was a definite responsibility of both the students and the teacher. Previous to the existence of the laboratory the model-making done by the students to illustrate or develop a unit of work was necessarily done at home, with insufficient tools, equipment, and materials. This inefficiency in the work made it unsuited to all, excepting the very persistent and extremely hard working few. The craft room, by providing the tools, equipment, and materials, made the results achieved more in proportion with the efforts put forth. The creative atmosphere generated by dozens of students working on many different projects was an added incentive to the construction. The help and encouragement of an instructor produces the needed push that prevents a stalling on some of the rough spots. In fact, the presence of such a room and such work was almost symbolic of the inclusion of life's problems into the present-day school.

Several objectives in this experiment were set up and maintained to attempt at least to keep the progress in the right direction. In the first place, the laboratory's existence was based upon the philosophy "*learning is doing*." Children soon sensed the challenge of the laboratory. Their courses in literature, mathematics, science, history, geography, dramatics, health, music, and art began to pay "dividends." The instructors in those diverse fields could point to facts and principles used in the craft room work for which they were responsible. The vitality of their teaching and personality was also directly reflected in the work accomplished. This was an ideal opportunity for the teachers to gain a "kinetic quotient" in the value of their instruction.

Appreciation was decided upon as a second objective. This is a wide and indefinite term. But so was the objective wide and almost indefinite. To some students in the upper brackets of mental strength, the inter-relationship of design, structure, and materials seemed to form the basis upon which their work became an active part of their lives. From that upper strata various appreciation levels filtered down to those whose greatest joy lay largely in the manipulative stages of handwork.

The last, but by no means least, objective was to keep the work, the equipment, and the materials defin-

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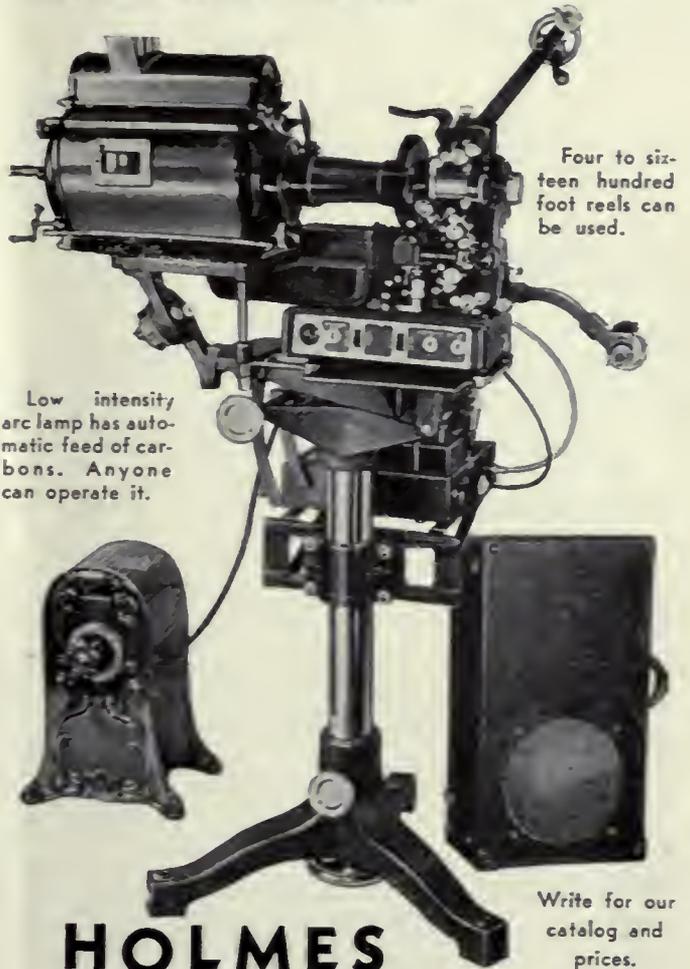
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itely *non-technical*. The hope behind the whole laboratory setup was that it would merely become a launching place for continuous efforts in the same lines of work. No effort was made to teach skills that would "rust" from lack of continual use. Expensive and hard to get materials would be a crippling barrier to the future work of the students. The equipment chosen and the materials used were well within the means and access of everyone.

Space, equipment, and supplies are the three "spectres" that haunt every new activity in school life. As with any educational effort, cheerful, light, and airy surroundings are conducive to better work. However, the work itself is easily motivated and the "inner-glow" generated by creative efforts can convert a dungeon into a drawing room. Also, the less "finish" on a room, the more and more its care can be relegated to secondary importance as regards the work in progress.

The equipment needed will delight a budget-maker's heart. Clay, sawdust, rags, sticks of wood, twigs, crates, pasteboard, shoe boxes, razor blades, yard sticks, tin cans, twine, and wire are as free as the air and are obtainable in every district. Hammers, paint brushes are obtainable at any five and ten cent store. This quality is sufficiently good for the work. Equipment for a class of thirty-six amounts to approximately fifteen dollars. Two machines that help tremendously are a used sewing machine and an electric jig saw. Five dollars seems to be the standard price for a "sub-marginal" sewing machine. A first-class jig saw, equipped with a motor, approximates twenty-five dollars. One-quarter inch ply wood in four by eight foot sheets forms the tops of most of the tables. The cost is approximately one and a half dollars for such a sheet. The expense involved in the under rigging of the table is about one dollar. Such a table is sufficiently large to accommodate a group of eight persons with ease. To stock our "larder" we may purchase two sacks of plaster of Paris, twenty-five pounds of flour, five pounds of flake glue, one sack of lime, one sack of cement, one hundred pounds of sand, dry colors, linseed oil, shellac, alcohol, varnish, turpentine, and bronze powders. These materials just about equip us to rebuild the glories of the ancient world and to produce new wonders yet to come.

The work of the original art room group penetrated the past to the time of the Swiss lake dwellers. They recreated a lake village in miniature, perched on a Lilliputian lake bed with piles made of 1/4" twigs pushing up through a wind-tossed surface, made of crumpled cellophane. The Stonehenge arose again under the skillful fingers of three fifteen-year old "giants." The stone sarcophagus of Astarte, high priest of Assyria, was reborn in white plaster, blackened to rep-

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resent the original basalt, despite the curses that were so carefully transcribed from the original. We can watch, unheeded and unseen while tiny Egyptian butchers, bakers, brewers, carpenters, and cattle drovers continue their respective duties in the timeless history of Egypt. The five rows of sweating oarsmen on the Grecian galley still labor for us on the Aegean that has shrunk to a section of beaver board with plastic waves. Time marches swiftly up through history in the craft room to the present where our own city beautifies herself in plaster, paint, and stone, with parks, memorials, bridges, stairways, airports, highways, and public buildings. Modern homes, built by embryonic "Frank Lloyd Wrights" set a goal and establish a need for future civic growth.

The craft room "elbowed" its way into the "indispensable" class in the school with its contribution to the school's efforts in dramatics. Our aims were not one bit desecrated when a Moroccan fortress was constructed to fill the stage for the Foreign Legion to storm. Aeneas and Dido had their tragic lives reinforced with a Greek temple that was largely wire, muslin, and sticks. The glistening helmets, shields, and breast plates of the soldiers had a used paper towel basis to support the metal enameling. A section of the Luxemburg palace helps us to live with the Three Musketeers for three performances. The sparkling diamonds in Cinderella's tiara, rings, and bracelets, lose their magic when we remember that their base was epsom salts. Like the tail of a comet the craft room followed the "imaginings" of the dramatics department from the past through the present and into the mystics of the future. The glitter of the stage sets began to challenge the sterling silent products in the craft room. The battle is not over.

There need be no searching for the "outcomes" of the craft room experiment. *Socially* the contribution was in forcing teamwork on projects. Leaders, lieutenants, specialists, cooperations, conflicts, disappointments and joys—all come from the group work. Definite concrete efforts in future architectural, and structural needs of the community will bear definite concrete results. *Historically* the experiences break down the concept of the history book as a telescope to view the past. Rather the effort has been an experience of living with those folks of the ages. *Geographically* the "worm's eye" scope of our own vision increases until "Jehovah-like" we can look down from the



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News and Notes

(Concluded on page 57)

Division of Information and Publications, Georgia State Department of Education, and Mr. H. R. Richie of University of Georgia, also participated in the program.

The possibilities of the use of the motion picture camera in the school were also discussed and ably demonstrated. Other speakers and their topics were: Mr. T. H. Shelby, Director of Extension Division, University of Texas—"Radio Services Available to Texas Schools;" Mr. R. M. White, Abilene, Texas—"Acoustics and Audio-Visual Education;" Mr. George H. Wells, Principal, Austin High School—"Use of Inter-School Hook-up."

"Ten Best" Films of 1937

The Life of Emile Zola, Warner Brothers' film starring Paul Muni, has been selected as the best film of 1937 by the newspaper and magazine film editors and critics of the country canvassed in the *Film Daily's* annual poll. The nine other "bests" were: *The Good Earth* (MGM) *Captains Courageous* (MGM), *Lost Horizon* (Columbia), *A Star Is Born* (UA), *Romeo and Juliet* (MGM), *Stage Door* (RKO), *Dead End* (UA), *Winterset* (RKO), *The Awful Truth* (Columbia).

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Current Film Releases**Film on Nursing Profession**

A vocational motion picture which successfully serves a double purpose has been created by the Harmon Foundation Division of Visual Experiment in *Nurses in the Making*. This two-reel survey of a modern nursing education, made in cooperation with the New York Hospital School of Nursing and other agencies, is being widely used not only by hospitals, schools of nursing, and public health agencies, but also by high schools for vocational guidance.

The major portion of the film portrays highlights of a modern nursing curriculum. Without attempting to show procedures in detail, it suggests by brief scenes the scope and content of such a program. Glimpses of the preliminary aspects of the student's education are presented, followed by scenes showing the student in the medical and surgical pavilions of the hospital, where she becomes familiar with the many services and carries out, under careful supervision, the techniques she has learned. The emphasis on the nurse as a teacher is indicated by scenes of the student helping mothers to learn the proper care of a baby and assisting sick children in their play. Her two months' affiliation with a visiting nurse agency helps her to apply hospital techniques in the home, and a final four months in the care of patients with mental and personality disorders rounds out her basic professional education. The film does not neglect other phases of

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the student's life. The careful supervision of her own health is shown, and the provision made by the school for her social and recreational activities. As a whole the film creates a real understanding of the nurse's place in the modern community and of the necessity for a thorough comprehensive preparation to fill it.

Nurses in the Making is a sixteen millimeter silent film, available on a rental basis from the Harmon Foundation, New York City. Systems of public instruction and other qualified organizations may also secure prints of the picture for their own use on a lifetime lease basis. The film is distributed with "Suggestions for Use" prepared in cooperation with national nursing organizations, which include background material and reading lists on nursing, suggestions for musical accompaniment, and helps in planning programs. Phonograph records to supply the accompaniment may be rented with the film.

Additions to Garrison Library

Garrison Film Distributors, New York City, have acquired exclusive rights to the distribution of *Ethiopia today*, a silent three-reel short subject, which was produced by Dr. Kurt Wiese in Ethiopia and is an authentic record of events since this country was proclaimed Italy's "New Empire." The film was especially edited for integration with the school curriculum and is now being used by the New York Public School System.

Also on the current schedule of releases by Garrison for classroom use is *America's Disinherited*, a real-

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life story of the southern share-cropper and his un-
availing struggles against poverty. This is a three-
reel subject with commentary by Dr. John Haynes
Holmes.

Lenten and New Subjects from Ideal

Ideal Pictures Corporation, Chicago, have just
issued their 1938 Lenten Bulletin of Religious Motion
Pictures in 16mm sound and silent and 35mm silent.
Among the new religious releases in 16mm sound are
Brother Francis (7 reels), *St. Anthony of Padua* (9
reels), *Life of Christ* (8 reels), and *Christus* (7 reels).
This catalog should provide a wide selection to
churches planning their Lenten programs.

Supplement No. 2 of their regular motion picture
catalog, listing new subjects which have been added
to their library, announces price reduction on many of
their rental features and shorts. Ideal also announce
that they have available all of the pictures released by
Castle Films, Inc.

Panay Bombing in 16mm.

The famous newsreel, Norman Alley's *Bombing of
U. S. S. Panay*, is now offered for sale by Castle
Films, in the same five versions as all Castle releases—
16mm silent (100 feet and 360 feet) and sound (350
feet), 8mm. silent (50 feet and 180 feet). Announce-
ment is also made of *The Winner*, latest addition to
the series of Sport Parades, showing the champions of
the year.

Short Subjects Edited from Features

Paramount Pictures have produced two new short
subjects for educational and non-theatrical consump-
tion from their features, *High, Wide and Handsome*
and *Wells Fargo*. From the former, a two-reel film
has been made, entitled *Men and Oil*, portraying the
early development of the oil industry in America and
the laying of the first pipe-lines. *Wheels of Empire*, a
one-reel production edited from *Wells Fargo*, tells the
story of transportation and communication. Both films
are available from Films, Incorporated, in 16mm.
with orchestral score and narrator's voice.

Classroom Reading Projects on Foreign Films

The International Film Bureau of Chicago an-
nounces the publication of portions of the dialog of
La Kermesse Heroique for classroom study before
showings of the film. This reading project has been
prepared by Sara Thompson, Teacher of French in
the Oak Park River and Forest Township High School,
Oak Park, Illinois. It contains explanations and mar-
ginal vocabulary prepared with the needs of third
semester French students in mind, and is intended
for reading before the film and dramatization by stu-
dents after the film has been shown several times. The
Bureau also has available dialog reading projects based
on *Singende Jugend* and *Emil Und Die Detektive*.

The International Film Bureau announces the na-
tional release of *The Making of a King (Der Alte un
Der Junge Koenig)* in 16mm sound. This picture, star-
ring Emil Jannings in the role of the father of Fred-
erick the Great, has been appraised by members of
the history and German departments of the University
of Chicago as historically accurate in story and detail.

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position almost automatically. The Ampro-sound is distinctively different in design and principle, with many remarkable features not to be had in any other equipment. You will be astonished at the quality of 16mm. sound-on-film projection which you may now secure on Ampro equipment at low cost. Silent Projectors and Models convertible into Sound projectors also available. Send Coupon for new 1938 Ampro literature giving full details and prices.

(Ampro distributors are established all over the world. Write for name of dealer most convenient to your locality. Sole British Isles and Irish Free State distributors, M. W. Duncombe, Ltd. 5 St. Augustines Parade, Bristol, England).

Be sure to see the display of latest Ampro Projectors at the
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AMONG THE PRODUCERS *Where the commercial firms announce new products and developments of interest to the field.*

Pictures for the Social Studies

From Informative Classroom Picture Association, Grand Rapids, Michigan, comes news of a new series of pictures for use in the teaching of Social Sciences. These are black and white line drawings 8½" by 11" printed on bristol board, each unit consisting of some twenty large plates. The series when completed will include ten units, which correspond to the units of activity taught in most schools. The titles are: "Home and Community Life," "Clothing and Textiles," "Pioneer Days," "Life in Colonial America," "Knighthood—Life in Mediaeval Times," "Transportation," "Christmas in Many Lands," "The Farm," "Indian Life," and "Modern Primitive Peoples." Three of the units are already completed and in use, and the others are in progress. Concise text material, a bibliography, and suggested activities accompany each unit.

The pictures have been organized as units around natural centers of child interest with the idea of providing clear, forceful, informative pictures that explain and clarify the subject and stimulate pupil research and activity. The legend which accompanies each picture tells its own interesting story and answers the questions which the details of the picture stimulate. It has been the aim of the editors to produce pictures that teach, that are not merely pretty. After considerable thought and experimentation it was decided that line drawing, when reproduced in sharp black and white could best accomplish this end. In such pictures the child's attention is centered upon the informative aspects of the subject and is not distracted by the mere brilliance of color which, in color pictures, sometimes takes predominance over the information contained in the picture.

Spencer Lens to Build New Plant

Expecting ultimately to double its present production schedule and number of employes, the Spencer Lens Company of Buffalo, New York, completed negotiations for the purchase of 25 acres at Cheektowaga, a Buffalo suburb. The expansion plan, as outlined by Burton H. Witherspoon, vice-president and general manager of the company, will mean the construction soon on the new property of a production unit, to be followed during a period of years by the building of other units as increased business warrants.

Employment of an additional 100 men during the last year, has warranted this expansion program. Mr. Witherspoon said, stressing the fact that his concern contemplates no immediate withdrawal from its present plant. Units on the Cheektowaga property will be constructed gradually, the production schedule being increased correspondingly as additional facilities become available.

Central Camera Products

The new Trojan Reflectors have been introduced by Central Camera to provide efficient lighting units at moderate cost. Like the Realite lighting equipment after which it is patterned, the Trojan is equipped with the new patented lock construction—one push, one pull, and your stand is set properly at any height. Not as heavily constructed as the Realite, it is steadily and durably constructed of cold rolled steel, with polished aluminum reflectors, acid etched inside. Priced at only \$3.95 and up.

From the workshops of the Central Camera Company, 230 South Wabash Avenue, Chicago, Illinois, comes another photographic aid—the new Royal Tripod. Made of all metal, the two sections adjust at any height by a single quarter turn of an ingenious ring. It is strong enough to support all still and movie cameras and can be furnished with its twin newcomer, the Royal Tilting Head for panoraming and tilting. Both operations are controlled by a single lever.

Both products are described in the Central bargain book which is available for free distribution.

DeVry Centralized Control System



In the photograph may be seen Monsignore M. Klasen seated before the "Console" of the DeVry System, addressing the classes of St. Gregory School, Chicago, which has recently purchased a centralized central unit linking all classrooms with the principal's office.

New Catalog of Film Accessories

Neumade Products Incorporated, New York City, announces the issue of a new 1938 catalogue, completely revised and fully illustrated covering all types of film editing, laboratory and film storage equipment that are manufactured by this firm.

This concern, since 1916 manufacturing products for 35mm., has recently gone into the 16mm. field. Of particular import are the Neumade Film Storage Cabinets which offer protection for valuable 16mm. films. All those who wish to acquaint themselves with the latest methods of handling, editing and storing films will want a copy of this interesting new catalogue.

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THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films
 (A) Discriminating Adults (Y) Youth (C) Children
 Date of mailing on weekly service is shown on each film.
 (The Film Estimates, in whole or in part, may be reprinted
 only by special arrangement with The Educational Screen)

- Amphitryon** (French-Rhythmic dialog-English titles) Aristophanes made into a modern sophisticated whimsy. Hilarious, bawdy burlesque of Jupiter and Mercury parachuting to Earth to seduce two wives of absent soldiers. Thoroughly laughable amorous farce-comedy in pseudo-classic style. 1-11-37
 (A) Very good of kind (Y) and (C) No
- Boy of the Streets** (Jackie Cooper) (Monogram) Social evils of slum life vividly shown. Jackie—with marcel—smart benighted hero, taught by worthless father that "only saps work," lies, cheats, steals, fights too amusingly. Intended ethical values lost. Joining Navy cures all. 2-1-38
 (A) Fair (Y) Perhaps (C) Unwholesome
- Buccaneer, The** (March, Gaal, Tamiroff, Soth-ern, Grahame) (Para) DeMille masterpiece. Romantic melodrama, brilliantly directed, beautifully set, acted and photographed. Inflates minor history to epic proportions, glorifies rascality, decorates and distorts for maximum glamor. Thrilling entertainment, not "education." 1-25-38
 (A) and (Y) Excellent of kind (C) No
- Charlie Chan at Monte Carlo** (Oland, Luke, Huber, Virginia Field) (Fox) Fairly good Chan mystery, despite overcomplexity and unpleasant aspects of plot and some faulty direction. Key Luke still tries too hard. Comedy situations amusing, with Huber especially good in role of French police chief. 1-25-38
 (A) Good of kind (C) No
- Club de Femmes** (Danielle Darrieux) (French dialog, Eng. titles) Highly sophisticated comedy concerned with sex impulses of girls isolated in elaborate club-home. Real artistry in subtle characterizations, dialog, acting, direction. Dramatic values high. Subject-matter too continental for most American taste. 2-1-38
 (A) Notable (Y) and (C) By no means
- Exiled to Shanghai** (Wallace Ford, June Travis) (Republic) Senseless title for hash of camera-man adventures in Spain and America built round phony promotion of faked television. Artificial thrills, overworked coincidence, little logic, and much mere silliness. 1-18-38
 (A) Stupid (Y) Hardly (C) No
- 45 Fathers** (Jane Withers, Thos. Beck) (Fox) Jane still impossibly mature and aggressive in arranging affairs of her elders, but her capers and absurd proceedings, with slapstick, ventriloquism and a mischievous monkey as ingredients, are hilariously funny as she extricates hero from designs of gold digger. 2-8-38
 (A) (Y) and (C) Amusing
- Glamorous Night** (Otto Kruger, Mary Ellis) (Republic) English production. Mythical kingdom—musical romance about a beloved King, a dictator, and a gypsy queen who saves the monarchy. Plenty of action, picturesque back-grounds, but sound and photo-technique not the best. 2-8-38
 (A) Hardly (Y) Fair (C) Little interest
- Happy Landing** (Sonja Henie, Don Ameche) (Fox) European flight a la Harry Richman. Crude, cheap romance by sappy villain, bad taste comedy, banal singing, tortured music. Sonja's skating wonderful as ever but flimsy story and half-inch eyelashes do not help. 2-1-38
 (A) Feeble (Y) Not the best (C) No
- Hollywood Hotel** (Dick Powell, Lane Sisters, et al) (Warner) Luxurious slapstick and horseplay in gorgeous settings and raucous noise. Visual and aural pandemonium glorifying Hollywood, radio and Luella Parsons. Hectic music, sycophantic dialog, silly action and unconscious burlesque. Acting undistinguished. 1-18-38
 (A) Depends on taste (Y) (C) Amus. but dbtfl. val.
- Hurricane** (Jon Hall, Dorothy Lamour, C. Aubrey Smith) (U. A.) Monumental achievement in mechanical technique overwhelms picture, both strength and weakness. Full of improbability, even absurdity, but seeks thrill at all costs and succeeds. A masterpiece of its kind, notable for both direction and cast. 1-18-38
 (A) Extraordinary (Y) Thrilling (C) No
- In Old Chicago** (Alice Brady, Ameche, Power) (Fox) O'Leary family glorified in faintly historical, seething melodrama of old Chicago. Real character values and amusing grotesques in first half. Rest becomes expert chaos of tremendous "effects," violent thrills, deafening pandemonium. More colossal than important. 2-1-38
 (A) and (Y) Very good of kind (C) No
- Invisible Menace, The** (Karloff, Marie Wilson) (Warner) Bloody doings in an army post, with atmospheric effects calculated to heighten suspense and mystery in killing of army officer. Comedy provided by a rookie and his bride, smuggled into camp. Suspenseful, but marred by brutalities and confusion in plot. 1-25-38
 (A) Perhaps (Y) Not the best (C) No
- Jury's Secret, The** (Kent Taylor, Fay Wray) (Univ) Circumstantial evidence tries innocent man for murder while killer sits on jury. His one vote for acquittal causing deadlock, he is smugly content, but fiancée, stumbling on evidence of his guilt, persuades him to confess. Very incredible, sensational, suspenseful. 2-1-38
 (A) Hardly (Y) and (C) No
- Lady Behave** (Sally Eilers, Neil Hamilton) (Republic) Heroine's married kid sister does drunken Mardi Gras marriage with rich married playboy. To save her from crazy mess, heroine poses as wife. Absurd complications with various intrigues and divorcees, two impossible children, attempted swindle, etc. 1-25-38
 (A) Absurd (Y) and (C) No
- Love Is a Headache** (Gladys George, Rooney, Tone) (MGM) Imitating "Wise Girl," two impossible kids are orphaned and saved by hero and heroine. Good intentions nearly wrecked by well-meaning but dumb publicity man. Much supposed comedy more painful than funny. Waste of George and Tone. 2-1-38
 (A) Dull (Y) Poor (C) No
- Mannequin** (Joan Crawford, Spencer Tracy) (MGM) Hard-working heroine escapes slum home by marrying obvious good-for-nothing. Ardent love, then dreary disillusion until rich, rough, big-hearted hero brings second marriage. Good acting, but too much of story is dismal, improbable and false. 2-3-38
 (A) Perhaps (Y) and (C) No
- Marihuana** (Unknown cast) (Roadshow Films, Inc) Cheap thriller, cheaply produced, paraded as education. Crudely told and acted story of innocent heroine and young friends—soft drinks, liquor, marihuana, illegitimate baby, final reform, etc. Sensational lobby publicity now needed for 1936 picture. 1-18-38
 (A) Trash (Y) and (C) No
- Night Club Scandal** (John Barrymore, Lynne Overman) (Para) To start, clever club man kills faithless wife and frames lover. Cleverer newspaperman—expertly comic role by Overman—follows tangled clues and solves all. Deft mixture of fun and suspense to the end. 2-1-38
 (A) Good of kind (Y) Mature (C) No
- Non-Stop New York** (John Loder, Ann Lee) (Gau-Brit) English chorus girl, penniless in New York, is only witness to gang murder. Then long struggle in London, hectic trip on trans-atlantic plane. She outwits gang and saves innocent man from death-sentence. Villain melodrama. 2-1-38
 (A) Depends on taste (Y) Hardly (C) No
- Paid to Dance** (Don Terry, Jacqueline Wells) (Univ) Sensational expose of dance-hall racket cheapened by over-emphasis on murder and violence. Shows girls bought and sold, held in virtual slavery by employers, till racket smashed by stalwart Government agent in climax exposing and "disposing" of big boss of ring. 1-25-38
 (A) Hardly (Y) and (C) No
- Paradise for Three** (Frank Morgan, Rob't Young) (MGM) Hilarious fun by expert cast in merry mistaken-identity story of rich and poor "contest winners" on Alpine vacation. Mary Astor's small role as cheap seductress is needless smudge on fine farce-comedy. Morgan does notable role. 2-8-38
 (A) Amusing (Y) and (C) Mostly Amusing
- Penitentiary** (Walter Connolly, John Howard) (Columbia) Innocent hero—street girl—night club—insult—manslaughter—prison. Then extended and convincing portrayal of grim prison life. Notable role by Connolly as warden. Otherwise a depressing jumble of weak story, dull romance and dramatic falsities. 1-25-38
 (A) Feeble (Y) and (C) No
- Portia on Trial** (Frieda Inescort, Walter Abel) (Republic) Well-acted and produced, but sordid, unpleasant, unconvincing melodrama a la "Madame X," with betrayal and murder chief ingredients. Only the excellent performances of Inescort and Abel give it any semblance of reality. They deserve better. 1-11-37
 (A) Hardly (Y) and (C) Certainly not
- Radio City Revels** (Burns, Oakie, Berle, et al) (RKO) Radio "plugs" for movies and now movie reciprocates—with little benefit to either. Absurd hash of "music," dancing, horse-play, mostly loud and stupid, with plot or talent scarcely discernible. Hectic attempts to make physical exertion funny. 2-8-38
 (A) Stupid (Y) Perhaps (C) Prob. Amusing
- Shadow, The** (Rita Hayworth, Chas. Quigley) (Columbia) Murder mystery crudely done in trappings of small-time circus troupe. Black-robed shadow shoots poison darts in the dark till hero brings prosaic solution. Artificial suspense, mediocre acting, clumsy narrative. 2-8-38
 (A) Poor (Y) No (C) No
- She Married an Artist** (John Boles, Luli Deste) (Col) Light, breezy, mature farce about stormy marriage beset by crazy misunderstandings and situations—complicated by husband's pretty model—leading to separation. But blustery old housekeeper engineers reconciliation and happy ending. 1-18-38
 (A) Fair of kind (Y) Doubtful values (C) No
- She's Got Everything** (Ann Sothern, Gene Raymond) (RKO) Efforts of heroine's creditors to marry her off to rich husband provide slight, uneven comedy of romantic complications. Slow-moving, uninspired dialog, and not enough story for assorted comedians in cast. Antics of Broderick and Victor Moore amusing. 1-25-38
 (A) Only Fair (Y) Rather amus. (C) Little Int.
- Some Blondes are Dangerous** (Noah Beery, Jr., Nan Grey) (Univ.) Commonplace film about pugilist hero, all brawn, no brain, who falls for and marries brazen, cheating chorus girl. Finally awaking to her double dealing he turns again to decent, patiently waiting little heroine. Endless shots of ring fighting. 1-11-37
 (A) Poor (Y) No value (C) No
- Spy Ring** (Wm. Hall, Jane Wyman) (Univ.) (In-ventor of silly "improvement" to army rapid-fire gun is killed by blonde spy, his pal to carry on work. Polo and romance absorb hero till spy theme is resumed for climax. 1-25-38
 (A) Mediocre (Y) Perhaps (C) Hardly
- Thrill of a Lifetime** (Betty Grable, Leif Erikson) (Para) Airy and lively musical with youthful cast engaging in song, dance and romance. Slight plot, concerning hero's efforts to sell play portraying life at his camp, serves as a basis for specialty and ensemble acts. Some amusing hits. 1-11-37
 (A) Mostly inane (Y) Fair (C) Perhaps
- Troop Ship** (Leslie Banks, Flora Robson) (U. A.) Life of British Tommy, on board troop ship vividly and humanly portrayed, with its ups and downs, glowing hopes and poignant disappointments. Ample comedy in contrasting characters living under rigid discipline, for "King and Country." 1-18-38
 (A) Novel (Y) Good of kind (C) Hardly
- Viennese Nightingale** (Martha Eggerth, Leo Slazak) (German with English titles) (Casino Films) Charming heroine, obsessed with stage ambition, climbs from laundry girl to prima donna through amusing, distressing and very human adventures. Well made little plot, splendidly sung and acted. Notably good sound. 1-18-38
 (A) Very good of kind (Y) Perhaps (C) No
- Wise Girl** (Miriam Hopkins, Ray Milland) (RKO) Decidedly original whimsical comedy suffers from too much inconsistency, burlesque and silliness. Rich heroine rescues two little orphan girls held by the half-cracked artist hero in a phony Greenwich Village. Unique but uneven interest. 1-18-38
 (A) Hardly (Y) Fairly good (C) No
- Women in Prison** (Wyn Cahoon) (Columbia) Pretentious thriller of hidden loot and gangsters. In grewsome accident they "frame" heroine who gets 10 years in prison where her mother is warden! Jailbreak—and guns keep going till gang chief dies and all is solved. 2-8-38
 (A) Mediocre (Y) and (C) No
- Young Pushkin** (Russian-English titles) (Len-film) Against lovely Tsarskoe Selo back-grounds, the 1815 school days of great poet glorified in realistic but undramatic narrative. Boy appealing, but gnome-like in look and weird movements. Much reading of poetry. Tempo slow, humor heavy. 2-8-38
 (A) Hardly (Y) and (C) No interest

Publications on Visual Instruction

EDUCATIONAL SCREEN

Published monthly except July and August. Official organ of the Department of Visual Instruction of the N. E. A. The only magazine devoted to extending and improving the use of visual and audio-visual teaching aids in education. A clearing-house of thought, fact and experience on all phases of the work.

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A SYMPOSIUM ON SOUND AND SILENT FILMS IN TEACHING

A stenotype report of the entire afternoon session of the winter meeting of the Department of Visual Instruction of the N. E. A. at St. Louis, February 26, 1936. Includes able presentation of the advantages of sound films, the latest addition to the family of visual aids.

8 pp. Net Price 20c

ACTIVITIES OF STATE VISUAL EDUCATION AGENCIES IN THE UNITED STATES. By Fannie W. Dunn, and Etta Schneider, Teachers College, Columbia University.

A concise and discriminating summary of total results from a comprehensive survey of 24 of the 26 states having Departments of Visual Instruction. A companion article to this, "Practices in City Administration of Visual Education," by the same authors, appeared in EDUCATIONAL SCREEN for November and December, 1936.

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(See advertisement on page 58)
- Castle Films (6)
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- Cine Classic Library (5)
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(See advertisement on page 66)
- Commonwealth Pictures Corp. (5)
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(See advertisement on page 63)
- Eastin 16 mm. Pictures (6)
Davenport, Ia.
(See advertisement on page 60)
- Eastman Kodak Co. (1, 4)
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- Garrison Films (3,6)
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Cal.
- J. H. Hoffberg Co., Inc. (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 56)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 62)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 66)
- National Cinema Service (6)
3 W. 29th St., New York City
- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Pictures Corp. (3)
Rockefeller Center, New York City
(See advertisement on page 59)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Visual Instruction Supply Corp. (6)
1757 Broadway, Brooklyn, N. Y.
(See advertisement on page 60)
- Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
(See advertisement on page 66)

MOTION PICTURE

MACHINES and SUPPLIES

- The Ampro Corporation (6)
2839 N. Western Avenue, Chicago
(See advertisement on page 67)
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co. (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 66)
- Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina Sask.
156 King St., W. Toronto
- Herman A. DeVry, Inc. (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 34)
- Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago.
(See advertisement on page 59)
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 56)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)
- Neumade Products Corp. (3,6)
429 W. 42nd St., New York City
(See advertisement on page 37)
- RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 52-53)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 62)
- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 69)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Colonial Art Company
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Okla.
- Informative Classroom Picture Ass'n.
48 N. Division Ave., Grand Rapids,
Mich.

SCREENS

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(See advertisement on page 57)
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1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

- Institutional Cinema Service, Inc.
130 W. 46th St., New York City
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Johnson Co. Bank Bldg.,
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- Edited Pictures System, Inc.
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28 E. Eighth St., Chicago, Ill.
(See advertisement on page 56)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 36)
- E. Leitz, Inc.
730 Fifth Ave., New York City
(See advertisement on page 63)
- McIntosh Stereopticon Co.
549 W. Randolph St., Chicago
(See advertisement on page 57)
- Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 64)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 65)
- Visual Education Service
131 Clarendon St., Boston, Mass.
- Visual Sciences
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MARCH, 1938

VOLUME XVII, NUMBER 3

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(To be concluded in April Issue)*

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Contents

Audio-Visual Education on a Limited Budget. Gordon R. Jones and John W. Gilliland.....	79
Slides and Films in Correlation. Belle B. Fenton.....	81
The Department of Visual Instruction.....	82
Looking Ahead in Visual Instruction. Edgar Dale.....	82
Evaluation of the Literature in Visual Education. Etta Schneider.....	84
In-Service Teacher Training in Visual Instruction. Paul C. Reed.....	86
Need for National Planning in the Distribution of Visual Materials. J. E. Hansen.....	88
Among the Magazines and Books Conducted by Stella Evelyn Myers.....	92
How to Hang Pictures—In Hand-Made Lantern Slides. By Ann Gale.....	94
News and Notes. Conducted by Josephine Hoffman.....	96
Current Film Releases.....	98
School Department. Conducted by Wilber Emmert.....	100
Among the Producers.....	104
Film Estimates.....	106
Here They Are! A Trade Directory for the Visual Field.....	108

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Audio-Visual Education on a Limited Budget

Emphasizing the value of sound films in a visual aids program in a small city school system

By GORDON R. JONES
Director of Visual Instruction

JOHN W. GILLILAND
Superintendent, Aurora, Missouri, Public Schools

THE world is still too large for the child to come in direct contact with all its interesting situations, and the school is far too small to house the significant representations that can be brought to the school. School excursions, museums, posters, pictures, all have their limitations as well as their advantages when it comes to broadening the background of school children through contact with situations as nearly lifelike as possible.

Within the last forty years there has been made available a new medium that is almost unsurpassed in its broad influences on human behavior. That new medium is the motion picture. It is the most powerful of the visual tools of education that have been devised by man. However, schools as a rule have not taken full advantage of this opportunity to use the motion picture, and the most effective use remains to be developed in the future.

Recently a study was made endeavoring to ascertain the extent of the social influence of the motion picture. From the study several conclusions were reached. First, the motion picture is a powerful medium of education. Second, children learn a large number of facts from a motion picture and remember them for a long time. Third, motion pictures produce a change in attitudes toward social problems. Fourth, they stir the emotions. Fifth, they provide patterns of conduct. All these conclusions were reached even though the study was confined to the theatrical motion picture. If the possibilities found in a theatrical motion picture could be turned into the proper directions and then these educational pictures used in the schools as a tool of instruction, no doubt school instruction could be improved.

Definite progress has been made in the use of the motion picture in the schools of the land. This has been brought about largely by the fact that the school must ever be devising better ways of teaching and learning, better instruments for translating various types of experiences as nearly as possible into reality. Sometimes it is one device that works; again it is another. So it was with printing, with the radio, and now with the latest development, the talking picture, even though the educational talking picture as a teaching device has not been used to any great extent as yet.

The coming of the educational talking picture represents one of the greatest forward steps in overcoming some of the limitations to learning, for it expands the possibilities of the words "teach" and "learn."

With these ideas in mind, and with the desire to

vitalize our instruction to a greater extent, the Aurora Public Schools have initiated a visual education program which utilizes the use of the sound film as well as silent films, film strips, lantern slides, etc.

In March, 1936, a number of representatives of concerns selling motion picture projectors were invited to demonstrate different types of sound projection machines to our Board of Education. Three factors were considered in making our choice,—projection qualities, simplicity and safety of operation, and the possibilities of using it as a public address system. After careful consideration a machine was selected upon these three basic considerations.

Since that time we have used a large number of sound films. Some were good and some were of absolutely no value to us at all. These films were obtained from the various University Visual Education Departments, the Y.M.C.A. Motion Picture Bureau, as well as various large corporations. We have found that a great many of the sound films called industrials and scenics can be obtained free of charge except for transportation charges. Naturally these free films with the exception of those put out by the United States Government have more or less advertising; and one of the problems in selection is brought about by this advertising, for there is so much in some of them that they are not usable.

Another problem that confronted us was the selection of films that would be of real value to the teachers in supplementing their units of work, and getting the films booked far enough ahead in order that they would be on hand when a teacher wanted them. In order to bring this about the principals of the different buildings obtained from their teachers lists of the films wanted, together with the approximate time they would like to have them. The teachers compiled their lists through the use of film catalogs put out by the various agencies as well as through the film estimates made by previous users. The principals then met with the individual in charge of visual education for the system and booked the films, keeping in mind the limitations of the budget and using previous experience as to the use of the films. Approximately 300 reels, both sound and silent, were used in the year 1936-37. For the current year we have booked approximately 250 reels, both sound and silent, including five full-length feature pictures used monthly in assemblies for the student body. Such feature pictures were booked as "Jane Eyre," "Girl of the Limberlost."

"Hoosier Schoolmaster," "Song of China," etc. These have proved very popular with the student body, even more so than the assemblies secured through assembly bureaus in the past, and they are much less expensive.

After our program had been in effect for a year, we could make more intelligent selection of films through the use of the film estimates made by the teachers. The form listed below was used:

Name of film.....
 Source
 Date used
 Sound..... Silent..... Slides.....
 Film strip.....
 Comments and recommendations for future use:
 Teacher.....

Through the use of these film estimates that have been filled out by the teacher using the film or other visual aid, one can readily see that a much more intelligent choice can be made. It is essential that these estimates be kept in order that a more intelligent selection can be made by those in charge of booking the various films. Too much stress cannot be placed upon this part of the program, as we have found it very difficult to keep from booking films which we have found to be of no value whatever to us after they arrived. If this film estimate blank is used intelligently many free films may be included in the program with very little additional cost.

During the past few years, there has been a gradual increase in the number of sound educational films available at a more moderate price. We have secured excellent service on sound films from the University of Wisconsin at one dollar per reel, they paying the transportation one way. Since the time that we introduced the use of sound films here, two other state universities have added sound films to their film-libraries—namely, University of Oklahoma and University of Missouri.

One of the most frequent questions asked is regarding the expense attached to the visual education program, particularly the use of the sound films in a school the size of ours. First, let me say that we have been agreeably surprised in this respect, as it has not been nearly so expensive as we had thought in the beginning. This has been due to the fact that we found that we could secure a large number of good films free and that we did not have to pay more than a dollar a reel for the better educational talking pictures, when at first it was our impression that the charges would be from \$2 to \$2.50 per reel. For the 1936-37 school year, we spent approximately \$100 for all kinds of visual aids, with about half of this going for sound films and the remainder for enrollment fees and transportation costs for other visual aids. This year we estimate that our expenses will be around \$125, which includes \$50 spent for the five feature programs alone. Without the feature programs you can see that our cost as estimated is \$75 for all visual aids. The smaller amounts being spent this year is due to the fact that we have been able to make wiser selections all the way along, and yet we have not shortened our program to any great ex-

tent. At least \$50 of the \$125 for this year has been raised through concession stands operated by the student council in the high school building during the noon hour.

As a means of keeping the program moving along smoothly, the Visual Education Director places in hands of the principal of each school a Visual Aids Report which gives the title and source of the films, as well as the return and comments.

Most of the silent films are booked for one week while the sound films are booked for one day. It should be pointed out, however, that the sound films usually come in from two to three days ahead of the actual date they are to be used. Naturally, we spread their use over the period they are with us instead of trying to crowd it all into one day.

Each film which has not been booked before is previewed before it is shown to any group, preferably by the teacher who will use it. A report is sent around immediately following the preview of the film to those whom we feel might be able to use it to advantage. This makes it possible for the teacher to stress various points of importance in the film at a certain place for a discussion. Sometimes the film is run more than once in order that a particularly difficult point might be emphasized. Naturally, after the film is shown, each teacher tries to tie the important factors brought out with the unit of work being considered.

We believe that the sound picture is a highly superior medium of instruction. We read in our school magazines about master teachers, master scientists, etc.; and through use of the educational sound film these masters may be brought before the class, thus making the lesson much more impressive. The child is hearing as well as seeing. We should keep in mind that the sound film is a valuable aid in instruction to present subject matter currently studied. We should keep in mind that this subject matter is enriched through using the sound film to initiate a unit, to present facts, to give a general background, and to summarize. Outside the classroom the sound film is being utilized to enrich club programs and special projects, for assembly programs and parent-teacher meetings. Herein lies one of the particular advantages of the sound film over the silent film in holding the interest of the group.

It should be pointed out that the sound projection machine in use here has a public address feature which is quite important and is used almost as much for that particular job as for a sound projection machine. It is used in all assemblies at the high school, as well as in many programs in the elementary schools. Then, too, the public address feature is used for various other types of meetings in the community such as band concerts, etc.

Two boys are trained each year to operate these machines, as well as to care for them and take them to the different buildings. Postgraduate students are usually used for this purpose. One of the problems that bothered us at first was getting the proper care for as expensive an apparatus as a sound machine would be. However, in the three years we have used it, we have had practically no difficulty of any kind, which indicates to us that the machine is much more simple of operation and handling than we thought at

first. There are always boys with a mechanical aptitude who are very much interested in this type of work and have the ability to handle it in a splendid manner.

In conclusion, we would say that our visual education program, particularly the sound motion picture part, has been very much worthwhile. We feel that through the experience of the past two years we are offering a better program this year than ever before and are of the opinion that there is a very definite

place for the educational sound film in any visual education program. We have also come to the conclusion that far too few schools in systems the size of ours use this valuable aid as a means of improving instruction. Perhaps this is because of a misunderstanding as to cost and because of a lack of understanding to the real value therein. Let us say emphatically that there is no doubt as to the fact that the sound film has a place in our schools and that it is not a passing fad or fancy, but is here to stay.

Slides and Films in Correlation

By BELLE B. FENTON

Slide Division, Visual Instruction Department
of the Chicago Schools

Some observations and comments made from outside the classroom which may be pertinent and valuable to the work going on inside

NOTWITHSTANDING the progress made in visual instruction in recent years, educators on the whole have not yet achieved fully balanced evaluation of possibilities in this field. Motion picture films and stereopticon slides both offer great values as educational aids, yet the films far surpass the slides in scholastic favor nowadays. One of the reasons for this is more natural than academically sound. Unquestionably a most natural desire of youth is to be entertained. Records show that the motion picture theatre does more national entertaining than any form of amusement ever known. The whole nation, and its youth in particular, are extremely cinema conscious, which means that the movie connotes entertainment primarily wherever it is shown. It is difficult to use films in the classroom without engaging this idea of amusement, and such use, to be genuinely successful, necessitates thought and careful planning.

In the past few years great stress has been put upon motion picture films as an aid to education. There has been considerable commercial inspiration behind this introduction of motion picture films to the educational world. The end has been quite definitely accomplished and because of the enthusiasm films have aroused, stereopticon slides seem to rate as second choice among the majority of teachers everywhere. In teaching young pupils especially, the writer believes, the stereopticon slides offer a much greater educational value than motion picture films, for these reasons:

1. Motion pictures in a child's mind are identified with entertainment rather than education, with thrill rather than thought.
2. A child's mind is not mature enough to grasp the full significance of details in motion.
3. Motion pictures do not make a clear enough impression upon a child's mind for the subject matter to be retained.

Some time ago it was the privilege of the writer to observe a class of small children viewing a motion picture film on transportation. After the picture

was over, the teacher asked the class to tell her what they saw. The first one to speak was a little boy, who very proudly remembered seeing smoke rolling out of the smoke stack of a train. In fact, all the answers she got from those youngsters were just as vague. The reason for that was—the picture moved too fast for the children to grasp the important details—such as the makeup and operation of the train. They merely glimpsed the movement in the picture. However, their interest in the subject of transportation was aroused, and they were enthused with the action that took place. An ideal situation, had the lesson been carried through to a satisfactory finish. So it is with almost any motion picture film. The thought unfolds so rapidly the child's mind is lost in a bewildering mass of details. Nor can subject matter so presented be effectively retained, and retention is, after all, a primary purpose of all education. The practice of showing the same moving picture over several times is not always a satisfactory or economical solution. Youth is impatient, eager to go forward, and resents the idea of review.

Some motion picture projectors have a device which permits the film to be stopped at a selected spot in the picture, thus producing a still picture. This device is valuable, but it can not replace the full and colorful details brought out in a well made stereopticon slide.

The writer would urge that a practice tried only sporadically be widely adopted: namely, to use the motion picture films as a stimulus to arouse interest in the subject to be taught, at the same time both stimulating and simplifying class room discussion. Then, to make the all-important lasting impression, follow up with stereopticon slides presenting significant points in the action, selected "stills" from the films.

Going back for a minute to the example of the little boy and the train, if the teacher had shown a stereopticon slide of the same train that boy could have noticed the number of cars attached, the number of big and little wheels on the engine, the

(Concluded on page 105)

DEPARTMENT OF VISUAL INSTRUCTION

Proceedings of The Annual Winter Meeting, February 28-March 1

What Happened at Atlantic City

I AM writing this piece the day after the last of the Atlantic City meetings. The members were very enthusiastic about these meetings; in fact, they liked what was presented so well that they voluntarily organized two additional informal meetings. What did they talk about? What were they interested in? What do they want to do? The answer is, "Many things", but here are some of them.

1. There is need for better clearing of ideas, not only in our Department but also in the whole field of visual instruction. Why can't we, these members asked, clear information about the many amateur films that are being made, evaluation data on films and slides, techniques of teaching, and the like?

2. We need to do something about teacher training. The teachers want it, but the normal schools and other teacher-education institutions don't know what to do—sometimes are apathetic about doing anything. The Department can aid here in locating, evaluating, and preparing possible curricula not only for complete courses but also for units which can be used in the fields of social studies, science, and other subject-matter areas.

3. Teachers must have more of a hand in the preparation of visual materials. Better methods of cooperation must be effected between the producers and the consumers of visual materials.

4. In-service training for the hundreds of thousands of teachers who have not had work in this field is imperative. Paul Reed's technique, reported in this issue of the *EDUCATIONAL SCREEN* provided an opportunity for a great deal of discussion.

5. There must be better guides prepared to accompany visual materials, especially films. Many of the currently available guides are excellent but, of necessity, they are general in their scope and treatment. Individual school systems might well supplement such

guides by their own suggestions for the use of the films. Here is an opportunity for the Department to make a collection of the many kinds of teaching suggestions that are being developed in connection with visual materials.

6. We need the names of people who can write good articles, give good talks and demonstrations, conduct institutes, give administrative assistance in setting up visual libraries. This list might then be widely circulated for use by program chairmen and others in preparing regional, state, and national programs for educational gatherings, in getting more material on visual instruction into the journals.

7. Joint meetings with other educational departments are highly desirable, e.g., with the Society for Secondary School Principals, etc.

8. There was a great deal of discussion as to what would make our New York summer meeting most valuable and interesting. The suggestions which the executive committee heard most often were the need for excellent demonstrations, a general headquarters during the meeting where members could drop in and talk it over, and an opportunity to visit some of the motion-picture studios.

9. A number of plans for increasing membership were discussed. All felt that if our plans for the future were carried out, members would get a great deal more out of their memberships—not merely in materials, such as yearbook, and the like, but also in the opportunity to serve on committees doing worthwhile educational work.

10. Finally, several of the speakers stressed the need for broader objectives in the work, giving less emphasis to the accretion of information as a direct objective, and more to the development of attitudes, methods, and insights.

I am sure that reading these statements of fact can in no sense convey the lively sense of comradeship, cooperativeness, and alertness that characterized all of the meetings at Atlantic City. EDGAR DALE.

Looking Ahead in Visual Instruction

The President's Address points out past and present shortcomings and future possibilities of the Department

By EDGAR DALE

Bureau of Educational Research, Ohio State University

THE LAG between the development of scientific discoveries and their utilization in the world at large has frequently been commented upon by sociologists. We rush into print, but not into practice. The "range of improvability" in business, medicine, politics, and education is extremely large. There is a constant gap between theory and practice.

Some of this lag can be accounted for by our unwillingness to change our current routines and by conflict with vested and competing interests. A significant proportion, however, is due merely to the fact that the scientist has not been sufficiently concerned with seeing that his discoveries were translated into practice.

In certain fields, notably the chemical industries and machine technology, no such need exists. New discoveries are eagerly hailed by those who can make commercial profits from them. However, many discoveries of educational science have no such immediate prospect of gain, hence we find reading still taught by methods out-dated by scientific discoveries of 25 years ago; in the secondary school and college, we still find chief dependence on the recitation method. We find a lag between what we know how to do in education and what we actually put into practice.

This lag is well illustrated in the field of visual teaching materials. Probably not more than one out of twenty schools

is equipped with motion picture projectors and not one in ten with a glass slide projector. Certainly a much smaller percentage use these materials in ways advocated by experts and leaders in this field. Nor are the materials, teachers guides and the like at all adequate for our needs. Why is this?

The first reason is probably a failure on the part of teachers and administrators to understand how we really learn. Now I know that our understanding of problems of learning still leaves much to be desired. But our progress will be impeded as long as we have the following mistaken views about learning.

(1) We do not learn by reading textbooks at a set pace and attempting to memorize what we find there. We can, it is true, get a respectable showing of memorization for short periods after such pseudo-learning, but the facts and generalizations that stick are the ones which have relevancy in the life of the student, which aid him in solving problems that he considers important. For example, if you put a bunch of assorted beads in a basket, you have nothing except brightly colored bits of glass; there is no meaning apart from the separate bead or the jumbled, composite picture which they present. I am afraid that this is the condition in which we find the information in many pupils' minds.

But *select* beads, put them on a string in some prearranged or planned order, and you have something totally different, a necklace. We are in much the same position in our school work, there are too many beads and not enough necklaces—we have lots of varied experiences but they aren't strung together purposively, integrally. Instead, they are atomistic and disjointed. Facts on a string, then, mean principles, generalization, meaning. . . Facts tossed into the mental basket, willy nilly, mean little or nothing.

I am suggesting here, then, that visual materials are especially valuable, first, as a device for stimulating thinking about important social problems, developing social sensitivity. Second, they are important in developing a wholeness of experience and an integrated view of a problem. In ancient history, for example, the first of the book is four months away from the end of the book in point of reading time. In a filmic or pictorial survey of ancient history, the beginning and the end can be within an hour of each other.

It is possible, of course, for visual materials to be used merely as a collection of individual, unrelated experiences. Here, for example, we might contrast the integrated, interpretative presentation of the March of Time with the much more disjointed treatments of news in other newsreels.

One other point on the question of learning: I might emphasize the significance of concreteness of experience in learning. That has been well done by others. May I merely state some opinions about an excessive emphasis on this side of the question. For example, aren't we about done with the cliché, "One picture is worth a thousand words"? Some writers say a million words. Is it true? Well, obviously there is no substitute in words for a Mona Lisa or for Margaret Bourke-White's photographs in *You Have Seen Their Faces*. But, on the other hand, is there any pictorial substitute for such generalizations as democracy, integration, psychology; of the words "Yes" and "I Love You"? Dewey's statement is relevant here:

While direct impression has the advantage of being first hand, it also has the disadvantage of being limited in range. Direct acquaintance with the natural surroundings of the home environment, as a means of making real ideas about portions of the earth beyond the reach of the senses and as a means of arousing intellectual curiosity, is one thing. As an end-all and be-all of geographical knowledge it is fatally restricted. In precisely analogous fashion, beans, shoe pegs, and counters may be helpful aids to a realization of numerical relations, but when employed except as aids to thought—the apprehension of meaning—they become an

obstacle to the growth of arithmetical understanding. They arrest growth on a low plane, the place of specific physical symbols. Just as the race developed especial symbols as tools of calculation and mathematical reasonings, because the use of the fingers as numerical symbols got in the way, so the individual must progress from concrete to abstract symbols—that is, symbols whose meaning is realized only through conceptual thinking. And undue absorption at the outset in the physical object of sense hampers this growth.¹

This need for generality in experience without the hampering effects of being tied down to a single object such as *this* dog, *this* boy, or *this* girl, is well illustrated in our use of common words—mountain for example. Do you have a visual image of mountain when you read or hear this word? If you do, it would have to be a pretty fuzzy one, since our image of a mountain is certainly generalized. It may be snow-capped or not. It may be barren or forested. It may be an Appalachian mountain or a Rocky mountain. And the word mountain carries with it sensual relationships that are not visual at all—emotional tones, rich memories of mountain climbing, of geological study, of exertion. It has ceased to be a localized thing and moves in a relational field—in a realm of contexts. Instead of sight, or feel or taste alone, we have insight.

My point in these two illustrations, then, is that we need to avoid the devil of excessive and unnecessary lingering on concrete experience and the misty, deep blue sea of generalization apart from such necessary concrete experience. Frankly, our research literature and even good writing on this subject is very limited. There is certainly a very large range of differences between children of the same ages in this regard. A five year old, for example, told me that the tire on my car was "unaired" meaning deflated. An eight year old girl said that the 1938 Ford cars had been "disimproved" over last year. These quite correct generalizations about the use of certain prefixes had been made correctly with a relatively small amount of experience with them. The amount of concrete experience needed for adequate generalization will vary greatly from student to student.

A further point that I should like to make is that we have not been sufficiently clear as to the kind of objectives that we have been trying to reach with films. Are we trying to raise certain problems in the student's mind—to sensitize him to the problem of vocational planning, soil erosion, crime, leisure and the like—to develop an attitude? Are we trying to present answers—information that helps him think through the problems that he or the teacher or the environment has raised? Or are we trying to develop certain skills? Or are we trying to combine several of these ideas in a single film?

This leads to still another question: Have we really solved the problem of when and how to use visual materials? The writer Whately once said, "Woman is an irrational animal which pokes the fire from the top." I doubt whether this generalization really applies to women, but I do believe that it applies to most of us. I wonder if in this business of visual instruction we cannot be accused of poking the fire from the top. Have we really gone fundamentally into the question of when and how to use visual materials? Have we developed a philosophy and technique of use of visual materials which is a chart and a guide to their thoughtful production and use? Have we progressed much, if at all, in answering some of the fundamental research questions asked by Wood and Freeman in their book "Motion Pictures in the Classroom" published in 1929? I am not chiding anyone. I am merely raising the question for our own good, for the growth of our work. Do we know the rhetoric of the film? Do we know the art of persuasive film discourse? Do we know how to relate the parts of a film harmoniously with each other—the

¹ John Dewey, *Democracy and Education* p. 35.

grammar of the film? Do we know what makes for good understanding in visual materials—or for poor understanding? Sometimes I think that the answer to these questions is a resounding negative.

Here are my reasons for saying this: first, clear-cut evidence in recently released sound films of the failure to realize that over-crowding of ideas in a film is a common violation of good film production; second, failure to use sound and speech skillfully in some of the sound films; third, inability to correctly grade-place materials; fourth, failure to realize what materials are cinematic and what ones are not; fifth, failure to secure proper montage or build-up in films. We don't understand the necessary interdependence of meanings that must be built into a film.

May I briefly turn now from this discussion to some of the more mundane problems which confront us as a group. I have mentioned some of these problems in my monthly letter in the EDUCATIONAL SCREEN. They can bear repeating.

First, what are our general objectives? To provide leadership in this field? If so, I think it's fair to say that the fine leadership that has been provided all these years has not stemmed up primarily through this department. The magazine has been an integrating force. But certainly the department has not stood for a specific national or state program.

Second, there are many persons who have qualities of leadership who have not yet been utilized in our work. We are now attempting to find out from individuals throughout the country just what they can do to help in this problem. Further, we are trying to develop lists of speakers and writers who can be called upon from time to time by various associations.

What are *educational* objectives? Are we merely interested in promoting a tool without concern as to how this tool is to be used? I believe that we must have that concern. All over this big country of ours, teachers and principals are fumbling the ball when it comes to the wise use of visual materials. They think there is some kind of magic or voodoo in films or slides or pictures—that turning on a projector is like rubbing an Aladdin's lamp, that your educational wishes will thereby come true. Now you may be interested to know that a pretty careful scrutiny of the literature in the field

shows that they didn't get that simple notion of visual materials from us. But neither did they get the kind of wise guidance in teaching methods, in the psychology and philosophy of the use of such materials, from us, either.

We haven't had enough impact on the organizations of teachers in specialized fields. There ought to be some attention given to the problem of visual instruction in at least half of the special sessions at N.E.A. meeting. The social studies teachers have prepared such a program for this meeting and it looks like a good one. I suggested such a plan to the Society for Curriculum Study, but their program had already been made up. I understand that the N.E.A. will give signal attention to visual materials in their summer meeting this year. That is where we ought to be aiming. Our meetings such as this one ought to be primarily ones for specialists, for planning, for discussion.

We need to give the members of our department more for their money. In addition to the EDUCATIONAL SCREEN he ought to get some kind of annual report or yearbook. Such a yearbook might well include such information as the following: names of members of the department, names of full-time directors of visual instruction, sources of materials, selected lists of films, teaching techniques in various fields, etc.

We need more members. Sixty-two persons rated as full-time directors of visual instruction in the Koon-Noble survey do not belong. Why not? Are we failing or are they not alert? Or both? We have begun a modest campaign for membership to get some notion of what proportion of letters sent to various prospective members are likely to be fruitful of returns. Thus far the campaign has easily paid for itself.

I believe that we must elect our officers on a more democratic basis—not by the handful of people who foregather at our summer meeting, but by mail nomination and by ballot. I shall propose this to the executive committee.

One final word. We need new members. New members need the kind of assistance which we as a group can give them. Won't you help us secure the 185 members necessary to raise our membership to 500?

Evaluation of the Literature in Visual Education

By **ETTA SCHNEIDER**

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THE "literature" in visual education on which this evaluation is based is a classified compilation of about 1,600 titles, gathered at Teachers Colleges over a period of four years. For the most part these titles treat of the *educational motion picture*—either as a teaching aid by itself, or as part of an integrated use with other visual aids. My remarks will be concerned, therefore, mainly with the motion picture and with other visual aids only insofar as they relate to the motion picture.

There is no lack of abundance in the number of magazine articles and books available on the educational use of films. It is almost a full-time responsibility to be able to keep informed on published reports, due to the great diversity in sources. Magazines of the drama, psychology, science, current events, and education; magazines for home, farm, or smart set; newspapers, trade papers, yearbooks are all potential sources of reference for our files. Textbooks and courses of study are increasingly listing sources of visual aids. EDUCATIONAL SCREEN, which for nearly 17 years has pub-

Summarizing sources of visual literature and the various aspects of the field adequately and inadequately treated therein

lished articles and news items exclusively on visual education, provides the greatest single source of information. As for books on the subject, we have estimated that there are available today at least 45 books on the educational film and related visual aids, and at least 44 books on the educational implications of theatrical films. Clearly, then, we are not lacking in a bibliography on motion pictures in education.

Who, you will ask, are the persons writing in the field? They include public relations specialists, social psychologists, child psychologists, producers of educational and commercial films, and educators. Among the latter we have references by superintendents, directors of visual education, principals, general supervisors, curriculum workers, classroom teachers, graduate students, and members of college and university faculties.

Let us start with the classroom use of motion pictures. There is evidence that films are being used in many areas of learning and on all age levels, from kindergarten through

adult. There are some accounts of special techniques which have been developed through films, such as large group instruction, teaching of deaf and dumb children, and use of films with slow-reading groups. But, upon further analysis, these reports are found to be very subjective and often unsound by modern standards. In an era of changing socio-economic and psychological goals for education, outcomes are still predominantly expressed in terms of comparison with textbook or other types of instruction as means for imparting specific items of information; in an era characterized by propaganda, there is little question of the authenticity of the motion picture's presentation.

Here and there, encouragingly, a classroom teacher does evidence awareness of wider potential outcomes of motion pictures in education. For example, one teacher of secondary American history,⁽¹⁾ included in her evaluation of the motion picture technique, the "socializing" outcome derived by her pupils, as well as leads to individual interest and activity. But, generally speaking, teachers' articles on classroom use of films reveal little awareness of the innumerable possibilities of films for personality adjustment, as means of discovering child interest, as an aid in teaching backward children, or as means of developing an appreciation of the art of the motion picture. A few reports do exist of the use made of films with children of poor reading ability, but the values derived from such use have not been fully perceived.

Guidance for teachers through supervision is also inadequately provided, according to the published reports. Curriculum materials go no further than the listing of courses, but such references as are given are deficient in evaluation of the materials in terms of educational objectives avowed in the curriculum.

Without leadership in evaluation of motion pictures as means of education, purposeful and critical use of such materials cannot be expected from classroom teachers in general.

Teacher training in visual education has made rapid strides, but such discussions as are found are theoretical, rather than practical. Instructors in visual education would be greatly aided through published accounts of the practical application of suggested course outlines. To what extent, they would like to know, are such course outlines being modified in practice? How well are the needs of teachers in service being met by these courses? These and other similar questions remain unanswered in the literature.

As for *administration*, this has developed along practical lines. Proposals for nation-wide, state-wide, city-wide, and school-wide programs are available. But little critical evaluation of these programs is noted. What, for example, do the teachers think of these programs? Are they aware of the purposes for which the visual education program has been established? Are they enthusiastic, or is the system being imposed? Is there general cooperation on the part of the teaching and supervisory staff? What practices have had to be modified to meet new educational trends, for example, an activity program? Is there any provision for teacher growth? Is such provision adequate? What recommendations should be made to other school administrators? What problems of finance have yet to be met?

We have found a few excellent illustrations of democratic practice in administration. A report on the value of silent films for education by the principal of the training school of the University of Denver⁽²⁾, for example, includes specific reference to teacher judgments. The New York State As-

sociation of Elementary Principals⁽³⁾, in its bulletin on visual aids in the schools, cites teacher and pupil experiences.

Incidentally, another important deficiency in the literature here suggests itself. What is the judgment of the pupils regarding motion pictures? Do they like films at all? Do they like the kinds of films that are available to them? Are they critical of the organization of the films, or do they sit back and watch the reels go by? Would they much prefer other forms of experience? Pupils have much to offer in connection with evaluation of educational films. In one high school chemistry class⁽⁴⁾, some of the pupil comments on industrial films were reported as being: "Real chemistry of process not emphasized." "Too much complicated machinery shown." "Too many pictures of buildings and grounds." In other words, they found the pictures poorly organized for their purposes. Few teachers express the same critical sensitivity, or else much more would be written about the *quality of available films*, and much less on the value of "motion pictures" as ideally conceived.

Research workers are not beyond reproach, insofar as their reports indicate. There is much overlapping in studies, revealing little recognition of the problems investigated in previous studies. There is not enough emphasis on the role of motion pictures in bringing about desired changes in the child. It is no longer necessary to set up an experiment to determine which visual aid is more valuable. We have outgrown that stage, although researches do not indicate this. There is little evidence in published reports that *creative experimentation* is being developed. The value of films in developing attitudes, for example, in promoting social understandings as opposed to the accretion of facts, and the many other values already cited in this paper have still to be studied under scientific experimental conditions.

Two other needs which can only be mentioned in passing are: first, the need for improving the quality of handbooks which accompany teaching films; and secondly, the need for practical suggestions regarding desirable techniques for producing educational films on an amateur level.

The educational film has come far in the last five years, in that more and more school systems are providing for their use as an integral part of the curriculum. Its progress is being retarded, however, for lack of an adequate exchange of experiences. We hope that educators will continue to publish their views on the subject—implementing these opinions with concrete, well thought-through, practicable recommendations. Through such reports we may eventually hope to influence producers of films to improve the quality of their products; we may be able to justify to boards of education the allocation of funds for the use of films; we may be able to impress teachers with their effectiveness; and of course, we hope to be able to improve considerably the quality of education afforded the pupils.

That the motion picture is being given serious consideration is evidenced in the increase in number of researches being sponsored by colleges and universities from all parts of our country. Dr. Hoban, for his doctoral study, reported on 57 studies carried on between 1915 and 1934. In the two years following, 1934 to 1936, the U.S. Office of Education lists an addition of 46.

In order to bring together the most important writings along most-needed lines, the American Council on Education, through its Committee on Educational Motion Pictures, has published a source book. In the literature here assembled is the information we now have on the extent to which some of the basic problems are being met. I am sorry to report, however, that the contents of the book indicate either

¹Hotchkiss, Grace: *The Use of the Motion Picture as a Technique of Instruction*. SOCIAL STUDIES 23: 6-13, January, 1937.

²Wiley, G. S.: *The Silent Film as a Teaching Aid*. Akin & Bagshaw, Inc., Denver, 1935.

³Committee on Educational Progress, Visual Division: *Visual Aids in the Schools*. Bulletin IV New York State Association of Elementary Principals, 1935.

⁴Walters, O. S.: *Industrial Motion Pictures in the Classroom*. JOURNAL OF CHEMICAL EDUCATION 6:1736-9, October, 1929.

that many basic problems are not being solved, or even attacked—or else, that the published accounts do not tell some of the best things that are going on.

Two criteria for judging written reports in this field

should be: (a) What contribution does this article make to a more efficient use of the motion picture in education? and (b) How does this use help in the achievement of modern educational objectives?

In-Service Teacher Training in Visual Instruction

A discriminating exposé of the need, theory, practice and results of an effective teacher-training program.

By PAUL C. REED

Supervisor Visual and Radio Education, Rochester, New York

THERE is no need for any special in-service training in the use of visual aids for some teachers. These teachers are the ones who know what visual aids are and know how they can be used effectively in classroom instruction. Furthermore, knowing this, they are the ones who are making regular use of visual materials to the end that instruction for their pupils is full of meaning and valuable outcomes. These teachers are the ones who have had adequate pre-service training or who through sound thinking and practice have trained themselves to use visual aids well.

There are other teachers in our schools. There are teachers who do need some assistance in developing their philosophy and techniques in visual instruction. My own experience has shown that many of these teachers recognize their needs for assistance and welcome opportunities to learn. Some don't.

Even casual observation in schoolrooms discloses certain practices which seem to me convincing evidence that there is genuine need for in-service training in visual instruction. I know that you are familiar with these teachers who misuse visual aids, but let me recall some of them for you. There are teachers who never depart from the textbook. They are "verbal villains." Teaching for them is just so many pages of words a day. They assume that all words are meaningful to all pupils and they fire away at the defenseless victims at the rate of one hundred fifty words or more per minute. Variations occur when pupils are able to save a few of yesterday's meaningless words to toss back at the teacher today in reply to questions. These teachers do not use visual aids at all.

Then there are the "if you're good today, children, you can see a movie tomorrow" teachers. Visual aids are discipline tools to them. And there are the "parasitic visual instructionists" who borrow whatever visual materials the teacher in the next room happens to have on hand, or they may march their children into the next room to see their movie. Another kind of teacher you will recognize as the "methodical maiden." Rain or shine, whether it's needed or not, every Tuesday or every other Wednesday is visual education day. On that day her pupils regularly go to the visual room for their visual lesson of the week or month. There are two other kinds of teachers I want to mention. One is the "mass minded," who cannot think of projected pictures without thinking of an assembly hall crowded to the doors—kindergarten and eighth graders treated alike. The other is the "friend of the free." He is the one who for his visual aids depends entirely upon the special interest groups who glory in his naiveness which enables them to warp young minds to their selfish advantages.

Probably this list is not exhaustive. There probably are others whose struggling efforts to use visual aids in instruction result only in misuse, but the errors of the ways of these six groups are clearly perceived by those who really

understand instruction and visual materials. It would seem then, that if this is so, teachers who make errors in their procedure do not completely understand the media which they are using. To overcome this lack of knowledge should be one of the objectives of any in-service training program.

But there are causes other than lack of knowledge which contribute to misuse of visual aids. For instance, lack of adequate facilities is an obvious cause. The "verbal villains" may never have had a chance. Maybe no visual aids are available to them—but I doubt this. The practices of the "methodical maidens" may be the result of a faulty administrative set-up which assigns teachers to the visual room without concern for needs. The "mass minded" probably got that way because in their schools expensive equipment was supplied for assembly entertainment and its use for instruction has come as an incidental afterthought or excuse.

Some film libraries and other central depositories which distribute visual materials may unknowingly contribute to the continued inefficient use made of their aids by the rules and regulations they prescribe and by their apparent lack of sympathy with the classroom teachers' needs. For instance, I believe that a distributing system which requires a request for visual aids six months or a year in advance does not result in a teacher using the materials when they will be most helpful. Block-booking or the circuiting of films to a group of schools in regular order regardless of specific needs can only encourage misuse of materials. Film libraries that attempt to serve a hundred schools without an adequate number of duplicate copies cannot possibly meet the needs if their films are to be used most intelligently. One day loans stimulate the bad practice of the "if you're good today, children, you can see a movie tomorrow" teachers and the "mass-minded" teachers. If these words about film libraries should happen to be read by those who are responsible for libraries where such practices prevail, much could be said in defense. Much of the defense would be entirely valid. But the fact remains that if visual aids are to be used most effectively in the classroom, they must be made readily available to teachers so that they may have them when they need them. Recognition of this fundamental in the planning of visual service and keeping in mind that it is a service for teachers will aid any teacher training in visual instruction program.

This suggests that if teachers are to use visual aids more effectively, many factors must be taken into consideration. Taking a course in Visual Aids at best can only contribute to a teacher's success in using visual aids. It alone is not the final answer. The way materials are listed in the visual aids catalog may influence teachers' attitudes in their use of materials. Listings that are correlated with courses of study and which give some indication of the age level where greatest values may accrue will suggest the places and purposes for maximum effectiveness.

The importance of the principal and other directors and supervisors of instruction in developing an in-service program should not be discounted. Teachers respond with amazing alacrity sometimes to the notions and educational philosophy of their principals. The attitudes of principals toward visual instruction and their understanding of it should be cherished. In one of our Rochester schools a startling increase in the use of visual aids was traceable to the principal having stumbled into a Visual Aids course at Columbia the summer before. There is no question about the principal's responsibility for effective instruction in his school and it is important that he be fully aware of the relation of visual aids to effective instruction. The understanding cooperation of grade supervisors and directors in subject matter fields seems to me essential in the methods of teacher training.

Perhaps I have generalized enough about this subject. Perhaps I should now be more specific and in being specific I must necessarily draw upon my own experience in the Rochester Public Schools. In evaluating this experience I believe that our in-service teacher training in visual instruction program that is now evolving is of more significance than our actual accomplishments of the past few years. At no time, however, in the development of our Visual Department have the needs and points of view of the classroom teacher been neglected. The fundamental purposes and plans for our circulating library of films and other visual aids took these needs into consideration. Red tape has never entangled our procedures. Teachers may order visual materials by telephone. Visual aids must be available upon demand and if teachers have to wait two weeks for a film, additional copies of those already listed are acquired before new titles. Complete sets of teachers guides for available classroom films are in every school for ready reference. Mimeographed lists of aids correlated by grade level and subject matter are in the hands of all teachers.

In addition to these basic procedures in the dissemination of information and distribution of materials some training values have come from the spoken word. There have been countless consultations with department heads and directors. There have been the usual conferences with committees. There have been talks to meetings of teachers. And there have been planned visual programs as a part of the annual sectional teachers' meetings. If results were to be measured only by the charted upward curves of increased circulation of materials there would have been good reason for sitting back and coasting along. But there were indications that classroom teachers, principals, and supervisors in some instances were not completely satisfied that maximum values were being achieved from the use being made of visual aids.

To consider these problems with classroom teachers and to review all of the procedures involved in our visual program A Study Committee on Visual Aids was proposed last September. The plan evolved from the thought that possibly a selected group of elementary school teachers might be interested in thinking through problems related to the use of visual aids in the classroom. The principal objectives for the group were stated as follows:

To consider how available visual aids can be used most efficiently and effectively for instruction in Rochester Schools.

A. To acquire a basic understanding of the nature of visual aids and their place in the learning process.

B. To analyze critically the visual aids resources of the community.

C. To evaluate procedures being used in Rochester in administering and teaching with available visual aids.

Interest was spontaneous even though the meetings were to be on Saturday mornings. Forty-two teachers registered for the study group and although no special inducements of credit or recognition were offered the average attendance for the nine meetings that were held was thirty-nine.

No course of study had been planned and the interests and needs of the group dictated the procedures. Free discussion, demonstrations, a projection equipment clinic, and lectures all found their place in the program. One of the most helpful discussions resulted when all of the available visual materials related to one unit of subject matter were assembled. A film and lantern slides were brought from the Visual Department; pictures, models, and specimens were brought from the Extension Division of the Museum; and one of the schools sent related pictures from its picture file. The discussion and ideas that were exchanged relative to the values and techniques of using these aids resulted in the generalization that it seemed that there was no one best way. Best techniques depend upon the teacher, the pupils, the objectives of instruction, and conditions of the particular learning situation.

If values from these study meetings were to accrue only for the teachers who attended, improvement in the use of visual materials throughout the school system would have been slow indeed. They were only thirty-nine elementary school teachers from a total of more than a thousand. But they were a selected thirty-nine, representing most of the schools, and really interested in the use of visual aids. There were indications that many were reporting back to their principals and in school faculty meetings. There was a growing consciousness that visual aids used well might make instruction more purposeful.

A smaller committee of eleven of the teachers who had been members of the study committee was organized. The teachers who made up this Visual Aids Advisory Committee were the ones who had seemed most interested in the previous meetings and had been approved by the Department of Elementary Grades as very successful teachers. They represented all grades from one through seven.

There was a real purpose for this committee and they have turned to it with promising results. A major problem is the developing of ways and means to assist all teachers in making best use of visual aids. Their first approach to this problem produced results most significant of which was the suggestion that a weekly bulletin be prepared and distributed to all teachers. These bulletins were to be brief and are being planned to guide teachers in their attitudes toward visual aids and their techniques in using them. The teachers pointed out the values from constantly focusing teachers' attention on a subject week after week. After the third bulletin I was receiving telephone calls of commendation from principals. They were reading them too.

The committee is dealing with other problems such as those pertaining to equipment and the acquisition of new materials. Their voice will be heard in the administrative procedures of the visual department. Their advice will be sought and respected in the planning of teacher and conference meetings and in regard to planning future study committees. It is apparent that through them the Visual Department is attuned to the needs of classroom teachers as it never has been before. Close and worthwhile harmony must inevitably result.

I have tentatively concluded at this stage of the development of our in-service training program—and, by the way, it will always be a developing program—that teachers seem to recognize their needs for assistance in the use of visual aids more clearly than do those who are in a position to give that assistance. I believe also that any in-service training program in visual instruction must include much more than a formal course in Visual Aids. It must be a broad and continuing program that considers all the forces that influence teachers' knowledge and attitudes and takes into consideration all of the best practices of administration and supervision. It will function best when it is planned so that it first permits teachers to let their needs be known and then is aimed to satisfy those needs.

Need for National Planning in the Distribution of Visual Materials

A comprehensive discussion of outstanding problems of selection, production and distribution of films adequate to the needs of American education.

By J. E. HANSEN

Bureau of Visual Instruction, University of Wisconsin, Madison

THE greatest weakness in the visual instruction movement today, as I see it, is the lack of representative national leadership, particularly in the field of administration. We have leaders, who, as individuals express in a theoretical and idealistic manner the objectives of the movement, who do individual research, who write and talk about the movement and urge us to do something about it. But as yet we have had no organized representative effort on a national scale to actually plan and administer a program which will facilitate the use of such aids as the motion picture in our schools.

From our experience in developing our program in Wisconsin we have come to feel that the most effective work in promoting the visual instruction movement in this country has been done by commercial interests. In the field of educational motion picture production we owe nearly everything to two or three commercial producers, and, of course, we all realize how much we owe the manufacturers of projection equipment for the advance made in picture projection. In fact, were it not for the actual work plus the promotional activities of the commercial interests the visual instruction movement would probably not amount to much today. I had this fact driven home rather forcefully to me recently at a meeting in Wisconsin when a member of the legal profession asked me what had been done and what was now being done by the educational profession to promote the use of these newer materials and techniques. His concluding remark was that apparently we were depending on the commercial interests to furnish our leadership.

I for one believe that the motion picture, together with radio, will revolutionize educational practice very soon, and I predict that the motion picture will not play the less important role of the two. This revolution will probably take place whether we in the educational end of the visual instruction movement do anything about it or not. In my own state the visual instruction work has developed much like "Topsy"—it has just grown without any help or guidance from the state educational authorities or from the teacher training institutions. Although there is much for us to do locally we are hindered greatly in developing a worthwhile program by the lack of national leadership to which we can turn for help along certain lines. I shall first outline briefly some of the more urgent needs confronting directors of visual instruction departments in their attempt to serve the educational motion picture needs of their respective communities or regions and then discuss them, more in detail:

1. There is need for a more adequate catalog of all educational films now available.
2. There is need for some sort of a national organization of film libraries through which member libraries may purchase cooperatively such films as are not now available from the regular educational motion picture producers.
3. There is need for some national body through which educational institutions can make known their film needs

to the producers and through which they can take the necessary steps to see that such films are produced.

4. There is urgent need for leadership in the editing of available non-educational films to suit educational purposes.
5. There is need for some form of organization through which educational institutions can distribute or market their own local film productions.
6. There is need for national leadership to aid in the setting of standards, and to help shape the trends in motion picture production.
7. There is need for national leadership to help stimulate the organization of film libraries throughout the nation, especially in those vast areas in which motion pictures are not now available to schools.

Let us now take up these needs more in detail. Those of us who have the responsibility of developing libraries of films feel quite keenly the need for a complete description and a critical evaluation of all films available for educational purposes. Several publishers now publish educational film directories which are excellent as far as they go, but they are very inadequate. The descriptions are very general and not sufficiently critical either of contents or of photographic quality. Evaluations of films by teachers in the particular fields for which the films are intended are needed, and criticisms by photographic artists of the photographic quality, the composition, etc. are very essential if the catalog is to have much value. Such a catalog is needed not only by directors of visual instruction but should be available to all teachers as well. This is a job that cannot be done by any individual local library or by one group of teachers. Cooperation on a national basis, and coordination of present scattered efforts are needed. I understand that this need will probably be taken care of adequately by the American Council on Education under the direction of Dr. Hoban.

Many of us have had the experience of attempting to get certain films from the non-educational producers of motion pictures only to be told that they are not available for educational purposes even after such films have served their purpose in the theatrical field. The reason usually being that the producers will not bother to make their product available in 16mm. size for the limited financial return which they expect from individual buyers. The same holds true for productions from various other sources. Within the past half year one of our federal governmental departments, apparently, has found it necessary to distribute one of its excellent educational films through a theatrical chain because of the lack of educational distribution facilities. Cooperative buying plus national distribution would not only make many films available which are not now available but would no doubt enable all member libraries to purchase films at lower cost. The present cost of educational prints is high, but not necessarily through any fault of the producers. Increased sales would enable them to drastically reduce prices and at the same time insure to them a more adequate return on production costs.

A central purchasing agent, together with the probable reduced cost of prints, will encourage or promote the establishment of new libraries, both state and local, which will in turn aid in making available more pictures at lower cost. Any arrangement whereby individual libraries can gain access to new and much needed materials would prove to be one of the greatest services that could be rendered to the visual instruction movement today.

I believe that one of the real dangers to a free and untrammelled education system is the present deluge of the so-called free films upon our schools. Industry and other selfish interests are now flooding our schools with advertising and propaganda films of subversive nature. And I am sorry to have to say that many of our school leaders do not seem adverse to imposing these materials upon their defenseless pupils. Within recent weeks I have heard several men boast that their school film programs are costing their schools no financial outlay. One of the most effective means of combating this practice will probably be to make available a much larger range of legitimate films at lower cost—and, of course, at the same time we should attempt to bolster the morale of some of our faltering school administrators.

A survey of the educational pictures now available indicates an almost total lack in certain fields. Considerable materials are available in the various sciences, in health, in geography, in the industries, in conservation, etc. However, in the social sciences, in history, and in literature, for example, there is practically nothing. It is to be expected when production and distribution is left strictly to commercial interests that production will be limited to those fields in which production costs are lowest and in which there is likely to be the greatest demand, regardless of where the actual need may be greatest. A national organization could through its study of the educational needs and through its contact with the various educational groups make known the film needs to the producers, and at the same time assure them of a market for such productions. Such a national association of film libraries, of course, should have sufficient influence and prestige behind it to see that such production would be carried out.

Even though many of the films not available now, and this is also true of many films already available, may be made available to us, it is an inescapable fact that practically all of these films will not be suitable for teaching purposes without revision. It is impracticable for individual libraries to do this. This could be handled satisfactorily only through a national educational organization, with the aid of panels or committees of teachers in the various fields. Fortunately most of the teaching films now available to schools have been produced by such producers as Eastman and Erpi with their staffs of experienced educators. These companies have done an excellent job. It would seem though that the educational profession ought to take a hand in determining the types of films and their contents which are used in our schools. Any effort along this line should be done at the source, in cooperation with the producers. Little can be done on a local basis.

In our state of Wisconsin there have been produced during the past several years, by educational and governmental institutions, a number of excellent educational films—films which ought to be made available to educational institutions in other states. But since these institutions, including our own university, have no marketing facilities, the distribution of these films is limited to their local communities or at the most to distribution within our own state. National distribution and sale would insure some return on the production cost as well as to render a greater educational service through the wider use of such materials. A means of distributing their productions would also encourage increased production by edu-

ational institutions. What is true for Wisconsin is true for other educational institutions. Certainly this sort of production should be given every possible aid and encouragement.

Sometimes I wonder where the whole motion picture movement, theatrical, cultural, and strictly educational, is heading us. Are we as educators going to direct and control it, or is it to continue in its present unguided state? I for one am satisfied to allow the artists, the literary folks and other associated interests to attempt to do what they can for the entertainment field, because I believe we educators lack the imagination to do anything worthwhile about it, but in our field of education it seems to me that if we wish to maintain our leadership it is time for us to assert such leadership. It would seem that it is about time that steps be taken to give the educational motion picture program a fundamental social orientation; that the purposes or objectives be defined; that standards be set up and that studies be made to determine the types of films which are best suited for the various purposes. In a word, it would seem that educators ought at least to help shape the trends of the educational motion picture movement. To do this an actively functioning national organization is essential.

Each year we at Wisconsin receive many dozens of letters from administrators in other states and cities and other universities asking for information and advice to guide them in the organization of visual instruction departments. But apparently progress in getting departments organized is slow. Each day we receive requests from schools scattered throughout many states, which do not have film libraries, for the use of our films. And I know that every person present here today who has the responsibility of administering a motion picture library has the same experience. In my visual instruction class at our University last summer there were teachers from thirteen different states. In only one of these states was there a film library from which the schools could procure films. A national organization which would not only promote but which would actually aid in the formation of film libraries in the various states and in all the larger cities to the end that all schools would have access to educational motion pictures would render a truly great service to education in America.

The organization of a national association of non-commercial educational motion picture distributors will be considered at another meeting at this convention and it is hoped that steps may be taken to meet these needs. Having been raised in the cooperative movement in my own state, I believe I realize better than many others the many obstacles and discouragements that have to be overcome in bringing to a successful fruition any cooperative movement. A national educational film association of the kind now being proposed can only succeed through the whole-hearted cooperation of the entire educational profession.

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on

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AMONG THE MAGAZINES AND BOOKS

Conducted by Stella Evelyn Myers

The School Executive (57: 266-7, Feb. '38) "Books We Read and Films We See," by Eleanor W. Mossman, Lane Technical High School, Chicago.

The movies give the child something interesting about which to talk and write, and also encourage the reading of books. English teachers spend much time and energy in leading pupils to choose good books, likewise, they should encourage boys and girls to choose wisely the type of pictures they see. The younger children prefer to see a movie before reading the book; older ones prefer the book first. Pupils voted "The Plainsman", "Slave Ship", "The Good Earth", and the "Road Back" as their favorites.

At Lane Tech, a number of films have been cut and adapted to illustrate the best in literature. The Pennsylvania State Board Rules provide a satisfactory standard for censoring. The more general films are chosen for the present, but later committees will work on films for smaller class groups. Ten films are mentioned in the article as on the list for the present semester.

Movie Makers (13: 16, Jan. '38) "Sound Projection in Schools," by Arthur A. Hebert.

Here is good advice for those in charge of audio-visual education programs. The points that should be considered in the purchase of a sound projector are enumerated. "When the machine is chosen, the next step is to arrange the equipment so that the best results will be obtained." How to do this is clearly explained by the writer. Darkening of the room, the proper operation and care of the machine, and the storage of films are also fully discussed.

Scholastic (31: 30-31, Jan. 15, '38) "From Script to Screen." Illuminating illustrations show modern methods of filming Tom Sawyer, such as, the papier-mache cave, and the life-size cave with its fall of 125,000 gallons of water. One is made to understand the intricate research on the part of many staffs, and the coordination of a multitude of efforts to produce one such picture.

"Making Facts Dramatic," (25s-26s +), by Paul Rotha. In contrast to the usual story-telling way of the movies, Robert Flaherty is mentioned, along with others, as a scenarist who does not rely upon a narrative, nor upon a picturing of things as they are, but as one who brings alive the ways of the people whom he visits. He understands their culture and their traditions. Russian films, too, have ordinary people presented in a dramatic way. Paris and Berlin have also applied the same technique. England has made a contribution to the world, in the struggle for realism, through the documentary film. The government wishing to dramatize state affairs in place of presenting them in dry statistics, engaged John Grierson to make a film. He used everyday people drudging away, day and night, at the herring catch. Other films were made and it was found that a simple human appeal was

enthusiastically received. Even better than visits to the scenes of work, these films can give an understanding of what lies behind industry. In America, the realist film has not gained much headway, although the forerunners were of American origin, such as, "Grass" and "Chang." The "Plough that Broke the Plains" and "The River" are remarkable, but there is need for a series of such units.

Journal of Chemical Education (15: 24, Jan. '38) "Projection and Filing of Microphotographic Reproductions," by James A. Austin and Harold P. Brown.

This article is a welcome addition to the writings on microphotographic duplications of scientific literature on 35 mm film which have been made available to research workers by Science Service, under the name *Bibliofilm Service*. Such duplications may be readily enlarged for projection by means of an ordinary projection lantern. Two methods of preparing the film for projection are described. In one method, which is particularly applicable to short strips, the films are cut into segments which are mounted individually on two-ply Bristol cardboards with a window in the center. In the other method, especially suitable for long strips, the film strip is kept intact and projected with the assistance of a film holder.

Bibliofilm Service photographs double pages on a single exposure. Sufficient space is left to allow the film to be cut between these exposures, thus yielding separate two-page units.

Church Management (14: 187-188, Jan. '38) "Pictures You Can Afford", by George Hartley.

A full description is given of making still pictures on 35 mm. film to be projected in an ordinary lantern provided with a film slide attachment for either single or double frame pictures. The cost per picture for single frame runs from one-half cent to less than one cent, depending upon quality of materials used. The cost for double frame pictures is only slightly more.

All sorts of church activities can be taken, and people are always interested in seeing themselves as others see them. One minister made a picture record of the art of his church for a class studying the theme of the Living Church. Sections of your city that need rehabilitation can be shown to make the problem of community betterment more concrete.

Christian Science Monitor (30: Jan. 24, '37) "Konrad Bercovici Visions Big Field in Film Scripts" by Frank Daugherty.

The film is not adapted as well to novels as to the short story. The great mistake in producing short stories is to depend mainly upon plot instead of the delineation of character. When a character is introduced, all the actions must be true to that type of

person. This is what makes a story true. Fairy stories may be true if the characters are consistent throughout. The article contains many points of interest to writers of stories either for print or screen.

Building America (Vol. 3, No. 1) "News" is the title of the first of the three issues of this publication which have appeared during the current school year.

This unit of study is extremely intriguing both in a pictorial and a narrative manner. Fully half, or more, of the revealment comes through pictures, which require considerable concentration. Events which are off or unusual, or which affect the welfare of many people, are news. Within twenty-four hours, any event of significance becomes known all over our country by means of newspapers, radios, and movie theaters. One paper goes forth for every three people.

The development of the mechanical process from one side of one sheet being printed by the hand-press in one minute to the harnessing of the steam engine to the press, which soon turned out ten times as many sheets, makes the story seem like magic. But more nearly unbelievable yet is the plan of placing rigid type on a large cylinder, then on ten cylinders, which turned out 10,000 newspapers an hour. More magical steps were the feeding paper to a press from a roll instead of separate sheets, followed soon by a machine which would set type.

"News" tells a complete story of the newspaper business—its early beginnings, growing competition and the fight for mass circulation, the appearance of such features as sensational headlines, editorial cartoons, special departments and correspondents. Other developments covered are the formation of News Associations and the International Typographical Union, part played by advertising, and the influence of newspapers on public opinion. Suggestions are offered for the improvement of the American press, the chief difficulty being to favor no class and yet produce a paper that will command a circulation, sufficient to pay expenses. If present patrons are willing to pay eight cents for their daily, it can be done.

(No. 2) "Our Farmers," This study unit, like others in the series, presents an important aspect of American life, through pictures and words. It points out America's great natural and human resources for farming. The history of American agriculture, the contribution of machines and science, and the life of the farmer are reviewed. It further discusses the serious problems confronting our nation's farmers—low incomes, tenancy and share croppers, and soil erosion. Finally, it explains various aspects of government policy and suggests ways in which these problems can be solved.

(No. 3) "Labor." This is a timely topic dealing with the problems faced by most of America's workers from colonial times to the present, showing how the domestic system was replaced by the factory system of manufacturing. This change brought great changes in the lives of workers and led to

(Concluded on page 103)

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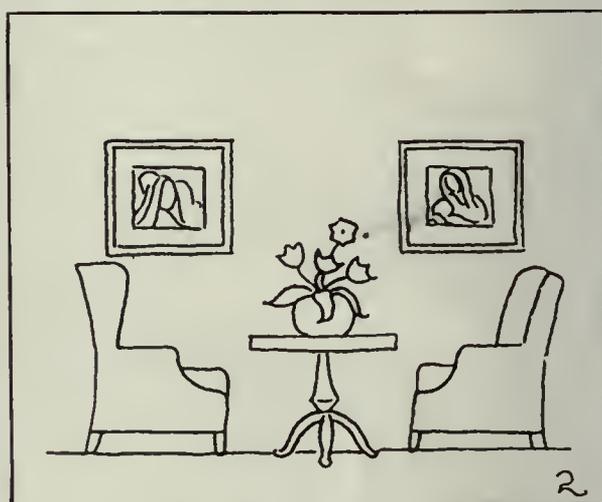
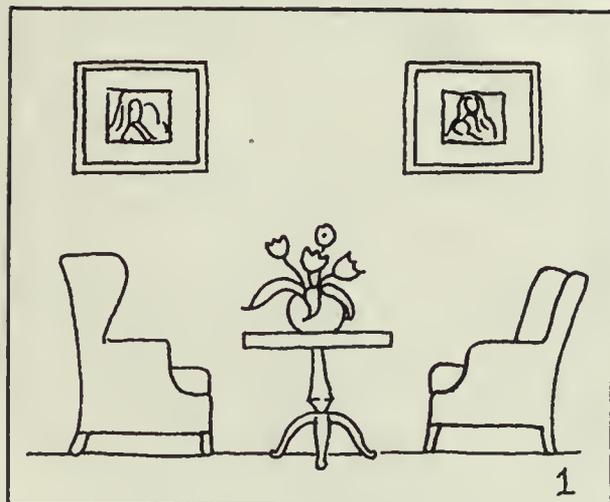
By ANN GALE

Art Department, Lindblom High School, Chicago

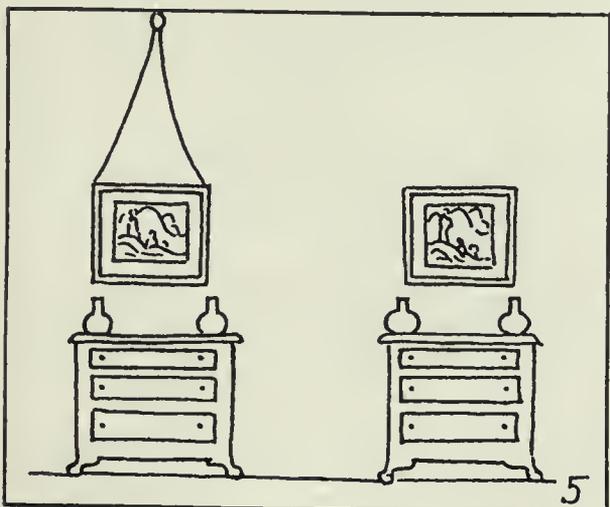
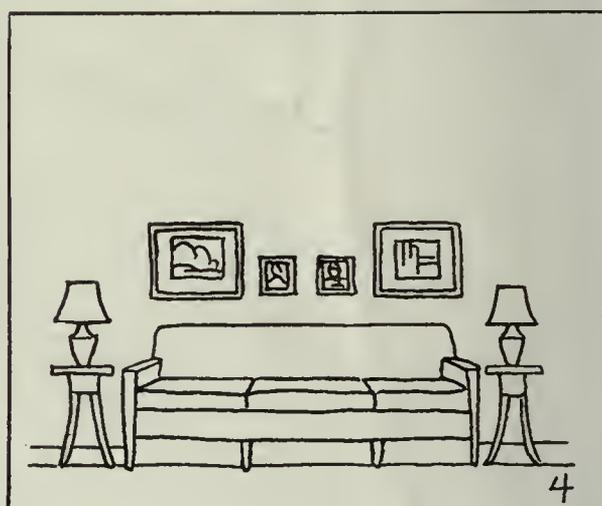
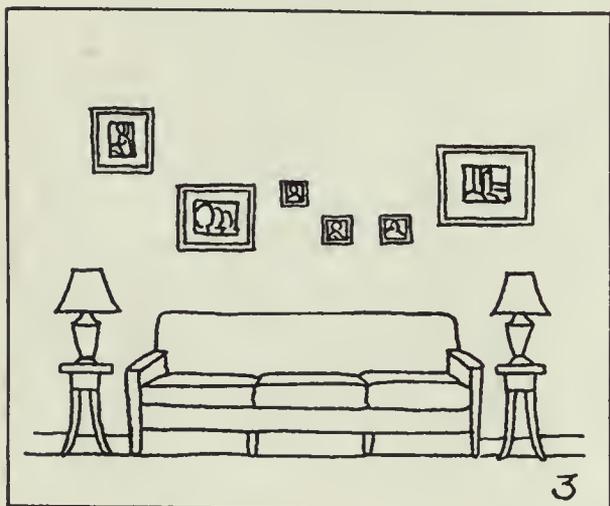
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4. Instead choose two different sizes of frames and arrange the pictures within those sizes. Then place the pictures so that their lower edges form a continuous horizontal line.
5. Don't hang pictures with diagonal wires or cords. The diagonal lines spoil the peacefulness of the horizontal and vertical lines in your rooms. Use a wall fixture instead.
6. For a child's room, keep the picture at his eye level, and change them as he grows.



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.



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NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

American Council Film Distribution Plan

A meeting, sponsored by the American Council on Education, was held in Chicago January 6-7 to discuss plans for the improvement of non-commercial distribution of educational films to schools and colleges. Eighteen representatives of educational organizations, and producers attended the session. It was the opinion of those present at the conference that co-operation among users of educational films would do much to achieve the ends of better distribution. This cooperation could take the form of organizing some sort of national educational film distribution association, to be composed of non-commercial libraries that are maintained by extension divisions of state universities, state departments of education, city-school departments of visual education, county-school units distributing films, and others engaged in non-commercial distribution. The main purposes and set-up of such an association were outlined. There was general agreement that such an association should be non-profit in character, carrying membership fees which are not excessive.

A summary of the proposed plan was prepared and submitted to educators throughout the country. The idea aroused such favorable reaction that a conference was sponsored at Atlantic City, March 2 to present the idea to the convention of American Association of School Administrators, and to provide educators an opportunity to organize the National Educational Film Library Association.

Syracuse Cooperative Film Library

A Cooperative Educational Film Library has been established at Syracuse University, New York, by Dr. Russell T. Gregg, Assistant Professor of Education, similar to that in operation at the University of Illinois, with which Dr. Gregg was formerly associated. The Syracuse service is now furnishing eighty schools in the state with visual education material. Any school may obtain a two-year membership by paying the cost of one educational film, sound or silent, plus a small annual service fee. Each school that becomes a member is entitled to the use of thirty-six classroom films each year and an unlimited number of commercial films of an educational nature. Mr. Fred L. Hipp is the Director of the Cooperative Film Library.

Visual Aids with Radio Lectures

A synchronized film-radio program, called "Radio-vision," whereby specially prepared filmstrips illustrate the subject matter of the weekly educational radio programs, "The World Is Yours," broadcast by the Smithsonian Institute, has been developed by Mr. Gustave Marx, formerly of Linden, New Jersey, High School. Mr. Marx has moved his laboratory to Washington where he is cooperating with the Smithsonian

Institute, the National Office of Education and National Broadcasting Company.

Various details of film treatment, projection and other photographic methods have been perfected by Mr. Marx especially for the project. A company is being formed to produce radiovision programs for schools and other agencies interested.

CCC Film Libraries

According to a recent issue of *Happy Days* (February 5) plans for setting up film laboratories and the distribution of free rental films in all corps areas, similar to the services now operating in the Fourth and Ninth Corps Areas, have been approved by Robert Fechner, Director of Civilian Conservation Corps, and sent to all corps areas.

The libraries and distribution services are to be operated without the obligation of additional Federal funds along the lines followed by the Fourth Corps Area, where the film activity has been in operation since August, 1934, under the direction of the Assistant Corps Area Educational Adviser, Mr. H. S. Busby.

Various types of co-operation have enabled this corps area to have at all times available a very wide range of subject matter. Both rental and free films are brought in to Fourth Corps headquarters (Atlanta, Ga.) and are distributed to single camps or to the heads of circuits among the CCC camps by this headquarters.

A separate section has been set aside at headquarters for the deposit, servicing and handling of such films.

Projection equipment has been purchased both from educational funds and from company "other funds," which also take care of film rentals. Approximately two-thirds of the camps in the corps area operate and make use of this service, approximately eighty machines being in constant use.

Peace Films Caravan

A report on the splendid work carried on by Dr. Francis Onderdonk in the interests of peace, has appeared before in this department. Through his tours with his "Peacemobile" for the last three years, he has presented peace films to over 90,000 people. Dr. Onderdonk has now added three timely subjects to his combination talkie-silent film sequence, "From World War to World Community," which should give the indifferent majority an insight into the tragedy of war torn Spain and China, namely, *Spain's Civil War*, *Spain in Flames*, and *Thunder over the Orient*.

In addition to these films, the following 16mm talking pictures can be rented: *Broken Lullaby* (the 7-reel Paramount production), *Drums of Doom* (7-reel German drama of the World war) and *Dealers in Death* (5-reel film on the munitions racket). A set of lantern slides on War with accompanying text is also available from Dr. Francis S. Onderdonk, 1331 Geddes Avenue, Ann Arbor, Michigan.

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Visual Education Abroad

Hungary. All intermediate and secondary schools are under obligation to use cinematograph projectors as an aid to teaching. A "Delegation of Educational Cinematography," established by the Ministry of Public Instruction and Religion, acts as a connecting link, as regards the provision of films, between the schools and the Ministry which has the final say in all matters concerning the school cinema. The films are controlled by the National Commission for the Appreciation of Educational Films. No film may be shown in schools unless it has obtained the approval of this commission.

South America. The Argentine North American Cultural Institute, the leading institution in Buenos Aires for the promotion of cultural interchange, has inaugurated a Film Section in which they plan to present a series of selected cultural and industrial films specially adapted to develop interest in such interchange with the United States. The Argentine Government has declared free of duty any films sent to the Institute, which has also arranged for the free transportation of the films from New York to Buenos Aires. After they have been presented in cities of Argentina, the Institute will return the films to the institutions or firms loaning them.

Canada—Motion pictures, still films, film strips and lantern slides are finding an increased use in the schools of Canadian cities, but, in the majority of cases, the use is experimental or occasional only. Among 197 school systems in cities of over 5,000 population, 91

(Concluded on page 105)



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Current Film Releases**Bell and Howell Releases**

The following are announced as new exclusive 16mm sound releases of the Bell & Howell Film-sound Library. *The Dude Ranger* (7 reels), a Zane Grey story of Western ranch life; *Igorote* (3 reels), showing the Philippine back-country, Southern Malays, Moros, Ifuagos and Igorotes; *Ahoy* (2 reels), portraying the adventures of a group of Sea Scouts on an uncharted island; *Luck of the Irish* (8 reels), a whimsical all-Irish production.

New silent subjects include: *Cheeka, an Indian Boy*, 3 single reels edited from the feature *The Silent Enemy*; *Nanook, the Eskimo*, 4 single reels cut from *Nanook of the North*; *Present-Day Germany* (1 reel); *Mr. and Mrs. Goldfinch* (1 reel); *The Tenderfoot* (2 reels), first of a series of Scout stories.

A Timely Patriotic Subject

To help counteract foreign propaganda widely disseminated today in motion picture houses and on non-theatrical screens, *The American Way* is the title of a new one-reel sound film produced and distributed in 16 and 35mm by The Defenders, a nation wide patriotic organization whose National Director, Louis M. Bailey, describes the film as "a stirring exposition of the system of 'checks and balances' which is the foundation of our Constitutional form of government." The film is available without charge for group showings of any type and may be obtained from The National Defenders, 542 Fifth Avenue, New York City.

Unsolicited letters received by The Defenders from educators and church and club leaders commend the film both for its subject matter and the thrilling, vital manner of its presentation. Largely made up of news material in the manner of "March of Time," *The American Way* is a non-political lesson in patriotism.

A 16mm. Sound Film in Color

The Calco Chemical Company, Inc., Bound Brook, N. J., announces that their new film, *Beyond the Rainbow*, is now available for showings by clubs, universities, schools, associations, etc. This film, which dramatically tells the story of the dye industry, is unusual because it is the first time that sound has been used on 16 mm. color film.

Another development in which Calco has pioneered in producing is in duplicating color on 16 mm. films. Six prints were made, which are said to be as vivid and colorful as the original. The film itself is both educational and entertaining and takes 44 minutes to show.

A New Baseball Subject

Batter Up, the fourth official sound motion picture to be produced by the American League in cooperation with the Fisher Body division of General Motors, will be released this month following a series of previews in the eight league cities. Entirely new, the film was written and directed by Lew Fonseca, director of pro-

motion for the league, with Ted Husing doing the narration. It will be distributed free of charge by the body-building division of the automotive concern.

Additions to Gutlohn Library

New releases of 16mm sound-on-film by Walter O. Gutlohn, Inc., New York City, include ten variety reels which are entertainment supplements to the well-known *Pathe World in Review* educational series. They also have ready for distribution five *Musical Moods* films of one reel length which present the nation's foremost symphony orchestras playing under the direction of such noted conductors as Hans Lange, Gustave Haenschen and Rosario Bourdon. The subjects are Liszt's "Liebestraum," "Dance of the Hours" from the opera *Gioconda*, Bach's "Air for G String" with the Doris Humphrey dance group, "Ave Maria" and Brahms' "Valse in A Flat."

Two important feature films are also listed in the new Gutlohn releases. *Old Curiosity Shop*, a nine-reel British production of the Dickens' classic, and *The Wedding of Palo*, a seven-reel saga of Eskimo life produced by Dr. Knud Rasmussen in Greenland with an all-native cast and voted as an outstanding film by leading critics.

Pictorial Library Releases

The Modern Dance, a new one-reel 16 mm. silent film, announced by Pictorial Film Library, New York City, is an interesting visual record portraying the work of Doris Humphrey and Martha Graham, two of America's foremost greatest dancers and choreographers. Pictorial also presents America's foremost photographer, Edward J. Steichen, at work in his studio in a one-reel subject, *Master of the Camera*, available in sound or silent. Another new subject is *Snow Fun* featuring Sonja Henie. This one-reel also includes shots of various winter sports—skiing, tobogganning, ski-joring, sulky racing, slalom racing, etc.

Motion Pictures on Virginia

Five motion pictures of historic and scenic places in Virginia, which have high educational value, are being distributed on free loan to schools and other such institutions by the Virginia Conservation Commission. All films are sent from Richmond, with the exception of the *Virginia Movietone Travelogue*, which is sent from Washington, D. C.

This travelogue, an all-sound picture of seven reels, available in both 16 mm. and 35 mm. is in the form of a tour of Virginia, with a narrator explaining the scenic, historic and recreational attractions. *George Washington in Virginia*, a 35 mm. sound picture of one reel, shows the principal places connected with the life of Washington. *Wonders of the World*, a 35 mm. all-color film in sound, one reel, treats four subjects, three of which are in Virginia. It is believed this film represents the first attempt to photograph caverns in color. *Richmond Under Three Flags*, a 16 mm. silent film in color, one reel and a half in length, treats mostly the historic, scenic and cultural places of the city. *Shenandoah National Park*, a one reel silent film in 16 mm. and 35 mm., shows scenes along the famous Skyline Drive and other beauty spots of the area.

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SCHOOL DEPARTMENT

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Director Visual Education, State Teachers College, Indiana, Pa.

The Technique of Molding and Finishing Plaster Casts

By **D. PAUL SMAY**

Art Instructor, Indiana High School, Indiana, Pa.

ONE OF the basic crafts used in the model-making laboratory which was described in the February issue of the *EDUCATIONAL SCREEN*, is that of making molds and castings in plaster. Figures, animals, plants, fruits, physiological sections, or any object to be used, is first modeled in clay. In such activity one just uses his natural sense of proportion.

From the clay model we begin a plaster casting. If we are planning to make several castings from the same mold, we must plan to have our mold heavy and substantial. If the object has deep undercuts and the mold is to be made completely in the round we must plan our mold so as to enable it to come apart in pieces. We must decide the lines on the subject where the mold must divide so that the castings will not break coming out. This will vary from a simple two-piece mold to the complex twenty to thirty piece mold. Having decided upon these lines we should cover the entire mold to be cast with grease or vaseline. Now press threads down onto the greased surface on the division lines decided upon, leaving about two or three inches of loose string at each end. (Fig. 1) The next step is to mix lime with a small amount of water to hold its shape. This may be mixed on a marble or concrete slab or on a sheet of tin. The amount to be

Figure 1



Head—greased—with cutting threads pressed into place—loose ends protruding—

Figure 2



Head—one side covered with plaster mortar—note separator strings

Figure 3



Head—entirely covered with mortar. strings withdrawn—two sections removed. note use of wedge to loosen third

used—one must just estimate the quantity that will be needed to cover the entire model to two inches deep.

Onto this lime mortar we shall now sprinkle plaster of Paris powder. Not more than one part plaster of Paris to twenty of lime is needed. Work the two well together and begin plastering the model. Cover the strings with plaster up to the loose ends, leaving these loose ends sticking out through the mortar. (See Fig. 2) Within five minutes—maybe less—depending upon the strength of the plaster of Paris, the mold will begin to stiffen. This starts very rapidly and so no time is to be lost in getting hold of the ends of the strings left protruding and pulling the strings up out

through the mortar. This cuts the mold into the pieces decided upon. As soon as the mortar is thoroughly hard drive small wooden wedges into the cracks made by withdrawing the cords. This soon breaks apart any small pieces, not entirely cut by the string. Remove the mold in separate parts and allow them to dry for several days. Then thoroughly shellac the inside parts of the mold that will come into contact with the casting. After this is dry, reassemble the mold by tying or wiring the parts together. Reach inside and grease the mold thoroughly. Putty shut any crevices that may allow the liquid plaster to run out. Estimate one-half the volume of the mold. Take this much water in a large can or pan. Add an equal volume of plaster of Paris. Stir this solution until it begins to thicken. At first the solution is thin and watery; gradually it begins to thicken. When it reaches the consistency of cream pour it immediately into the mold. Tamp the mold slightly to eliminate air pockets and set aside to harden. In approximately a half hour the casting is hard enough to remove. Simply untie the mold and remove piece by piece. (Fig. 3) Perhaps the wooden wedges will be necessary again to separate the sections of the mold.

Take the casting from the mold and begin to remove the mold lines from the casting with a knife. These are formed by the liquid plaster running into the crevices between the sections of the mold. The casting should dry thoroughly for two or three days before any attempt is made to finish the surface.

Now to finish the plaster casting there are various ways. If one wishes to keep the casting in its plaster form, the whole cast should be painted with raw sienna or burnt sienna mixed with water and glue. After about five minutes the paint will appear to be dry. Begin to

wash off the paint with a damp cloth. Merely wash bare the high spots of the cast leaving the paint intact in the crevices and low spots to accent the form of the cast.

If the finish is to imitate metal one must first shellac the entire casting until it begins to hold a gloss. This usually requires two coats of shellac. If the metal to be simulated is gold the next coat to be applied then is gold powder mixed with a fifty-fifty solution of turpentine and spar varnish. Allow this to dry for twenty-four hours. Paint over this coating with a thick, pasty coat of burnt sienna mixed with linseed oil. Again, with a cloth, (this time dry) rub

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The Carbon-Oxygen Cycle Carbon in fuel, food. Function of oxygen in releasing energy, carbon dioxide. 1 reel—\$24.

SINCE Eastman Classroom Films represent the bulk of the strictly instructional motion pictures used today in American schools, announcement of additional subjects is always important. These three science subjects are no exceptions.

With the "Historical Introduction to the Study of Chemistry," Eastman inaugurates a new chemistry series prepared at the suggestion and with the cooperation of the New York Chemistry Teachers' Club. Other subjects in the series will be produced as soon as is practicable.

Two additional science films—"The Carbon-Oxygen Cycle" and "The Nitrogen Cycle"—are also nearing completion. They afford powerful, graphic presentations of two vital topics.

Visual executives are now ordering these three films. Send in the order for your copies, for earliest possible delivery. Each subject is covered in one reel of 16-millimeter film (silent), and is priced at \$24. . . . Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

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off the high spots and allow the low spots to remain. Immediately cover the entire casting with a coat of spar varnish and when dry the casting will appear to be made of metal. Copper is made similar to gold, except that either copper bronze powder is used instead of gold, or we use more red in the burnishing paste. The gray metals such as aluminum, steel, or nickel are made in like manner excepting that aluminum bronze is used instead of gold or copper.

The limitations of plaster castings are very few and the possibilities for its use are endless. Scarcely anyone can fail to find it fascinating, entertaining, and helpful.

Transportation Project

ONE of the required courses in most teacher-training institutions is a physical science survey course. This is designed to familiarize the prospective teachers with scientific facts and principles, and in addition to acquaint the students with techniques which will enrich and vitalize the subject matter taught. A unit quite generally included in the course is the one dealing with modern day problems of *Transportation by Land, Water and Air*. A valuable activity for this unit is the making of models of transportation vehicles. Such a project calls for considerable reading on the part of the pupil, it necessitates the manipulation of materials for construction; and it demands mathematical computations in order to make the model to scale.

Such a project was carried out under the direction of Wilber Emmert, State Teachers College, Indiana, Penn., one semester, with a total of one hundred forty-two models submitted. The whole number of models were placed on display for a few days, then upon a vote by the classes, certain models were selected for a permanent exhibit.

To record what had been done, and to point the way to future activities by the students when they are teaching, the accompanying photograph was taken of the exhibit of models for transportation by land, water and air. As was to be expected, there was a predominance of airplane models submitted. In the exhibit, however, it can be seen that a fair balance was maintained between



Pupil—made Exhibit Models

the three forms of transportation. A study of the picture will reveal a large number of unusual types of transportation vehicles. This is a compliment to the ingenuity of the members of the classes in their efforts to have something separate and distinct from that submitted by others.

W. E.

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Among the Magazines and Books

(Concluded from page 93)

the formation of labor unions which could deal with employers on a more nearly equal basis. Most of the unit is concerned with the development of these organizations, employers' opposition to them, and the part they have played in our economic and political history.

Visual Review. Published by The Society for Visual Education, 1938. 72 pp.

The tenth annual edition of the *VISUAL REVIEW*, like its predecessors, is a work of considerable practical value, covering a great many aspects of the visual aids field. Many outstanding names in visual education are to be found among the twenty-odd contributors. William A. Yeager writes on the "Progress in Visual-Sensory Education;" Joseph A. Hennessey on "Some Practical Problems of Visual Instruction;" and James G. Sigman describes the visual education program in the public schools of Philadelphia. The contribution of the film slide to efficient teaching is discussed by A. G. Balcom. Walter S. Bell of Atlanta Department of Visual Instruction, Reid Davis of Union University, and Ellis C. Persing of Western Reserve University.

Three articles are devoted to the production of school-made films. "Photographing School Events in Color," is reported by L. W. Cochran of the University of Iowa; "The Newsreel," an activity at Western High School in Detroit, by Arthur Stenius; and a motion picture project in Texas by

Arthur L. Maberry of the State Department of Education.

"A Visual Radio Technique," by Louis W. Siple of the Pennsylvania Arts and Sciences, describes an interesting technique of using slides to accompany radio lectures. The organization of county units of state visual education associations, and county institute meetings is highly recommended by Arthur M. Judd of New Brunswick, New Jersey, as being an effective way of educating teachers in visual education. The topic of film distribution is ably presented by James A. Moyer, Massachusetts State Department of Education, Boyd Rakestraw, University of California Extension Division, and William Kruse, Bell and Howell Film Division. The agricultural extension worker using visual aids will find suggestive material in three articles on this subject.

We recommend *VISUAL REVIEW* as a splendid addition to the library of our readers. It is obtainable free upon request to the Society for Visual Education, 327 S. LaSalle St., Chicago.

Our Cover Picture

(The Sea Witch)

THE Clipper Ship "Sea Witch" was designed by John Willis Griffeths on lines that were a radical departure from the accepted ideas influencing marine architecture of the period around 1841.

The picture is painted by C. R. Patterson, from a model of the "Sea Witch" made by Mr. Charles G. Davis, naval architect of Port Washington, New York. The model was an authentic reproduction of this noted vessel.

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Eastman Devices for Color-Film Users

Rapid extension of the use of natural-color film among the growing army of small-camera users is bringing new demands on camera manufacturers for devices which will enable amateurs to project their color transparencies with a maximum of convenience and effect.

To assist in projection, the Eastman Kodak Company has developed two devices for use with its Kodaslide Projector. One is the Kodaslide Metal Frame for mounting individual transparencies; the other, the Kodaslide Sequence File, accommodating forty-eight 2x2 inch slides in projection order.

The Kodaslide Metal Frame consists of a double mask, two polished glass plates and an interlocking metal frame made in two parts. Masks are available in proper sizes for Kodachrome transparencies from the Kodak Retina, Kodak Bantam Special and other miniature cameras. A transparency is inserted between the leaves of the mask and this assembly placed between the two glass plates. The plates are centered on one of the metal frame halves and other half of the frame slid into position. A mounting of this sort protects the transparency from dust and fingermarks and prevents film cockling. Moreover, the frame can be re-opened if it is desired to substitute another transparency.

The Kodaslide Sequence File is a wooden case, supplied in natural finish, with an ingenious hinged back which folds open at right angles to the base. With the 45 degree tilt thus provided, slides feed down automatically. The inside of the case is grooved for three metal septums, supplied with it, which are convenient for separating slides into subject groups.

New Booklet On Movies In Education

New Horizons is the appropriate title of a really informative new booklet, published by the Bell & Howell Company, which should be read by every school executive who is not yet using educational motion pictures or who has just commenced a visual education program.

The booklet first discusses in an intelligent, non-partisan manner the advantages of the motion picture as part of the educational scheme. Ensuing chapters list and discuss those questions which never fail to appear before school executives who are considering or are in the first stages of the acquisition of motion picture equipment for their institutions. The manner in which the educational movie fits teaching needs, types of films that are available, methods of financing the cost of a projector, the choice between sound and silent equipment are a few of the problems this book takes up. It also points out the factors which determine good projection, requirements which should be

demand in a projector. The last two or three pages are frankly devoted to what might be called selling.

The Bell & Howell Company, 1801 Larchmont Avenue, Chicago, Illinois, will be glad to send a copy of *New Horizons* without charge to any interested educator.

For Home-made Lantern Slides

Glassive is the name of an abrasive made by Teaching Aids Service, Jamaica Plain, Mass., by which ground glass slides can be made by pupil or teacher at a fraction of a cent each. From this same source comes Celloslide for making non-photographic lantern slides. Celloslide provides an easy and inexpensive means for enlarging illustrative materials for making announcements, song slides, etc. For copying work, celloslides should be placed over the object to be reproduced and indelible ink used. Free hand work can be sketched directly on the celloslide. The finished celloslides are placed between two cover glasses and bound with lantern slide binding tape.

Eighth DeVry Visual Conference

Plans for the eighth annual Conference on Visual Education and Film Exhibition, are being made by Mr. A. P. Hollis, of DeVry Corporation, and his committee. Among the speakers who have already expressed their willingness to talk on subjects in their respective fields, will be: Mr. Haboush, native Galilean shepherd, who has done excellent film work and formulated religious educational films; Mr. Robert E. Hughes, in charge of Visual Education at Evanston Township High School; Miss Elizabeth Golterman of the St. Louis Educational Museum; Mrs. W. H. Ross, Illinois State Chairman of Visual Education, Parents-Teachers Association; Dr. I. E. Deer, of the Will Hays organization, who will present Hollywood's plans in connection with educational releases; Mr. L. A. Hawkins of International Harvester Company, representing the industrial motion picture field.

Leica International Exhibit

Record breaking crowds attended the Fourth International Leica Exhibit held at Rockefeller Center, New York City, from January 8th to 23rd. This exhibit comprises an outstanding collection of 710 exceptional Leica pictures, selected from the 2000 prints submitted by amateurs and professionals from all parts of the country and many foreign lands. In addition to black and white photographs, color reproductions and original color transparencies were also displayed.

Other cities which the Leica Exhibit tours are Philadelphia, Pittsburgh, Washington, Cincinnati, Indianapolis, St. Louis, Kansas City, Tulsa, Dallas and Oklahoma City.

Slides and Films in Correlation

(Concluded from page 81)

water tank, the brake beams and numerous other fine details. But instead he remembered only the action; his interest was aroused without being completely satisfied. That, too, is a vital point in the education of a child. His interest and curiosity must not only be aroused—they must always be completed by adequate details until full mental satisfaction has been obtained. Only this complete process ensures true learning and retention.

The object of this article is not to minimize the value of motion picture films in any way, but merely to urge the possibilities of the combination-use of films and slides for maximum effectiveness of each. There will doubtless be situations where the reverse of the suggested order of use will be found preferable. For an example, the teaching of swimming. The position of a certain stroke could be studied from a stereopticon slide, and while focused on the screen an explanation of every detail would be made easy. Then in order to show the action of that stroke—a motion picture would be ideal. This will be found true of any subject where movement is essential to the concept. The making of steel, the running of a motor, the working of underground water, are all examples where action is essential in the teaching. In either case, the writer believes, the most effective results that can be obtained from stereopticon slides or motion picture films will come from their use in correlation.

News and Notes

(Concluded from page 97)

make some use of films, but only 25 use them regularly. Film strips or still films are used by 83 but only 32 use them regularly.

Only 33 of over 20,000 one-room rural schools use films regularly, and these schools are mostly in Alberta where the extension department of the University of Alberta has organized visual instruction units. Forty-nine larger schools in small towns use them regularly, while 103 of the small and 228 of the larger schools use them occasionally.

The Orient—Visual Education in Oriental countries, according to Mr. R. R. Proctor (a DeVry representative who recently made an extended Oriental tour), is rapidly progressing. "The Orient" Mr. Proctor says, "is exceedingly picture minded, and Visual Education, therefore, appears to be an answer to the difficult teaching problems of Oriental countries." Mr. Proctor's trip was made in the interests of both motion picture equipment distributors, and of educational groups in Turkey, Palestine and Egypt, where he assisted in the organization of motion picture departments, and in the technical problems of photography and projection. Because of the lack of equipment and teaching facilities in the Orient, and due also to the widely scattered areas that must be served, many of these countries have found in mobile sound motion picture units a really practical accessory of education, thereby providing instruction which would otherwise be out of the reach of many of the inhabitants of widely scattered communities.

Sensational New Royal Tripod



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THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Action for Slander (Clive Brook, British cast) (UA) English club and army life ably portrayed in stiff, slow-moving story with much character interest. False charge of cheating at cards plus bad advice from friends bring social exile for hero until absolved in elaborate trial scene. 3-8-38
(A) Fairly good (Y) No (C) No

All-American Sweetheart (Patricia Farr, Jimmie Eagles) (Columbia) Pseudo-college story, feebly acted, of crooked gamblers' racket in intercollegiate crew-racing involving innocent hero and college president. Officious, unappealing co-ed-heroine runs everything until all is solved. 3-8-38
(A) Stupid (Y) Perhaps (C) No

Ballad of Cossack Golota (Russian-English titles) Two engaging boys and cute baby add only cheer to dreary story of "bandits versus Red Army." Snow, cold, stolid poverty, grim brutality make struggle for wretched existence thoroughly dismal. Depressing propaganda for primitive Russia. 2-22-38
(A) Good of kind (Y) No (C) No

Baroness and the Butler (Powell, Annabella, Stephenson) (Fox) Granting highly improbable situation of a butler being his master's parliamentary opponent—here is choice entertainment in deft acting of four fine roles, good dialog, and smooth unfolding of comedy-romance in Hungarian high life. 3-1-38
(A) (Y) Very good (C) Mature

Big Broadcast of 1938 (Fields, Raye, Lamour) (Para) Transatlantic race between super liners is thin plot padded out with vaudeville. Lavish sets, trick photography, animation sequence, incessant music, dancing, sexy "lyrics" and noise. Much occupation for eye and ear, none for mind. Laughs for the many. 3-1-38
(A) Depends on taste (Y) (C) Mostly amusing

Big Town Girl (Claire Trevor, Donald Woods) (Fox) Violent bank-robber melodrama and mistaken identity slapstick romance carried on by escaped convict, his incognito cabaret-singing wife, and a personable newspaper-reporter-sleuth—if that means anything. It doesn't, neither does the picture. 2-15-38
(A) (Y) (C) No

Black Doll (Donald Woods, Edgar Kennedy) (Univ) Sinister doings, aggravated by symbolic black doll, occur in wealthy criminal's country home. Several murders, many suspects as usual. Solved despite endless blunderings and too much "comic relief" by Edgar Kennedy as sheriff. "Crime Club" picture. 3-8-38
(A) Mediocre (Y) Hardly (C) No

Blondes at Work (Glenda Farrell, Barton MacLane) (Warner) Torchy Blane, reporter, continues to baffle entire police force with her supposed cunning in ferreting out their secret murder investigations, achieving sensational news scoops thereby. The usual wisecrack dialog, burlesqued police characters, breezy action. 2-15-38
(A) Perhaps (Y) Fair of kind (C) No

Borneo (The Martin Johnsons) (Fox) Martin Johnson's last picture, voice narrative by Lowell Thomas. Excellent material on jungle life, chiefly monkeys, with minimum of faking and exaggeration. Good educational values, save for Lew Lehr's mouthings, which are stupidly unfit for teaching purposes. 2-15-38
(A) Good of kind (Y) and (C) Good

Bringing Up Baby (Hepburn, Grant, Ruggles, Robson) (RKO) Hilarious slapstick-disaster farce-comedy of museum-scholar hero hampered by wealthy madcap heroine trying to "help." Dizzy mixture of Brontosaurus bones, leopards, and general absurdities. Amusing but too long. Hepburn fine in "Lombard" role. 3-8-38
(A) Good of kind (Y) (C) Amusing

Checkers (Jane Withers, Erwin, Merkel) (Fox) Lively horse picture with much real character comedy, with brassy little Jane bossing the action. Ethics badly twisted. Petty swindling and gambling made engaging, sympathetic and successful. Notably good roles by Stuart Erwin and Una Merkel. 3-8-38
(A) Fairly good (Y) Doubtful (C) No

City Girl (Phyllis Brooks, Ricardo Cortez) (Fox) Thoroughly unwholesome thriller of hash-counter waitress, from slum home of common, shiftless parents, who seeks "success" by joining crooks and enjoys hectic life of crime to its tragic end. Only decent character is the colorless hero. 3-8-38
(A) Mediocre (Y) (C) Unwholesome

Crashing Hollywood (Lee Tracy, Joan Woodbury) (RKO) Loud and lively fun for the uncritical. Thriller-farce about breezy writer-hero, crashing movies with absurd ease, unwittingly writing a gangster character identical with living gangster, when real trouble starts. "Chase" climax. 3-1-38
(A) Hardly (Y) Perhaps (C) No

Danger Patrol (Sally Eilers, John Beal, Harry Carey) (RKO) Tough Texans transport "soup" (nitro-glycerine for oil industry). High risk, big pay, till one mistake ends all. Heroine's father saves her for her by replacing him in grim airplane flight with fatal crash for finale. 2-22-38
(A) Mediocre (Y) Hardly (C) No

Double Danger (Preston Foster, Whitney Bourne) (RKO) Mediocre crook film about master criminal who outwits lesser crooks in theft of diamond necklace, but falls in love with crook-heroine in the process. Then supposed reform as they gaily restore booty and go free with police Commissioner's blessing! 2-15-38
(A) Hardly (Y) No value (C) No

Everybody Sing (Jones, Brice, Garland) (MGM) Fast, hilarious musical farce about little heroine, expelled from school for "swing" music, capitalizing her talent to save her crack-brained family from financial ruin. Amusing glorification of swing craze and some comedy by experts. 2-22-38
(A) Good of kind (Y) Amusing (C) Fair

Expensive Husbands (Beverly Roberts, Patrick Knowles) (Warner) Waning picture-star revives her publicity by buying and marrying "penniless" European prince. As climax, he inherits money and they prove really in love. Thin, undistinguished and very inexpensive effort at light comedy. 2-22-38
(A) Hardly (Y) Little value (C) No

Gold Is Where You Find It (Brent, de Havilland, Rains) (Warner) Struggle between miners and farmers in California's gold-rush period vividly shown in beautiful Technicolor, with spectacular "disaster" climax. Detailed picture of time and country rather than close-knit drama. Historical value. 2-22-38
(A) Good (Y) Very Good (C) Good but strong

Goldwyn Follies (Leeds, Menjou, McCarthy, Baker) (U.A.) Charming roles by Leeds and Menjou in slender plot nearly lost in glorified vaudeville. Masterful stage-pictures, operatic and popular music, artistic dancing, expert comedy, and raucous slapstick—all in finest Technicolor to date. 2-22-38
(A) and (Y) Excellent of kind (C) Prob. good

High Flyers (Wheeler-Woolsey, Lupe Velez) (RKO) Crazy farce with Wheeler and Woolsey as country-fair fakers who blunder into a jewel-thieving plot. Engaging little dog plays large role in solution. Usual sure-fire hokum, idiotic gags, and a minimum of vulgarity for a change. 3-1-38
(A) Absurd (Y) (C) Probably amusing

I Met My Love Again (Henry Fonda, Joan Bennett) (U.A.) Futile "social drama." Heroine proposes to hero, but marries wastrel. Returns as widow with child, hero now a ridiculous "professor," pupil proposing to him. Heroine's crazy "suicide" ride defeats rival and solves whole mess. 2-22-38
(A) Stupid (Y) No (C) No

Look Out For Love (Anna Neagle, Tullio Carminati) (GB) Humble heroine misunderstands motives of rich benefactor until he deliberately ruins his career for her sake. Weak story, clumsily told, dull dialog, and poorly acted save for the two leading roles. Waste of Anna Neagle. 3-1-38
(A) Mediocre (Y) No (C) No

Love, Honor and Behave (Wayne Morris, Priscilla Lane) (Warner) Main theme of "good loser" vs. "fighter" supposedly solved in sophisticated situation of dubious social value. Infidelity, divorce, remarriage, flippant attitude of parents, non-respect for all but "modern" youth. "Pitch woo" begins on screen. 3-8-38
(A) Depends on taste (Y) No (C) No

Mayerling (Charles Boyer, Danielle Darrieux) (French production) Famous romance of Emperor Franz Joseph's unhappy philandering son elaborately screened with beauty, strength, dignity and splendid acting. Fine French dialog and English titles. Brilliant, beautiful Darrieux now "signed" by Hollywood! 3-8-38
(A) Notable (Y) No (C) No

No Time to Marry (Richard Arlen, Mary Astor) (Col) Fast, ridiculous nonsense about two reporters whose wedding plans are complicated by assignments to obtain pair of goats and find a run-away heiress. The proceedings fail to make much sense, but are amusing for those who laugh easily. 3-1-38
(A) Hardly (Y) (C) Probably amusing

Of Human Hearts (Huston, Bondi, Jas. Stewart) (MGM) Notable realism in settings, character acting and direction make strong picture of primitive Ohio village life of Civil War days, with religious intolerance, grinding poverty and ingratitude. Dramatically faulty and very depressing. Feeble romance helps little. 2-15-38
(A) Notable (Y) and (C) No

Snow White and the Seven Dwarfs (RKO) Enchanting fantasy revealing Disney's artistry and imagination in deft blending of delicate whimsy and Puckish humor, all in exquisite color and with delightful musical score. A rare treat for young and old, but some scenes very strong for sensitive children. 2-15-38
(A) Delightful (Y) Excel. (C) Exc. but exciting

Stage Door (Hepburn, Rogers, Menjou) (RKO) Sophisticated comedy at its best, many fine roles, deft direction. New York boarding-house for smart young would-be actresses done to the life. Exaggerated action and incessant wisecrack too expertly clever for realism, but every foot is fine. 2-15-38
(A) Excellent (Y) Mature (C) No

That's My Story (Claudia Morgan, Wm. Lundigan) (Univ) Confused, ridiculous, aimless, and meaningless film, frequently painful to observe. Crazy situations concern a jailed murderess, a small-town sheriff and a reporter-hero, hoaxed by heroine—a rival reporter—into publishing fake interview, etc. etc. 2-22-38
(A) Poor (Y) Poor (C) No

The Wave (Mexican cast and dialog) (Garrison) Artistic, impressive presentation of Mexican fishermen's life—starvation wages, grafting bosses, "labor union" solution, with wonderful shots of fishing. Pictorial narrative, in proper tempo, little dialog and title needed. Film of dignity and appeal. 3-1-38
(A) Notable (Y) Mature (C) Beyond them

Yank at Oxford (Taylor, O'Sullivan, and British cast) (MGM) Smartaleck American hero airs conceit at rather movie-ized Oxford, gets deftly razed, but triumphs at last. Mutual concessions, and cheap vamp, supposedly bring mutual understanding. Amusing, but some painful moments for the intelligent. 3-1-38
(A) (Y) (C) Amus. but dbtfl. effect on yng. minds.

You're Only Young Once (Lewis Stone, M. Rooney, C. Parker) (MGM) Simple, realistic, portrait of family life wherein a wise and understanding father deals with the dubious romantic attachments of his teen-age children. But appeal and fine social values are marred by bits of cheap, distasteful sophistication. 2-15-38
(A) Very Good (Y) Doubtful (C) No



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- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City
- Cine Classic Library (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 98)
- Eastin 16 mm. Pictures (6)
Davenport, Ia.
(See advertisement on page 95)
- Eastman Kodak Co. (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Co. (1, 4)
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 101)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures System, Inc. (6)
330 W. 42nd St., New York City
- Erpi Picture Consultants, Inc. (2, 5)
250 W. 57th St., New York City
- Films, Inc. (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc. (6)
35 W. 45th St., New York City
(See advertisement on page 93)
- Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton's Travelettes (1, 4)
7901 Santa Monica Blvd., Hollywood,
Cal.
- J. H. Hoffberg Co., Inc. (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 97)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 93)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 93)
- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Pictures Corp. (3)
Rockefeller Center, New York City
(See advertisement on page 102)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Visual Instruction Supply Corp. (6)
1757 Broadway, Brooklyn, N. Y.
(See advertisement on page 98)
- Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago

MOTION PICTURE

MACHINES and SUPPLIES

- The Ampro Corporation (6)
2839 N. Western Ave., Chicago
(See advertisement on page 78)
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co. (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 105)
- Eastman Kodak Co. (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Herman A. DeVry, Inc. (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 74)
- Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 97)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)
- RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 95)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 99)
- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 77)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Colonial Art Company
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- Informative Classroom Picture Ass'n.
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2717 N. Crawford Ave., Chicago
(See advertisement on page 103)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Institutional Cinema Service, Inc.
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- Williams, Brown and Earle, Inc.
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Johnson Co. Bank Bldg.,
Iowa City, Ia.
- Edited Pictures System, Inc.
330 W. 42nd St., New York City
- Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 97)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 73)
- E. Leitz, Inc.
730 Fifth Ave., New York City
- Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 98)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 105)
- Teaching Aids Service
Jamaica Plain, Mass.
(Slide-making Material)
(See advertisement on page 105)
- Visual Education Service
131 Clarendon St., Boston, Mass.
- Visual Sciences
Suffern, New York
(See advertisement on page 98)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

- Herman A. DeVry, Inc.
1111 Armitage St., Chicago
(See advertisement on page 74)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 73)

STEREOPTICONS and OPAQUE PROJECTORS

- Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 107)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 73)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 105)
- Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 97)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

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EDUCATIONAL SCREEN

Magazine Devoted Exclusively
to the Visual Idea in Education

APRIL, 1938

IN THIS ISSUE

*Proceedings of the
Atlantic City Meeting
of the Department of
Visual Instruction
(Continued from March Issue)*

*Relation of Motion-Picture
Learning to Grade, Age,
and Sex of Pupils*

*Production Methods of
Graphs and Diagrams*

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The EDUCATIONAL SCREEN

APRIL, 1938

VOLUME XVII

NUMBER FOUR

Contents

Something Wrong With Films in General Education. Charles F. Hoban, Jr.....	115
Amateur Motion Pictures in the Schools. E. Winifred Crawford.....	117
Problems in Preparing Pictorial Material for Classroom Use. Dr. James E. Mendenhall.....	119
The Department of Visual Instruction Edgar Dale	120
A New Method of Quality Production of Graphs and Diagrams on Lantern Slides. William M. Gregory....	121
The Relationship of Acquired Information or Knowledge Obtained from Certain Educational Motion-Pic- ture Films to the Intelligence, Grade, Age, Sex, and Type of Educational Training of the Pupils. Arnold Reitze	122
News and Notes. Conducted by Josephine Hoffman....	126
Among the Magazines and Books Conducted by Nelson L. Greene.....	128
School Department. Conducted by Wilber Emmert.....	132
Current Film Releases.....	134
Among the Producers.....	136
Film Estimates	138
Here They Are! A Trade Directory for the Visual Field....	140

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Something Wrong with Films in General Education

An interesting discussion of changing aims in education and the changes needed in educational films to correspond

By CHARLES F. HOBAN, JR.

American Council on Education, Washington, D. C.

IN beginning a fifteen minute paper on motion pictures in general education I feel somewhat like the seven dwarfs when Snow White asked, "How do you do?" and Grumpy replied, "How do you do what?"

There seems to be agreement that something is wrong with the general education we are providing youngsters through high school and college, and that something is wrong with the motion pictures that have been produced for use through high school and junior college. It seems, therefore, an easy conclusion that one of the things wrong with our educational motion pictures is our education.

There is time here to discuss only two faults that have marked our pattern of general education and consequently motion pictures produced to fit into this pattern. The first is our concept of motivation, and the second our concept of objectives.

We have, in the past, relied on an artificial scheme of rewards and punishments to provide motives for learning in the classroom. If a youngster got the answers to all his arithmetic problems correct he was given a star, moved to the head of the class, and marked 100%. If he got all the answers incorrect, he was given a black look, held up to ridicule, and marked zero. If his behavior was consistently correct he was promoted to the next grade, if incorrect he was failed. This procedure was varied with the privilege of washing the blackboard or the punishment of staying in school longer—either by the day or by the year.

Thus, on an extrinsic and artificial system of rewards and punishments youngsters were and are motivated to learn logical bodies of subject-matter. The procedure was sanctified by our educational psychologists who proclaimed the laws of learning to be the laws of effect, and the effects to be either pleasant or unpleasant. The law of use or repetition was passed in the first decade of this century, but virtually repealed in 1930 with publication of Thorndike's *Human Learning*. It is no longer necessary to repeat to learn.

In the second of our educational faults, we need not share responsibility with educational psychologists, unless we are or have aspired to be educational psychologists. It is in their actual code only to find out how you learn, never what or why you learn. The result is that we have countless investigations on whether it is better to add up or to add down, but none on why you should add at all, and what you should do about your addition.

To us, as educators, goes the credit for educational objectives. We are indebted, to be sure, to temperance organizations, veterans associations, descendants of veterans, and other well-intentioned groups for conspicuous assistance in this matter of objectives, but, in the end, full responsibility is ours.

We have preserved the cumulative educational "stuff" not only of the Founding Fathers and their descendants, but of their predecessors who knew Abelard. Consequently, subject matter introduced into the curriculum because of its functional relationship centuries ago, remains in the curriculum today because of educational inertia. We study Latin because at one time Latin was the living language of educated men. Since we are usually no longer interested in what these educated men talked about, we study the way they talked. We study

geometry and trigonometry largely because we were once a nation of navigators and surveyors. The reasons for the introduction of Latin, and geometry, and trigonometry have been forgotten or neglected, but we still have these subjects in the curriculum. Since we have forgotten why they were introduced, the objective of instruction in these subjects is mastery of subject matter facts.

As our knowledge of the universe and the people in it has increased, we have an ever-increasing subject matter in our curriculum, and its mastery is increasingly difficult. And so we have turned, in our dilemma, to quick and painless panaceas—the radio and the motion picture. In the former we have the master teacher at the microphone, and thousands of youngsters at the loud-speaker as the master speaks. In the motion picture we have the other magic of the age, and we can now teach in the twelve minutes of a classroom film what we took weeks and months to teach before. Manifestly, if more facts can be imparted in a twelve-minute motion picture than can be grasped in a much longer reading period, the motion picture is an important and indispensable educational medium. Classes can be herded into auditoriums, teachers can be utilized for other duties, and the mad game of fact-imparting-fact-getting can proceed merrily as unit costs drop, and taxpayers associations turn to other worlds to conquer.

Such is the picture when American education loses functional relationship to the society which maintains it. But such is not the picture envisaged by educators who are critically examining our American school system. They are raising the questions of motivation and of objectives. They are convinced that the motives of classroom behavior must be rooted in the needs of classroom youngsters and the needs of the society of which they are and will be an integral part. They are defining the objectives of education, not as a mastery of isolated subject matter, but as behavior in relation to the satisfaction of human needs and to the adjustment of the individual and his potential contribution to American culture.

In this picture much of our subject matter remains, but the objectives of its study are changed. In other words, we are defining the changes of behavior we expect to result from school experience. In so doing, we are changing the relationships of our subject-matter, we are crossing old department boundaries, we are omitting some and adding other material.

Let us see how this concept applies to motion pictures. Because most of our recently produced classroom films are science films, and because most of these science films were produced for the main purpose of imparting information, let us see how a science film could be produced to meet youngsters' needs and modern educational objectives.

Motivation, we believe, should be rooted in human needs. What for instance, is a human need? One of the most fundamental is the need for security. To meet this need for security we must have a system of thinking that will enable us to establish a pattern of values and beliefs, and to apply these values and beliefs to the confused impacts that come to us from all sides. Our great religious systems have done much to satisfy that need in the past. Now we find our pupils coming into high school and college for their first systematic

study of science. Actually, to many of our students, science is chemistry, or zoology, or physics, or botany, and experience in science consists of unhappy and confused hours in smelly laboratories and memorization of Boyle's law, or the animal phyla, and chemical formulae, or gazing at spirogyra through a microscope. Theoretically, if some of the experience even in this type of teaching penetrates the personalities of our high school and college youngsters, the study of science means the upsetting of old religious beliefs. It means conflicts between the Bible and what are purported to be scientific facts, hypotheses, theories. It means conflicts between the cultural values of home, parents, and family, and a new cultural pattern of school, teachers, and students.

At the same time we find science playing an increasingly important role in our culture. Its findings are being applied to industry, to health, to food, to clothes, to household utilities, to most of the things with which youngsters come in daily and intimate contact.

It, therefore, seems essential to human happiness and human well-being that we clearly distinguish between science as an authoritarian system of values and beliefs, and science as a method of learning truth, and hence a means toward better adjustment of the individual to his culture. If there is a choice between these two, the scientific method must be chosen, because scientific findings are continually changing and the philosophy of science must necessarily be a philosophy of method.

It seems clear, then, that our science films must be produced with a view of developing an understanding of and a functional application of scientific method. The method of science will not necessarily become functional in the behavior of youngsters if we merely abstract its elements and pass these abstractions on to youngsters. We must rather provide as direct experience as possible in the situations of scientific method and thus provide the basis for its understanding. Youngsters should be able to learn from experience the difference between observed data, tentative hypotheses, theories, and principles; they should know how these are derived, they should understand the assumptions upon which data, hypotheses, and theories are based; and they should appreciate their tentative and changing nature. Students should also become aware of conflicting theories and of the necessity of a constant search for proof. Such understandings and appreciations are fundamental not only to the era of science, but to such common experiences as reading newspapers and magazines, listening to the radio, buying tooth paste and mouth antiseptics, or voting the party ticket. From this method of reflective thinking and assembling proof an enduring and satisfying pattern of values and beliefs can be established.

How, then, can motion pictures contribute to the development of such behavior? One obvious way is to portray the derivation of scientific data in its human setting. We could, for instance, make a film on the dramatic story of the chemical preparation used to treat streptococcal infections—how this chemical compound which acts like a dye was first used experimentally in Germany in 1933, how later it was tested experimentally at the Pasteur Institute in France, how from there it was introduced in a London hospital for the treatment of human patients with streptococcal infections, and how in 1936 experimental work with the preparation developed in Germany was undertaken at Johns-Hopkins Hospital. Following early reports of this experimental work the compound was used widely in the United States. In this part of the story, the posing of hypotheses, the testing of these hypotheses under controlled and varied conditions, and the careful gathering of data in support of hypotheses could be portrayed dramatically in a contemporary setting with real scientists and real human subjects. It could be shown how assumptions were recognized, how data were observed, how hypotheses were

developed, how proof was gathered, how proof was validated, how some conclusions were formed, how other conclusions were held in abeyance, how experimental inquiry was and is continued in search for more evidence, more facts, more proof.

Then it could be shown how one untested assumption resulted in fatal consequences—how a pharmaceutical house mixed the chemical compound in an improper solution—a solution which for this particular purpose proved harmful. In other uses this solution had been a satisfactory solvent. In another solution the chemical compound, now generally known as sulphanilamide, had proved successful in treating streptococcal infections. The assumption was that, since this solution was previously in other uses not harmful to human patients and since this chemical compound had been used successfully to treat streptococcal infections in human patients, this compound in this solution would be beneficial in streptococcal treatment. The tragic consequences of this assumption are well known.

Here, again, we have the scientific method in a human setting, and human error in the application of scientific method resulting in human tragedy. The scientific method is no longer a cabala of the laboratory and the classroom. It is a pattern of behavior which in this case meant in its application healing the sick—in its misapplication, death.

A small beginning has been made in this type of film for theatrical use. In "The Story of Louis Pasteur" the crude attempt to establish scientific controls in the determination of the cause of anthrax was shown in the segregation of sheep into separate pens. Very dramatically the human situations which beset the scientist in his search for truth were portrayed, as were the seemingly endless trials the scientist must make in searching for this truth. In another theatrical film, "Arrowsmith," a similar situation was drawn, but in this case an added factor was introduced. The climax of the photoplay came when Arrowsmith refused to follow the controlled group procedure because it meant certain death for the controlled group. Here an ethical question was raised—the same ethical question that scientists must face when they experiment with human beings in a democratic society where the worth of the individual is unique. It is the same basic principle which our warmakers refuse to recognize.

From these few examples we can draw at least six criteria by which our educational films of this type can be produced and used:

1. They must be related to the needs of students and of society.
2. They must contribute to specific behavioral objectives and these objectives are necessarily multiple and interrelated.
3. They must be dramatized in a setting of human, social, and contemporary significance.
4. They must be oriented in a functional rather than an abstract approach.
5. They must be constructed to appeal not only to the intellectual processes, but to the affective and conative processes, i.e., to the ideals, emotionals, and motivation of human behavior.
6. They must be developed in conformity with the hypotheses of learning that are generally accepted by psychologists, and are validated in common schoolroom experience.

If we had such films for instruction, our teaching would, I believe, change human behavior in a fundamentally better direction. It might even change the Latin poet to read "Dulce est decorum est, pro fratribus vivere."

The use of visual aids in classroom instruction is growing in Pennsylvania. More schools use motion pictures for the teaching of Science than for instruction in any other school subject. Travel and Geography rank second, followed by History, Social Science, Health, English, Nature Study, and Commerce and Industry. (*Penn. Public Education Bulletin.*)

Amateur Motion Pictures in the Schools

An illuminating discussion of values of teacher-and-pupil-made films, with full details on their production

By E. WINIFRED CRAWFORD

Director of Visual Education, Montclair, New Jersey

PICTORIAL records of school pupils and their work have been made ever since the discovery of the photographic plate. The first pictures, which are of considerable research value today, were of the exteriors of buildings and formal class groups. The early interior pictures of classes were taken with the thought of showing the children, and later of seeing them at work. With the change in philosophy of education, photographs were made to indicate teaching techniques. These pictures were used for illustrations in books and magazines, and stereopticon slides were made from them to supplement talks at teachers' meetings and lectures. Today motion pictures are filmed for use during teaching and to study teaching techniques. The uses of pictures taken in the schools have changed from early times when the main aim was to show the children unto today, when motion pictures are used to study all phases of educational procedure.

This discussion focuses on the use of amateur motion pictures in the schools. The term *motion pictures* for this study is defined as: sixteen or eight millimeter silent motion pictures taken by non-professional persons. These pictures are of educational procedures in the schools and of a wide range of subjects used in school work. The group of amateurs includes the director of visual education, teachers, parents, pupils, and other friends of the school. This limitation to amateur films is made to emphasize a phase of work that a school or school system can do in its local situation.

The value of the motion picture over the photograph and stereopticon slide for interpreting education is twofold: that of motion and of sequence. Activity is such an integral part of school life today that motion is needed to give an accurate pictorial record and an unbroken sequence of events. These two factors, together with the stopping of the film for stills, makes the motion picture indispensable for study and enjoyment. The main drawback for some of these films is the lack of sound.

The major reasons for using these motion pictures in the school are: (1) advancement of thinking during teaching, (2) improvement of instruction, (3) interpretation of schools to parents and community, (4) study of educational procedures in teacher training institutions, (5) medium of expression for pupils, and (6) development of appreciations, interests and hobbies.

Advancement of Thinking during Teaching

Motion pictures when carefully selected and evaluated for the desired purposes add interest and present an opportunity for related thinking. Many pictures taken by teachers and friends of the school while on vacation or business trips are splendid for school work. These films are used to introduce units of work or centers of interest, to carry forward the pupils' thinking during the study, to aid in summarizing, to give a new view in a review, or to make a transition from one unit to another. These uses, which are similar to those that might be stated regarding most motion pictures, overlap. The objectives of the study determine the reason and place of the film in the unit and the number of times it is shown either in part or in entirety. The fiords and glaciers of Norway taken from a Norwegian steamer introduce the country or sponge fisheries of Bermuda give detailed information. A

form the major part of a study on the work of glaciers. The travelogue of Mexico aids in a summary or gives a new view in a review. Not every picture taken by every traveler is good for school use, but some pictures filmed by those who know what to take to make the motion pictures significant for teaching purposes are of outstanding value.

Improvement of Instruction

Motion pictures, taken in the schools or of school activities by the director of visual education, are used for the improvement of instruction. The director, the general or special consultant, principal, or department head, discusses a teaching situation as depicted in a film at a faculty meeting, conference, grade level or department meeting. An individual or a group of teachers make a detailed study of an activity program as shown on the screen. Though observation and discussion of actual teaching is the finest way to improve instruction, this is not always possible. With an understanding and sympathetic consultant, teachers become willing to share their classroom experiences with others through the medium of the motion picture. Teachers, besides realizing that it is a recognition of their efforts, feel that they gain much help from studying films of their own work and from the group discussions.

A film depicting a junior high school unit of work with its center of interest on a study of copper is used as the basis of discussions to see how the objectives of the unit are accomplished, how the learning process is carried forward, and how the pupil's thinking is advanced. These films because they are silent, need good captions to help interpret what is taking place. School systems that are introducing progressive or creative educational procedures are using the films to supplement visitation and to orient teachers in their thinking regarding the newer approach to the objectives of education.

A study of pupils' work habits is made from films by both teachers and pupils. A classroom, whose arrangement seems much more objective when viewed on the screen, is studied from the standpoint of efficient arrangement of furniture, and accessibility of books, maps, and materials so that it may be reasonably possible for pupils to form good work habits. This film on the study of copper, which was taken of the normal classroom life, shows the way the pupils use the equipment, the efficiency of their movements, and the manifestation of interest in and attention to their work. The fellow school mates' habits, are quick to recognize fussing, lack of sustained application, poor use of reference materials and equipment, and false movements which show a failure to analyze what is to be done and to make a plan for accomplishing the work efficiently. It is obvious that the results of study habits from the standpoint of learning cannot be determined from silent films.

Interpretation of Schools to Parents and Community

Motion picture films are used to help interpret the work of the schools to the parents and to the community. School procedures have changed so much in the last two decades that many adults who do not understand what they see when they visit the schools or are not able to go to the schools, welcome an opportunity to see school activities as they can be shown through the medium of the motion pictures. The parents at

Parent-Teacher Meetings or School Night Conferences discuss with enthusiasm the educational principles underlying the experiences revealed in the motion pictures in which they perhaps see their own children. Community gatherings, church groups, social service meetings, and adult education classes gain an idea of the schools from films which show situations of an entire school day of one class, of a unit of work which lasts over several weeks, of the athletic or arts programs, or of a pageant written and produced by pupils as a result of their work under several teachers.

Study of Educational Procedures for Teacher Training Institutions

Teacher training institutions place much emphasis on observation of master teaching. As a supplement to it, but not to take its place, is the motion picture of classroom procedures. The film may be shown several times to permit the same silent situation to be studied from various points of view. The lack of sound reproduction of what is taking place is a drawback for this use as well as the study of teaching techniques. The same film showing the pupils carrying on their studies during the unit of work on copper forms an objective basis for a discussion in introduction to teaching, of the psychology involved in a unit, of pupils' habits of work and of the organization of visual aids to help advance thinking and accomplish the objectives. A motion picture of dramatic play in the kindergarten is analyzed for discussion of the values of guided play. The films are used by individuals or by groups of students for detailed investigation. Research studies need to be made to evaluate the several ways films are employed in education classes.

Medium of Expression for Pupils

Motion pictures are used as a medium of expression by pupils. The children in an elementary school which is emphasizing bicycle safety are planning the scenes to be filmed that will record their findings regarding the safe way to ride bicycles. A beginning group of pupils in a speech improvement class writes a play with the object of having motion pictures taken of themselves when they play it. Thus a motive is furnished handicapped children to help them engage in a normal enterprise.

Development of Appreciations, Interests, and Hobbies

Motion pictures that present situations in which appreciations may be felt present rich, vicarious experiences that are wholesome, enjoyable, and uplifting for class, club, or school. Pictures taken by the president of our Board of Education of the yearly reenactment of the Pilgrim story at Plymouth give an opportunity to understand an historical event and to realize some of the greatness connected with it. A canoe camping trip through the rivers and lakes of central Canada which two teachers conducted unfolds the good times enjoyed, and the wonders of unspoiled nature. Boulder Dam reveals the accomplishment of man's mind. The tides and gulls on the Maine coast lure one to rest and think. Such appreciations tend to expand the thoughts and feeling of the pupils and thus enrich their emotions.

Linked very closely with the last point and partly an outgrowth of it is the use of motion pictures to develop interests and hobbies. Such motion pictures reveal many interests as hiking, collecting and identifying minerals and rocks, making marionettes, and cooking for boys, which may develop into hobbies. The taking of still pictures and, with teachers and older pupils, of motion pictures, when a definite purpose for the photographic record is dominant, becomes life-long interests. These avocations, outgrowths of the enjoyment received from motion pictures, result in enriched interests and appreciations.

Filming and Editing of Motion Pictures

Very careful consideration needs to be given the taking of the two types of films to which reference is made: the one of school activities and the other of social science, science or other content. The purpose or purposes for which the pictures are to be used in the school determine the kind and amount to be filmed. After the purpose is determined and clearly analyzed, comes the investigation of what regular school work is going on or about to be initiated whose filming will portray what is desired. Because a unit of work or center of interest has much activity in it, or a play is pretty, or the children are attractive it does not follow that these are the ones to be filmed.

The person who operates the camera needs to be an educator or some one who knows the type of work to take that will illustrate the desired objective. This professional photographers find difficult. The best pictures of school situations are taken while the study is progressing, only rarely need anything be repeated. This means that the one doing the filming needs to be familiar, not only with the purposes for taking the picture, but with aims and plans the teacher has for herself and the children. The amateur photographer, who then can work while the children are working, is able to film the significant experiences of groups or individuals, and the activities that depict lasting values. The pupils who have had no contacts with motion picture cameras are interested in the mechanical procedure. What is going to be done, the reason for it, and the equipment used, and the way the camera works, should be talked over with them. Permit the pupils to look through the finder and press the starter when the camera is empty. All this is well worth the time that it takes for then the pupils go about their work freely and the pictures taken are as natural as possible. Those who are filming the picture for social studies, sciences, arts, or literature may film for their own enjoyment or to fulfill definite teaching objectives or both. Such ideas as casual relationships, types of life significant of a people, culture patterns, industrial developments, life processes and beautiful scenes are some of the important phases to be considered when the films are to be used in the schools. The value of color and slow motion needs attention for specific scenes.

The editing of both types of films should make the sequence of the picture develop the desired purposes for education. The planning of the captions needs much thought, for clear and succinct titles help guide the thinking of those who see the film and help interpret and perhaps evaluate what is seen on the screen. All the mechanical points and technical arrangements should be so well planned and accomplished that nothing distracts from the thought of the picture.

Amateur Motion Pictures for Future Research

Pictorial records, the amateur silent motion pictures of life lived in the schools and out, is brought to the school for these varied educational functions. The motion pictures of school activities that have been taken this past decade are a record of education at a time when it has made a most fundamental transition as a result of a change in educational philosophy. Though observation of pupils in the educational situation is of paramount value for study of teaching techniques, the experience is of a passing nature. The pictorial record is lasting. This fact makes these motion pictures of education valuable objective source material for research by future generations. It is to be hoped that copies of these films and detailed records regarding them will be kept so that when, in years to come, internal and external criticisms are focused upon them, they will reveal the truth.

Problems in Preparing Pictorial Material for Classroom Use

How text material and pictures are collected and selected for inclusion in these study units

By DR. JAMES E. MENDENHALL
Editor, Building America, New York City

THERE is growing interest in the field of visual education on the part of teachers, administrators, and curriculum-makers throughout America. There is also a vast store of visual material on hand and in process of preparation. As yet, however, there is only a beginning toward the production of visual materials which teachers need and want to make their classwork more interesting and vital to students.

Those at work in the preparation of pictorial materials for the classroom face many problems. Here will be raised some of these problems, particularly the problems which we have confronted in the preparation of the study units in our *Building America* series.¹

The main objective of *Building America* has been to help American youths to become more intelligent about life in their own communities, and in the United States as a whole. In line with this goal, we selected a series of titles which we believed covered basic aspects of American economic, social, and cultural life. Among these titles were: Housing, Food, Men and Machines, Transportation, Health, Communication, Power, Recreation, Youth Faces the World, Our Constitution, Safety, Clothing, Social Security, Steel, We Consumers, Conservation, Movies, News, Our Farmers, Labor, Education, Our Federal Government, Chemistry at Work, War or Peace, and Seeing America.

To decide upon titles, our Editorial Board makes use of two main techniques. First, our Board members analyze what is going on in the world today. They find, for example, that everybody is talking about housing. The Federal Government is launching a housing program. Newspapers and magazines are filled with articles and pictures on housing. Schools are introducing housing into their courses of study. From all these facts, our Board decides that "Housing" is an important title to include in the *Building America* series. Second, educators in the field are canvassed to determine what teachers, curriculum specialists, and other members of the Society believe to be valuable titles. Last year a questionnaire was sent out to Society members, and 335 out of 500 replied.² Tabulation of the returns revealed the following votes: Finding Your Job—259; How Our Federal Government Serves Us—225; The Farmers' Problem—239; News—222; War—195; Seeing America—182; Applied Chemistry—173; Oil—144; Education—136, etc. Here is an example of ways by which the producer of pictorial materials can secure the opinions of field workers in determining what the field thinks is important.

After the Editorial Board has decided upon the titles, our staff goes to work preparing an outline of content and list of illustrations to be included under each title. For orientation and facts, we go first to basic scientific books bearing on a particular field. Some of the books are useful in preparing a number of titles. Such books would be, *America's Capacity to Consume* and *America's Capacity to Produce*, both published by the Brookings Institution of Washington, D. C. Other

books are more specialized. Such would be Alfred M. Lee's *The Daily Newspaper in America* and John R. Commons and Associates, *History of Labor in the United States*, and the *Cost of Medical Care*. For some titles we must refer to a cluster of books and pamphlets which give reliable and basic information.

From the examination of these printed materials, we find certain important generalizations which we believe should be incorporated in the issues of *Building America*. Among these generalizations are:

1. Half of the American people live in houses which do not meet the minimum standards of comfort and decency.
2. In 1929, two-thirds to three-fourths of America's families had to follow an emergency or subsistence diet because they could not afford an adequate or liberal diet, necessary to maintain health, growth, and physical efficiency.
3. From 1919 to 1937, power machines and technology slightly more than doubled the productivity of the average factory worker.
4. Only half of our people visit a physician at least once a year, and only one-fifth go to the dentist.
5. Recently, accidents have every year caused 100,000 deaths, nearly 10,000,000 injuries, and a loss of about \$3,500,000,000: much of this waste could be prevented.
6. Three-fourths of America's steel is produced by seven large corporations.
7. The erosion of little waters has destroyed or damaged the soil covering two-thirds of our nation's arable land. Less than a fifth of America's original forest lands are left.
8. Even in 1929, a prosperous year, America's industries were operating at about four-fifths of capacity. That year the income of the average American family was about \$1,700. If America's industries worked to practical capacity and if income were more equally distributed, experts believe the average family would receive an income somewhere between \$2,500 and \$4,300 a year.

These generalizations represent the selection and evaluation of the most important facts reported by experts. They are also generalizations which are of immediate and deep concern to young people now attending schools and to adults in general.

After this general reading, we make up the final outline. This outline gives the fifteen sections to appear in the study unit. It also gives a general description of content and a suggested list of pictures.

Our next task is to search for pictures. All possible sources are canvassed. These sources can be divided into three main groups: First are such governmental agencies as the local Department of Health, the Bureau of Conservation of the State, and the U. S. Department of Agriculture at Washington, D. C. These agencies of course supply pictures free. Second are commercial companies such as the United States Steel Corporation, American Telephone and Telegraph, and United Artists. These companies are very cooperative in supplying free photographs, diagrams, maps, and other illustrative materials. Third are the commercial picture agencies such as Ewing Galloway, Philip D. Gendreau, Acme Newspictures, Armstrong Roberts, and International News Service,—all with

¹ *Building America* is sponsored by the Society for Curriculum Study, an organization of some 800 teachers, specialists, and other curriculum workers.

² See "Building America Sounds Out the Experts," by James E. Mendenhall, *Curriculum Journal*, March, 1937.

offices in New York City. These agencies charge a flat rate of \$5.00 for the right to reproduce one print.

The photo-researchist on our staff writes to out-of-town sources for pictures. He canvasses in-town sources by "leg-work." Soon pictures come pouring into our office. We examine these pictures carefully, and select the one which we consider the best. A "best" photograph must show people in action and as they really are living, working, and playing. A "best" photograph must contribute important facts to the study unit in which it is to be used. A "best" photograph must be artistically good. It must be clear,—that is, easy to analyze and study. It must be simple, with a definite center of interest. It must be good composition.

This process of collection and selection goes on for about two weeks. By the end of that time, we have fairly well decided upon which pictures we plan to use. We have also made up a photostatic dummy. This is done by marking the originals for size, and having photostats made of them. These photostats are pasted in the dummy.

We find it time-saving to make up the photostatic dummy before trying to write the complete text. The pictures we say must take about so much space—in a typical *Building America* study unit, about half of the space is devoted to pictures. Text takes the remaining space in the form of headings, captions and running matter. These are written and re-written until in final shape for setting in type.

When the issue is in dummy form with pictures, captions, and text in place, we submit this dummy to members of our Editorial Board and to experts in the field. If the issue is controversial, we show the dummy to experts on opposing sides and to impartial authorities such as government officials. The "Power" dummy for example was looked over by experts who favored municipal ownership and by experts who favored private ownership. This is done because on controversial prob-

lems, we try to present all points of view as fairly as possible, leaving the reader free to draw his own conclusions.

After we have made revisions suggested by the Editorial Board and by the experts, the issue of *Building America* goes to press. The copies of the publication are then sent to hundreds of individuals and schools throughout the United States. When the issue is in the hands of readers, it is subjected to evaluation by these same readers. Teachers and pupils write in, making comments and suggesting points for possible change. Some of our readers are officials in large business corporations. Some are labor leaders. Some are editors of newspapers and magazines. These readers too are critics who help evaluate our materials, and give us basic suggestions for revision, when a unit is to be reprinted.

In conclusion, it would be well to mention one of the most serious problems we meet in preparing *Building America*. That problem is to get good photographs which portray the living conditions of the American people. Most photographs stress the technical side of life, and ignore the human side. "What a beautiful machine!" exclaims the observer. And the critic replies, "But what about the man who is tending that machine?" We can secure idealized portrayals of home life from the commercial picture agencies. We can secure realistic pictures of home life in America's poverty-stricken areas, from the U. S. Government.³ But we find it difficult to get good pictures of the life of the average American family at home and on the job.

It is an objective of *Building America* to use pictures to convey ideas and to challenge young people to understand and to make better the world in which they live. If pictures are well-taken, well-selected, and well-presented, pictures have power to educate our nation's youths.

³ Many of these valuable documentary photographs come from the U. S. Farm Security Administration, Washington, D. C.

DEPARTMENT OF VISUAL INSTRUCTION

President's Letter

WHY DON'T schools adopt new materials of instruction more readily? Why should schools be unwilling to use visual materials which have been proved effective under fairly rigorous experimental conditions? Why isn't some work in visual instruction provided either as a course or as a unit of instruction in teacher education work? If films are so effective in information building, in the formation of attitudes, why don't we use them in our work in citizenship, in history, in the social studies?

These are questions which most members of our Department have faced again and again. All of us have groped for an explanation for what to us may seem like slow progress. Is there an explanation that is satisfactory?

May I first point out that many persons would not admit that progress has been slow. They would point out that the rate of educational change is normally slow. They would cite a study by Dr. Briggs of Columbia University which showed that even among a group of selected, supposedly superior, high-school teachers, more than eighty per cent were using traditional recitation, question-and-answer methods — that only twenty per cent were introducing students to the kinds

of experiences that progressive educators have been urging since 1900.

There are a number of plausible reasons for the failure of visual materials to penetrate deeply into the practice of the schools with the rapidity that some of us would like to see occur. These are financial reasons. Apathy, inertia, and routine are still far too common in the classroom. And as long as the memorizing of textbooks is a common objective of the teacher, visual materials are not likely to be widely used. Certainly, too, in some fields there is a paucity of excellent materials.

Nevertheless there is one deterrent which I believe is stronger than any other. Teachers do not know how to use these materials in the classroom. The mechanical problems are easily overcome, but what you actually do with pictures, with slides, with excursions, with films is not so simple. Use of these materials requires far more planning than when one merely assigns lessons in a textbook. And when films are used merely to add to the accretion of facts of the viewer, a real dilemma results. Pictorial materials have virtually hundreds of facts in them. How could you go about memorizing an excursion?

I believe, then, that our major problem in introducing these new materials of instruction is a teacher-training one. We must help the teacher in her initial

period of experimenting with a new device which gives a different type of experience to students. We must make that help specific. How can this be done?

I suggest the following ways for giving this specific instruction. First, through demonstrations by able teachers. This has been neglected both within school systems and in the programs of the visual instruction department. There should be on file in the office of the secretary a list of teachers who can give skillful demonstrations.

Second, we need to collect and publish what Charters has called the "unrecorded specifics." These are especially skillful ways of carrying out some particular

teaching activity. This is especially necessary in the field of visual instruction, where the literature on teaching methods is still meager. Chapter two in "Motion Pictures in Education" is especially valuable for this purpose. The teaching sequences in the film "Overcoming Limitations to Learning" illustrate the recording of teaching methods on sound film. Teachers do not want recipes to follow, they do want and need a rich variety of suggestions for their initial work in a new field. Our Department ought to be able to furnish such assistance.

EDGAR DALE.

The address of the Department of Visual Instruction is Box 3046 University Station, Columbus, Ohio.

A New Method of Quantity Production of Graphs and Diagrams on Lantern Slides

By WILLIAM M. GREGORY,

Director, Educational Museum, Cleveland Public Schools

THE need for large numbers of duplicate lantern slides for city wide radio lessons in Cleveland has been met by rotoprinting on transolene. This process suggested by H. A. Bathrick, Assistant Superintendent of Cleveland Schools, is now in use and is proving most satisfactory in low cost and in efficiency.

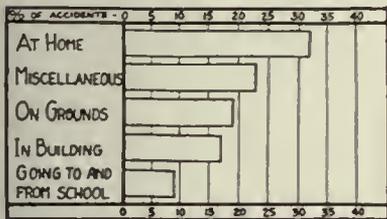
This new process uses the rotoprint for printing diagrams, sketches, pictographs, and graphs on transparent transolene at a cost of twelve cents per lantern slide. Transolene is transparent, heat-resisting, moisture-proof, and absorbs a special ink which produces an opaque line. The sketches are first carefully drawn and then photographed on an aluminum plate. Six slides (see cut) are printed on each sheet of transolene. This sheet is then cut into regulation lantern slide size and each piece mounted between two cover glasses. It gives a clear diagram when projected on the screen.

The above process has an advantage over the photographic method, in speed and cost. It is cheaper than the lantern slide produced on celluloid or cellophane by drawing or typing with carbon paper. The material is inexpensive, and makes it possible to distribute widely diagrams, statistics, and other materials throughout a school system. The material can be easily revised and frequently renewed at little expense.

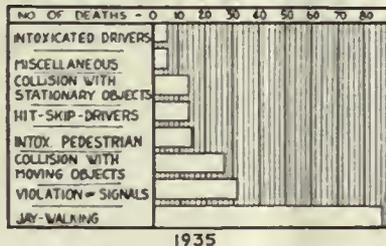
With this process, illustrative slides showing sketches, graphs, or pictographs, can be made to function closely with the various units in the course of study. This is especially valuable when the curriculum demands up-to-date material and thousands of duplicates for current lessons and for radio broadcast lessons. In Cleveland the Educational Museum recently provided four thousand slides of this kind for elementary science and junior high school mathematics.

This method will find a wide use in supplying quantity material for counties and large school systems, especially for direct instruction, for testing and for guidance in getting new ideas in operation. The writer will supply further information on request.

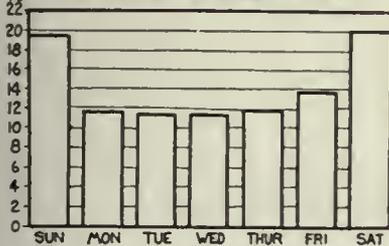
WHERE SCHOOL CHILD ACCIDENTS OCCUR



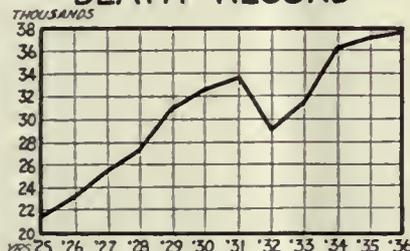
DEATHS DUE TO AUTO ACCIDENTS IN CLEVELAND



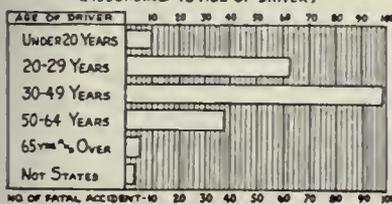
AUTO DEATHS BY DAYS OF THE WEEK-1936



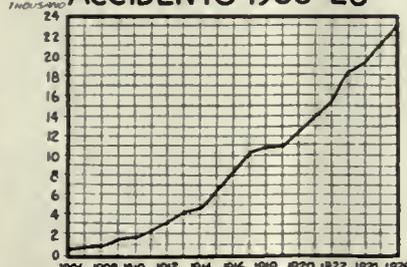
TWELVE YEAR AUTO DEATH RECORD



FATAL ACCIDENTS CAUSED BY CLEVELAND DRIVERS (According to Age of Driver)



DEATHS FROM AUTO ACCIDENTS 1906-'26



The Relationship of Acquired Information or Knowledge Obtained from Certain Educational Motion-Picture Films to the Intelligence, Grade, Age, Sex, and Type of Educational Training of the Pupils

Being an Abstract of Thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the School of Education of New York University, 1937

By **ARNOLD W. REITZE**
Jersey City, New Jersey

THE PROBLEM: The problem of this study is to show the relationship between acquired information or knowledge obtained from certain educational motion picture films and the intelligence, grade, sex and type of educational training of the pupils. This is an experimental investigation limited to these various phases of comparison.

Limitations of the Problem: It is limited to discovering the relationship between the pupil's factual perception obtained from certain educational motion-picture films and the intelligence, grade, age, sex, and type of educational training of these pupils.

No attempt will be made to prove the value of motion-picture film as a factor in education. Neither will the study attempt to compare or evaluate various techniques for the use of educational film.

Need for the Study: The need for further study of this aspect of the motion picture in education, as well as other phases, was made obvious by the marked increase in the use of educational film within recent years.¹ Available data effecting the use of such film has not kept pace. No other extensive study has been made whose primary purpose has been to compare the knowledge obtained from educational films with the intelligence, grade, age, sex, and type of educational training of the pupils.

Similar Studies: A careful survey of educational books, periodicals, and research studies discloses few investigations resembling the present research. There are many studies dealing with numerous phases of visual aids and motion pictures in education and a number of these touch upon some aspects of this thesis. However, there does not seem to be any study covering exactly the same phase of the use of educational motion-picture film.

Sources of Data: The results of an actual experiment are the chief sources of the data used in this research. Data were obtained, also, from educational books, periodicals, and research studies.

Method of Attack: The principal method of attack used in this study was experimental. Two educational motion-picture films were presented to various representative classes in the Jersey City public schools, which classes were then tested for film comprehension. All classes were tested, also, for intelligence as a means of obtaining a standard for later comparisons.

Groups Tested: After a careful study of the factors involved, it was decided to use four classes of each regular elementary grade from the second through the eighth, and two classes from each high-school grade. Also, a number of prevocational, vocational, and adult classes were used, since these were composed of pupils with different types of educational training. In order to have these classes representative of the whole school system, several different schools were chosen. Only one high school was used, but the fact that it draws pupils from a wide area makes it representative of the whole high school population. The schools used include a wide range of pupils of varying social backgrounds and nationalities, and are typical of an average school in a cosmopolitan city.

Tests: Considerable preliminary work was done to select and formulate the best tests for this study. Many forms of intelligence tests were considered and expert advice sought before the final selection was made. As there are no established film-comprehension tests, it was necessary to devise those used in this study. These were formulated with the advice and assistance of a number of teachers, principals, and supervisors. Furthermore, a preliminary test was prepared and given to a number of classes before the final tests were evolved and printed. In the final form, these tests had forty multiple-choice questions. Of this number five questions specifically tested observation of details, five others tested reading ability, and another five tested film comprehension.

Administering the Tests: For the sake of reliability, all intelligence tests were administered by a teacher trained in this work. The film-comprehension tests were administered by the classroom teacher according to a set of printed instructions, and under the personal direction and supervision of the investigator.

The first week, each group was given an intelligence test. The second week, they were shown the first film and given the first film-comprehension test. The third week, the second film was shown and the second film-comprehension test was given.

Scoring the Tests: The scoring of all intelligence and film-comprehension tests was done by the investigator. In addition to marking the papers for the total number of correct answers, each film-comprehension test was marked for the number of correct answers to each of the five questions dealing with observation

¹Cline M. Koon, *Motion Pictures in Education in the United States*. Chicago: The University of Chicago Press, 1934, pp 58-59.

of details, reading ability, and film comprehension.

Recording the Tests: All scores were carefully recorded on special record sheets devised for this purpose. Only those tests were recorded of pupils who had taken all three tests and the papers were ranked from the highest to the lowest IQ. Each paper was given an identification number by means of which it is possible to locate any pupil and any particular class. The data recorded include:

- The group or class and school tested.
- The identification number.
- The sex of each pupil.
- The age in years and months.
- The IQ and IQ rank.
- The rank on each film-comprehension test.
- The total score on each film-comprehension test.
- The total score on each film-comprehension test of the questions for observation of details, reading ability, and film comprehension.

From these facts given on the record sheets, and as a result of certain calculations, other information was obtained and placed on data sheets. These sheets contain, for both boys and girls, and the two combined:

- The class or group and school.
- The number of tests used and discarded.
- The range of intelligence, and, of both film-comprehension tests.
- The IQ rank of the pupil with the highest score in each film-comprehension test.
- The mean IQ's of all tested, the group above 110, from 90 to 110, and below 90.
- The mean scores of both film tests for the group as a whole, the IQ group above 110, from 90 to 110, and below 90.

The mean scores of the total group and each IQ group on the five questions for observation of details, reading ability, and film comprehension.

For further convenience and ease in interpretation certain of these data have been grouped and placed on summation data sheets. The information given on these sheets include:

- The group and school tested.
- The number of pupils tested.
- The mean IQ of the whole group and for the IQ classifications above 110, from 90 to 110, and below 90.

The mean scores for each of the sets of questions for observation of details, reading ability, and film comprehension.

Selection of Films: Two films were selected, as nearly alike in the difficulty of their content as possible. The films were selected to give representation to different kinds and types of educational films. Two distinct types, one on history, and one on geography, were used. Each film is edited in a manner characteristic of a certain educational film producer. They are typical of those produced by two of the largest educational film companies.

For the subject of history, reel one of *Daniel Boone*, of the Chronicles of America Photoplays, produced by the Yale University Press was selected. This film uses the dramatic form of presentation, yet is accurate and authentic in its subject matter.

The geography film chosen was the Eastman Class-

room Film, *Wheat*, produced by the Eastman Teaching Films. This film differs from the film *Daniel Boone* in that no attempt is made to use the dramatic form of presentation, but, rather, a logical development of the subject is followed.

Presentation of Films: It was deemed advisable to present the films without regard to their value as a lesson, or without any attempt to emphasize the films as a part of the classroom work. In their showing, no attempt was made to have an ideal situation. The films were shown under usual classroom conditions. The sizes of the groups, which determined the room to be used for the presentation, ranged from one to five classes. The films were shown without comment either before, or after their projection.

Evaluation of Data: As the classes selected for this research were representative and typical of the larger group or whole school system, the evaluation of data and the comparisons may be considered reliable.

Comparisons: Many comparisons can be made from the record, data, and summation data sheets. While the data of each class are given separately, the data of all similar classes are combined so that larger and more representative groups can be compared.

Comparisons can be made between and within any individual classes or any group of classes, on the results of the film-comprehension tests as a whole, and on the questions for observation of details, reading ability, and film comprehension. Similar comparisons can be made based on the full range of intelligence and for those of superior, normal, and below normal intelligence. Other comparisons based on grade, age, sex, and type of educational training can be made. Another form of comparison is made between types of educational films.

Conclusions: General. The definite value of educational motion-picture films in general, as shown in other studies, seems to be substantiated by this research. When it is considered that the films were shown without any preparation or discussion, either by the teacher or the pupils, the scores of the film-comprehension tests are relatively high. This is true regardless of such factors as grade, age, or intelligence. This seems to indicate that pupils gain considerable information from a single exposure to a film, and, therefore, the educational film is a most effective aid to teaching.

Intelligence. In considering the relationship between the educational films and the intelligence of the pupils, the mean scores on the film-comprehension tests generally improve with the increase in intelligence. The data shows that, for the most part, those of superior intelligence are also superior on the film tests. This better showing holds true for both boys and girls. It would seem possible to conclude that, in general, an increase in intelligence means an increase in the mean scores of a film-comprehension test.

While the data show that the highest IQ group acquire the most from the films, nevertheless, films are, perhaps, more worth while to those of low IQ. In fact, even though the IQ remains quite static, the film scores of those of low IQ increases as the pupils be-

come older. There is comparatively little difference in the actual scores of those of high IQ and those of low IQ. This seems to indicate that, relatively, the lower IQ group gains more than the higher IQ group. It seems, therefore, that it is worth while to use more films with all groups, but particularly with the over-age and mentally retarded groups.

Grades. There is a definite increase in the film scores, as a whole, from the second to the eighth grade. After this grade, the scores remain quite stable and constant. The data show that the upper grades receive the highest mean scores. However, this is not conclusive evidence that these classes gain the most from educational films. The difference between the scores of the lower and higher grades is slight, which seems to indicate a relatively greater gain for the lower grades. The general effectiveness of educational films with the lower grades seems to warrant a more extensive use of educational films in these grades.

Age. The data show that most older pupils receive a higher score than the younger pupils. For most of the items on the film-comprehension tests, those over eighteen have the highest mean scores. This is so for the group as a whole, as well as for those with an IQ range of 110 to 90, and for those below 90 IQ. For the IQ group above 110 the thirteen-year-old pupils make the best showing. As the lower IQ and over-age groups do relatively better than the normal-age and intelligence group, it would seem to indicate the worth-whileness of using more educational films with these groups.

Sex. In practically every case the data show that boys are superior to the girls on the film-comprehension tests. This holds true in spite of the fact that girls are slightly superior in intelligence. This is true, also, for both subjects of history and geography. It therefore, seems desirable to use educational films with groups of boys and men as they seem to acquire information more readily in this manner. However, with questions requiring reading ability, the girls are slightly superior.

Type of Educational Training of the Pupils. The data show that there are gradual increases in the mean scores of the film-comprehension tests in all regular classes from the second through the eighth, with the high-school classes remaining stationary. Other conclusions may be drawn regarding certain special classes. The vocational classes rate higher than any other group, with the exception of the high school college preparatory classes. They rate higher in spite of the fact that these classes are considered below the standards of scholastic ability of even the regular elementary classes, and this particular group has a mean IQ of only 98.4.

The prevocational classes, whose scholastic abilities are lower than the vocational classes, also make a better showing than the regular elementary and high-school classes. These facts seem to indicate definitely the need and practicability of using more educational films with such groups.

The pupils who show the best results on the film-comprehension tests are in the high-school college preparatory classes, which seems to indicate the value of educational films for this group.

The adults in the college class do about as well as the high-school college preparatory class. This seems to show that such a film is not particularly effective with such a group. However, due to the smallness of the group tested, any valid conclusions are impossible.

Although the primary grades do not actually score as well as the higher grades, it is believed that, relatively, they gain a great deal more. It would appear to be highly desirable to use educational films in these grades.

Types of Educational Film. An outstanding conclusion which the data show is the superiority of the dramatic type of film. In practically every case, the higher mean scores were received on the film *Daniel Boone*, which is a film presented in a dramatic manner.

Types of Film Questions. The data on the various kinds of film questions used in the comprehension tests indicate the need to train pupils to view properly motion-picture films. There is particular need to train pupils in the observation of details, and to grasp the significance of the film as a whole.

Summary. One of the facts brought out by the preliminary study of the problem is the rapid growth in the use of educational motion pictures within recent years. Another important fact is the economy of using educational film.

While these phases have been brought out in the preliminary study, a number of important facts have resulted from the actual experiment.

It has been shown that intelligence seems to have a direct and definite bearing on film comprehension. In other words, in practically all cases, the higher the IQ, the higher the mean film score.

Age, also, has a marked influence on film comprehension as the older pupils do better than the younger pupils. So, too, has the grade of the pupil an effect on the film scores as the higher grades receive better scores than the lower grades.

The type of educational training of the pupils also seems to influence the scores of the film tests. One of the most interesting results is that such groups as the vocational classes lead the regular grammar and high-school classes and are surpassed only by the high-school college preparatory class and the college class of adults.

Yet, in spite of the higher showing made by the upper intelligence groups and upper grades, it seems that the lower intelligence groups and grades gain relatively more from educational films. Therefore, it appears practical and logical to use more such films with the lower grades and with pupils of low IQ.

The type of film which gives the best results seems to be a film which is dramatized and contains enough simple titles to be self-explanatory. This fact should be worth while to those producing and selecting educational film.

These are some of the important comparisons and conclusions which the data of the study seem to warrant. In general, the research definitely shows the value of educational films for all pupils and specifically for certain pupils.

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NEWS AND NOTES *Being brief notations on significant doings and events in the visual field.*

Conducted by Josephine Hoffman

Regional Visual Education Meetings

The New England Section of the Department of Visual Instruction of the N. E. A. announces its ninth annual meeting on Saturday, May 14th, at the Children's Museum in Jamaica Plain, Mass. The theme of the conference this year will be "Ingenious Devices Made by Teachers and Pupils for the Teaching of School Lessons." These devices will be on exhibit and each teacher will explain how his device was made and used in a specific teaching situation.

More detailed information will be furnished by Carleton W. Erickson, President of the New England Section and Director of Visual Education, Public Schools, Greenfield, Massachusetts.



Announcement has just reached us also of a regional Visual Education Conference April 29th and 30th at the Pennsylvania College for Women, Pittsburgh. Among the names noted on the program are: Charles F. Hoban, Jr., American Council of Education, Washington, D. C.; Ben G. Graham, Sup't of Pittsburgh Schools; Wilber Emmert, Indiana State Teachers College; Fanning Hearon, Division of Motion Pictures, United States Department of the Interior; Henry Klonower, Director Teacher Bureau, Department of Public Instruction, Harrisburg; Alice V. Keliher, Chairman on Human Relations, Progressive Education Association; William Yeager, University of Pittsburgh; and V. C. Arnsperger, Erpi Picture Consultants. Presiding at the two sessions will be Herbert L. Spencer, President Pennsylvania College for Women, and John A. Hollinger, Director of Visualization, Pittsburgh Public Schools.



The University College of Northwestern University plans to hold a conference on "*Visual Education and the Adult*" on Friday evening and Saturday, May 13 and 14, in Thorne Hall on the Chicago campus. The topic for Friday evening is "Visual Aids in Industry."

INFORMATION WANTED

on

Summer Courses In Visual Instruction

Next month The EDUCATIONAL SCREEN will print a complete and nationwide list of these Summer Courses—giving *subject, place, time, and instructor.*

We urge our readers to send in data on any course planned for the coming summer which has come to their knowledge. Such reader cooperation has kept this list growing every year.

A Postal Will Suffice.

Saturday Morning from 9:00 to 10:30 the topic discussed will be "Visual Aids in the Community Program," and from 10:30 to 12:00, "Visual Aids in the College Program." All of these meetings are open to the public.

There will be a Round Table Luncheon which is to be a closed meeting of specialists and representatives of different departments of the college to discuss the inauguration of their visual aids program for next year. On Friday evening and during Saturday there will be informal screening of appropriate material. For further information call or write Dr. G. L. Freeman, Northwestern University College, 313 E. Chicago Ave., Chicago, Ill.



Huge Aquaria Built in Florida

The world's largest aquaria and a specially designed underwater motion picture studio have been constructed by Marine Studios at Marineland, Florida, which will present a dramatic and fascinating picture of submarine life, and provide excellent facilities for undersea motion picture work. Two large tanks, known as "Oceans in Miniature," will house live specimens of large and small fish and aquatic mammals in natural surroundings insofar as Marine Studios are able to duplicate conditions existing in the open sea. For example, a coral garden is built right in the tanks to afford the highly colored coral fish safety from their enemies. Various sea grasses and sea weeds grow from the bottom of the tanks thereby affording protection for certain small forms such as the pipe fish.

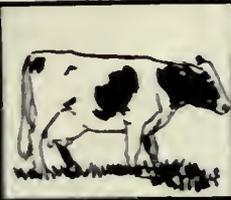
To meet the problem of transporting the larger species of fish, a method of injecting a drug through a hypodermic needle was developed which could be administered without injury to the victims.

The construction of the tanks will permit visitors an undistracted observation and study of marine life. One tank is 100 feet long, 40 feet wide and 18 feet deep; the other is circular, 75 feet in diameter and 11 feet deep. Enclosed galleries run at different levels around the entire perimeters of the two tanks. Each of the galleries faces inward upon a circle of glass portholes in the sides of the inner tanks in which the fish will be displayed. The portholes are placed in such a way as to make it possible for observers to look into the tanks from four different levels.

The design of the tanks was recommended by technical motion picture experts who with the greatest care worked out in advance the various camera angles that would be necessary to afford producers the greatest latitude and leeway in the filming of scenes.

Credit for this unique enterprise goes to Mr. W. Douglas Burden, an associate of the American Museum of Natural History and President of Marine Studios, Mr. Roy P. Gates, associated with him, and Mr. Ilia Tolstoy, grandson of Count Leo Tolstoy.

**THE
STORY
OF
MILK**



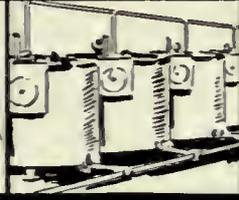
THE COW



MILKING



LABORATORY CONTROL

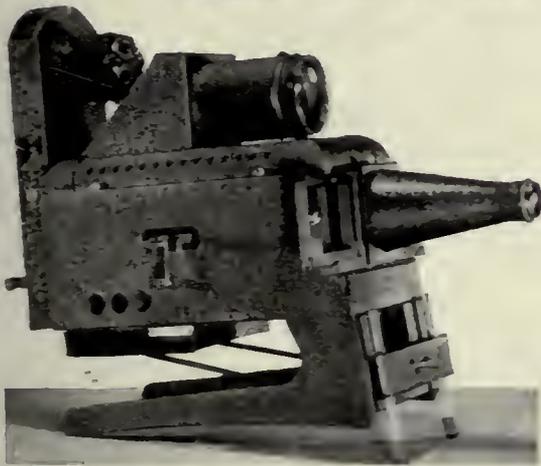


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**Unit Teaching is at its best
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The story of milk from farm to doorstep is but one of the hundreds of fascinating Units of Work. However, regardless of subject, vivid illustrations are necessary to stimulate maximum pupil interest and attention.

Obtaining suitable illustrations in sufficient quantities for class distribution is generally difficult and expensive. Single copies, projected with a Spencer Delineascope, save time and money—making available to the entire class, the unlimited supply of illustrative material to be found in school libraries, newspapers and periodicals. The result is a more vivid presentation of the subject and greater pupil interest.

For better grades and fewer failures investigate the effectiveness, wide scope and flexibility of the Spencer VA Delineascope which projects both lantern slides and opaque materials.

Spencer Lens Company

Write Dept. D12 for information on Spencer visual education equipment.

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Survey On The Utilization Of Visual Aids

An elaborate questionnaire effort has just been completed by the Victor Animatograph Company to determine—for their own purposes and for any others interested—"what films the schools are now using and by what means they are correlating them with their teaching programs." While other visual materials figured in the Questionnaire, the emphasis was on films. The questions covered teaching techniques, administrative arrangements, teacher training facilities, and provisions for keeping in touch with new developments in the field.

A list of 10,000 names, selected from the National Visual Education Directory published by the American Council on Education in 1936, received the Questionnaire. A return of 7% was obtained. Towns of 1000 population or less supplied 65% of the returns; 1000 to 5000, 29%; 5000 to 100,000, 6%. The tabulation of returns brings out interesting percentages, some startling. The validity of these figures must necessarily be relative, since they base on the 7% return which came largely from the most progressive and prosperous schools, without doubt. Were a 100% return available many of the percentages would show an enormous rise or fall. We list below a substantial part of the findings, in percentage of the schools replying.

- 82% own and use Maps, Charts and Graphs.
- 42% use stereographs; 30% have school museums;
- 26% use the School Journey.

(Concluded on page 139)

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PROF. I. V. PAVLOV

(Nobel Prize Winner)

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A 16mm Silent Film in 5 Sections

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- 3rd Section—The Spinal Cord: Study Of The Function Of The Spinal Cord. 2 Reels
- 4th Section—The Brain: Structure And Function. 5 Reels
- 5th Section—The Study Of Conditioned And Unconditioned Reflex Behavior In Different Organisms. 4 Reels

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AMONG THE MAGAZINES AND BOOKS

Conducted by Nelson L. Greene

Chicago Schools Journal (January, February, 1938) "Photo Slides as a Teaching Aid" by Victor D. Moseley of the Moseley School, Chicago. Describes an effective effort to teach "Safety" by slides of the school's own make. Twenty subjects were chosen, two photographs made on each, one of the "careless act" and one of the "result." The forty slides were made, shown repeatedly through the year and ardent discussions ensued at every showing. Interest was greatly increased by the personal nature of the pictures, pupils often appearing themselves in the scenes. The writer urges such pictures for many curricular topics.

Progressive Education (January 1938) "New Marine Aquaria in Florida Marine Studios" is a good, detailed description of this recent enterprise, one of the most impressive developments for production of visual material in recent years. Its potential values for the teaching field in Biology and Zoology could hardly be exaggerated. (See page 126 for an extended note on these Aquaria.)

"The Making of Natural Habitat Exhibits" by Lillian D. Kennedy of the Science Department of Woodrow Wilson Jr. High School, Tulsa Oklahoma. Two pupils worked together, with a mutual interest in (1) the particular kind of animal to be depicted, and (2) the locale proper to that animal. Research then began. What food? Forests or grasslands? Vegetation sparse or plentiful? Rainfall? Temperature? Altitude? Latitude? Longitude? Seasons? Winds? Much discussion with each other, with others steadily modifying concept to final form.

The combined projects ranged over Arctic, Antarctic, jungle, desert, marsh, mountains, plains, hills, farmlands, water surface and submarine. Each maker reported before student assemblies, showing maps and presenting references, inferences and conclusions. The work was done in ordinary class rooms, with fixed desks, work materials shared and mutual assistance cultivated. It was a notably successful socializing experiment by visual methods.

Scientific American (February 1938) "Double Featuritis," an editorial. The editor steps a bit outside his field to score the current habit of double features. It has brought on mass production of cheaply made feature pictures in such quantity that quality has to be sacrificed. Result, "a flood of movies that insult the intelligence of a large proportion of the movie-going public." (Doubtful how "large" this proportion is.) Public can stop it by doing "the same thing that it did not so long ago regarding smut on the screen." Namely, protest! "When collective protests are loud enough and vehement enough, results will follow."

(But the protest needs organization on a national scale with some great authority behind it, or it will be futile. The job done "not so long ago" was done by the Legion of Decency with the Catholic Church as prime mover, and several other churches cooperating.)

Buffalo Courier-Express (March 6, 1938) "Visual Education Is Seen Most Valuable in First Two Grades," a newspaper report by Miss Mary A. Cummins, principal of School 68, Buffalo, New York.

Miss Cummins tells an inspiring story of how the projection lantern makes reading a real adventure for children in the first two grades. "Our problem as teachers of children who are learning to read is how to get enough material on their level, offering a wide range of interesting subject matter," Principal Cummins said. It is practically impossible financially to provide each child with enough complete sets of books. By using the opaque projector, only one or two copies of books is needed to solve this problem. "The material is projected for group reading on a screen that is large enough for every child to see clearly. In this way, 25 different books can provide 25 different experiences for the same cost as one set of 25 books, all alike, which have one experience to offer and are quickly read."

The informal atmosphere such a procedure creates, encourages the children to more self-expression. "When the children are first learning to read," said Miss Cummins, "they tell stories about the pictures, stories that suggest themselves to the children as first hand experiences induced by the picture itself. The teacher easily can lead up to the reading experience by the suggestion, 'Let's see what the man who wrote the book had to say about this picture.'" Further, this method provides the child with material for thinking and forming his own judgments.

Not only do the first two grades find the opaque projector invaluable to their study, but other classes in the school find their subjects enriched by its use.

School and Society (47:119, Jan. 22, '38) In his article on "College Geography Text-Books," Mr. Robert B. Nixon asks why the authors of geography texts for colleges have not listed visual materials at the ends of their books, which could be used in collaboration with the texts. This department has long desired writers of school books for all ages to carry out this suggestion. Mr. Nixon asks especially for films which are reasonably scientific and which will make regions and countries live in our minds.

Movie Makers (13: 72, Feb. '38) "Recording the College," by Edwin Schwarz.

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the public, it can present a unified résumé of campus affairs that will give undergraduates a better understanding of the college and it will bring back pleasant reminiscences to alumni." The author emphasizes the advisability of making a filming plan in advance of visiting the college. Several ways of presenting the story of life at college are described concisely.

International Journal of Religious Education (14: 12, Feb. '38) "The Use of Motion Pictures in Religious Education," by Mildred MacFarlane.

No religious education director should overlook the use of motion pictures in connection with the work of the church school after reading this stimulating account of the significant results obtained with films in a Lenten program on the missionary work of the church. The subject was "Christian Heroes in Many Lands." The teachers were supplied beforehand with information sheets which gave the aims of the pictures, the story of the film, how to approach the discussion of it, and a story of the hero for whose life the picture provided the background.

A class in Movie Appreciation can offer a really religious contribution, also, if the teacher will use the students' natural interest in movies to promote an interest in the teachings of Christ.

Sight and Sound (Volume 6, Winter 1937-38) This publication always affords interesting reading—in the form of articles, film reviews and general news notes—on what is happening in the film field abroad, with particular reference to England.

One of the articles in this issue, "Actuality in Education," by Catherine Fletcher and G. J. Cons, presents a vital teaching method, whereby the children make their own investigations of life in the neighborhood in which they live. This actuality study gives more significance to films on related subjects, which later are shown to them, as well as a wonderful opportunity for film-making by the children themselves.

In "Psychology and the Educational Films," Dr. W. B. Inglis points out that although a considerable amount of psychological study has been devoted to examining the value of the film as a teaching aid, this field of study is far from being exhausted. There have been enough mass experiments on the general value of the educational film, but there is need for the examination of individual variations in film-learning, ways in which films may best be used, and the content of films. "A host of questions requiring the application of scientific method for their answering will arise when consideration is given to the widespread use of sound and color."

"Light-hearted Vikings," by H. Forsyth Hardy, tells of progress in the film industry of Denmark and Norway. Most of the Danish films are flimsy, light-hearted comedies, economically produced, with natural backgrounds utilized. The Government is taking an increasing interest in film production and makes a yearly grant to the industry for the purpose of producing educational films. Norway is one of the smallest countries in the world to undertake independent film production, the majority of the cinemas being municipally owned.

Book Review

EXCURSION IN MATHEMATICS, by Ernst R. Breslich, Associate Professor of the Teaching of Mathematics in The University of Chicago and Head of The Department of Mathematics in the University High School. (Published by The Orthovis Company, Chicago, 1938. Cloth, \$1.20).

Here is an engaging little blue-covered, 45-page book, most attractively bound in the modern plastic style to let the pages lie flat, that offers the most appealing, gentle and scholarly introduction to the fundamentals of geometry we have ever seen. It is written in beautiful English, in a charming style, and with a deft reader approach rare in textbooks. *Excursion in Mathematics* is likely to supplant any young student's fear of geometry with eagerness, appreciation and understanding.

"A knowledge of the basic facts of geometry is more necessary in present day life situations than ever before," says Dr. Breslich, and he proceeds to build that conviction in the young reader's mind from the first page on. Daily life is beset with questions of "How high?," "How long?," "How wide?," "How much does this container hold?," which only geometry can answer. "We live in a world of geometry. Geometric forms are everywhere"—and this genial teacher lists a few of the hundreds familiar even to the child, until the young reader, however sceptical, succumbs contentedly and decides to read on. It might even be "fun" to learn how to answer these questions!

Then follow the methods for thinking through these problems and the simple formulas are developed for handling dimensions, areas, and volumes of the geometric figures—circle, triangle, cube, parallelopiped, cylinder, pyramid, cone and sphere. The smoothness and pertinence of the written text not only makes welcome reading but clarifies thinking and allays the mathematical fears that have tormented generations of youngsters. Yet Dr. Breslich does not leave the whole burden on the verbal text. He makes extraordinary use of visual illustration. The twenty-one feature pictures are each full page width and about two thirds of a page deep. They are made actually stereoscopic by two color printing. From the original stereographic camera's double picture a copper half tone is made of each view. The right-eye view is printed in blue and the left-eye view is printed in red upon the first, in exact register. When the Orthoscope—simple cardboard spectacles with red and blue lenses, carried in an inside cover pocket in each book,—is held before the eyes, the red-blue picture appears in normal color tone and in startling "three dimensions." The utter reality of this stereoscopic vision makes for true perceptions of solids, geometric volumes, conic sections, etc. Below these the main object or theme of the picture appears again, drawn in simple geometric line form, with a brief summary conclusion in text beside it. And to complete the visualization of the entire text, more than fifty marginal drawings, beautifully done, illustrating perfectly objects and situations described by words in the text, add both charm and definite teaching value to the book. Truly, *Excursions in Mathematics* is a distinctive contribution to the literature. N. L. G.

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Some Teaching Tragedies

By **C. F. HOBAN**

Formerly Pennsylvania Director of Visual Education

"OF ALL sad words of tongue or pen,
The saddest are these: It might have been."

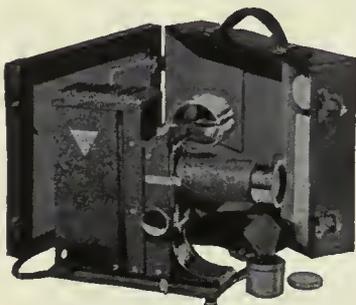
I have often thought of John Greenleaf Whittier's pronouncement, since first reading it as a boy, because of its application in so many fields. For some time I have been convinced that it finds valid expression in the field of visual-auditory instruction because, it seems to me, there are so many tragedies in the instructional processes, curriculum procedure, and administrative functionings of the school systems of our country. (All statements herein made are based on personal experiences, investigations and contacts with teachers and school administrators.) I have many, many times shared Maud Muller's feelings when I have seen school groups make a mere lark, a boy and girl affair, or a travesty of the school journey or field trip. This is notably true of many so-called "Educational Journeys" to national or state capitals, museums, shrines and art galleries. Then witnessing these travesties—

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no objective, no organized procedure, little or practically no interest, no serious study or discussion—I have been filled with disappointment. One cannot be eye-witness to effective, purposeful school journey performance without a feeling of inspiration, and there is nothing more depressing to an observer than the lack of an organized procedure. Much commendable school journey work is being carried on in the United States; but the deplorable fact is that so few of the total number of school districts in the nation make use of this valuable avenue of instruction—this is tragedy number one.

A second lamentable tragedy is to find in school buildings, and I say in school buildings advisedly, valuable apparatus—science equipment, stereopticons, object materials—stored in some room, unused and too frequently covered with dust. This condition, common in too many school districts, is one reason why verbalism is rampant, why instruction is abstract when it could be concrete and meaningful. A corollary to this condition is the number of school buildings without adequate equipment.

Equally tragic is the condition in too many teacher-training institutions where attempts are being made to prepare teachers for the schools of the country without visual or auditory equipment. This statement is borne out by the testimony of college graduates but can easily be substantiated by applying the professional yard stick. Such a piece of measuring apparatus is found in the requirement for Pennsylvania colleges and universities accredited to offer a course in the "Techniques of Visual Aids," as adapted to an average or local school system. The requirements are as follows:

1. Modern blackboard and modern bulletin board.
2. Modern filing case and the materials necessary for cutting, mounting, and filing flats, sketches, graphs, etc.
3. Budget provisions for conducting school journeys in elementary and secondary school subjects.
4. A collection of—(a) stereographs, typical of the different subjects, and at least six stereoscopes; (b) some mounted flats for use in each elementary and secondary school subject; (c) lantern slides, plain and colored, sufficient for intensive study needs in each subject; (d) a supply of 16mm motion picture films, typical of various school subjects (these may be borrowed or rented); (e) a supply of film strips for the subjects they especially enrich.
5. The following standard projectors—glass slide with film strip and film slide attachments, 16mm motion picture, opaque.
6. A complete splicing outfit for repairing films.
7. A slide-making outfit.
8. A good screen.
9. A still picture and 16 mm motion picture camera.
10. A collection of object-specimen-model materials for use in the different school subjects.

If the above measuring standard were applied to the teacher-training institutions in the United States, it would be interesting to know just how they would rate—and the time has arrived when the teaching profession and patrons are appraising these institutions and demanding adequate equipment.

A fourth tragic condition is that one, far too

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prevalent, where schools are provided with stereographs and slides but where teachers rarely use them—or when used, there is little if any evidence of effective technique. In this latter connection I mean when slides are shown without relation to curriculum. As an illustration of the latter statement, I have a vivid memory of a conscientious teacher who always tried her best but suffered from lack of training in the technique of pictorial presentation. She taught sixth and seventh grades and on this occasion combined her classes for the study of Hiawatha. Her presentation consisted of showing a series of slides with comments by the teacher. As I remember, there was little or no discussion by the pupils. Among the slides shown were Longfellow's birthplace—a dilapidated frame building in Portland, Maine; his Cambridge home; grave Alice, laughing Allega, golden haired Edith; the old clock on the stairs; the Village Smithy; Indians with war paint and weapons; Indians with horse-drawn travois, migrating. Only two of the slides were in any way connected with Indian life and I was at a loss to know how this serious-minded teacher expected those sixth and seventh grade pupils to get any understanding of that wonderfully interesting story of Indian life that Longfellow tells in Hiawatha. Could the slides, the stereographs, the pictures that repose in filing cabinets and boxes, be used effectively—at the proper time and in a skillful way—what a different atmosphere would pervade the school rooms of the country and what a difference it would make in the instruction to which the pupils in our schools are exposed!

Maud Muller's tragic situation finds its counterpart in these schools—and there are myriads of them—where valuable collections of Geology specimens: rocks, building stones, carbons, metals; Botany specimens: leaves, plants, noxious weeds, woods, fungi, fruits; Foodstuffs: cereals, beverages, sugar, fruits; Clothing materials: cotton, silk, wool, linen, rubber; Shelter materials, etc., are collecting dust in locked cases, basements and dark rooms. The school museum is a much neglected activity in the schools of the country—and yet it is one of the greatest contributors to meaningful instruction of all the visual aids. If teachers would but use the abundance of object materials available, what a benefaction they would contribute to the preparation of girls and boys for competent social living. In any discussion of object materials, there always comes to mind a pathetic picture. It is that of a mature man—a vocational teacher—in attendance at a summer session at a state college. I was discussing the values of object materials in instruction and was attempting to demonstrate some causes of verbalism and the cure. I had worked with some words that appeared on the blackboard—malt, latex, travois—and then wrote on the blackboard the word skewer. I called on this matured teacher and said "what do the six letters bring to your mind?" There was no answer. The man seemed embarrassed. I then held up a skewer and said "what have I in my hand?" He answered: "a piece of stick"—no mention of size, color, shape. I pressed with, "the ruler is a piece of stick and so is the yard stick." He amplified

(Concluded on page 137)

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This should be good news to non-theatrical film users as it is the first time that these particular reels have been offered in 16 mm. size. The color is said to be beautifully reproduced from the original 35 mm Technicolor negative.

Recent Castle Films Reviewed

From the large and steadily growing library of Castle Films we are glad to call our readers' attention to the three last viewed by us in private showing. *America's High Spots* (1 reel 16mm sound) is an excellent panorama of some of the outstanding regions of beauty and wonder. The ample selection includes Mount Shasta and Yosemite National Park in California, the Carlsbad Caverns in New Mexico, the Grand Canyon National Park in Arizona, the Yellowstone Park in Wyoming, and Niagara Falls in New York. A companion reel does the same for our great neighbor country on the north. *Canada's High Spots* is an equally fine portrayal in expert photography of Vancouver, the Canadian Rockies, Lake Louise, Banff, Toronto, Montreal, Quebec, the Horseshoe Falls of Niagara and the famous Canadian "Mounties." These scenic summaries, as they might be called, are not only pictorially delightful but the vocal narrative accompaniment deserves special mention. It is done by a pleasing speaker with fine voice and his script is entirely and refreshingly free from attempts at smart humor and wisecracks, which are so generally supposed necessary to "put the film over" but which have so often served merely to vitiate the film's value for serious educational purposes.

The third film is the very special and important release (March 28th) *Germany Invades Austria*. The recent spectacular coup by Europe's great opportunist is pictured vividly and completely. The outside personalities concerned appear—Chamberlain, Blum, Eden, Stalin, Mussolini, Benes, and Hitler himself appears repeatedly throughout the momentous hours. We see Schuschnigg delivering his fiat, that Austria shall remain independent, on the very eve of the decisive move by Hitler. Then, the crossing of the line! The German troops gleefully tear down and carry off the gate bars used to close the frontier roads—a mighty force of infantry, artillery, tanks, flows across bridges, through the countryside, and finally, down the streets of Vienna itself in thundering goose-step amid roaring applause from Austrian Nazis. The cen-

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N. L. G.

New Film Sources

Audio-Film Libraries, 661 Bloonfield Avenue, Bloomfield, New Jersey, has been established by James Weiss, formerly associated with Walter O. Gutlohn, Inc. They offer a fine selection of 16mm. talking pictures on a rental basis. Among the subjects noted in their new catalog are *Abraham Lincoln*, starring Walter Huston, *Drake the Pirate*, *Little Men*, *In Old Louisiana*, *A Girl of the Limberlost*, and many short subjects, including travel, sports, musicals, cartoons and comedies.



Three new 16mm. silent motion pictures are offered for sale or rent by Elias Katz, 69 Bedford Street, New York City. *Creative Design in Painting*, produced in

the Department of Fine Arts, Teachers College, Columbia University, shows Professor Charles J. Martin demonstrating the principles of fine design. In *Lynd Ward at Work* the complete process of wood engraving is demonstrated by the artist. The making of a papier mache mask is presented in *Make a Mask*.

Also available are three abstract films in which light patterns and geometrical forms are synchronized to music. Titles of these sound subjects are *Rhythm in Light*, *Synchromy No. 2* and *Parabola*.

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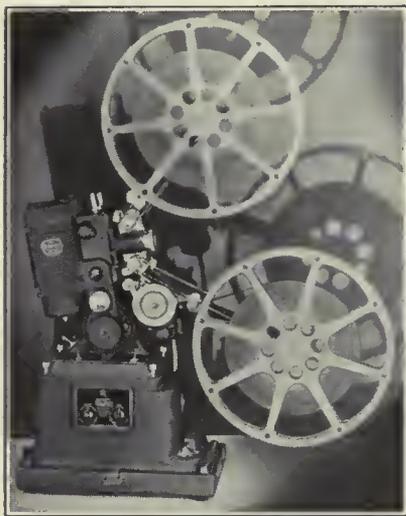
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230 S. WABASH, DEPT. 54 CHICAGO, U.S.A. (EST. 1899)

AMONG THE PRODUCERS *Where the commercial firms announce new products and developments of interest to the field.*

Ampro Announces New Projector

Ampro now extends its line with a new, A. C. operated sound-on-film motion picture projector with a 750 Watt lamp projection. This new model "U" is said to have unusual power, having an amplifier output of 15 watts undistorted (30 watts maximum) together with a 12 inch permanent magnet field speaker. It is designed for classroom instruction, auditoriums, industrial sales work, and home entertainment where maximum illumination and performance are required. It is light, compact, portable and is housed in two easy carrying cases — projector with a amplifier in one case, the speaker in the other.



The New Ampro Model "U"

Embodied in Model "U" are several new innovations such as a Speaker-Hiss Eliminator which enables the operator to obtain full volume without hiss even at low voltage; and an Amplifier Signal Light which indicates when amplifier is on and also designates location of volume and tone control knobs on the amplifier when rooms are darkened. The Model "U" does not replace any present Ampro model. It is offered to meet the need for a powerful A. C. operated projector where D. C. is not required.

Objectives of DeVry Visual Conference

The conference council composed of L. W. Cochran, director, L. A. Hawkins, International Harvester Co., Mrs. W. H. Ross, State Chairman, Illinois Congress of Parent-Teachers, Miss Amelia Meissner, Curator, Educational Museum, St. Louis Public Schools, under the direction of Mr. A. P. Hollis, in a recent meeting outlined the objectives of this year's conference. The dates set for the conference are to be June 20-23 inclusive, and the place—Francis W. Parker School in Chicago.

It was decided that this year's conference is to embrace a more extensive showing of worthwhile industrial and educational films; further, that all films to be exhibited before conference groups, this year, are to be previewed before exhibition and judged as to the acceptability for educational purposes. Films will be limited to shorter productions than formerly, in order to permit more time for analysis and discussions, both preceding and following film showings.

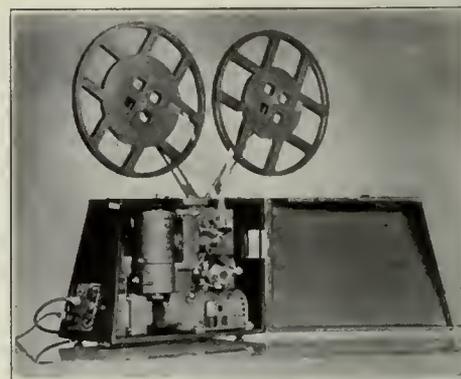
Improvements in the Leica Camera

The new Leica Camera, Model G—1938, produced by E. Leitz, Inc., New York City, offers a newly designed viewfinder and rangefinder system through which the eyepieces of these two units are placed closely together. This enables the user to change from rangefinder to viewfinder with literally a flick of the eye, permitting extremely fast action in making pictures and eliminating change of position of the camera once sharp focus has been established through the use of the rangefinder. The method of placing the rangefinder and viewfinder with eyepieces closely together retains a separate magnified rangefinder image, making focusing quick, simple, and accurate. The camera is still the same size.

Low Price Victor Sound Projector

With the announcement of the new "All-in-One" Model 33 Animatophone, Victor Animatograph Corporation, Davenport, Iowa, introduces a 16mm. sound projector which is claimed to provide quality projection, and sound reproduction, at an attractively low price. Although the machine is the smallest so far introduced, it is said to produce an amazing quality of sound with output sufficient for audiences of up to approximately 250-300 people, when used in a room of appropriate dimensions.

The model comes equipped with a 500 watt lamp, 2" Fl. 85 projection lens, and hand rewind. A deluxe model with motor rewind, 750 watt lamp, and 2" Fl. 6 lens will also be available. A standard feature is an input jack for plugging in a high impedance microphone for announcements, or a phonograph turn-table for amplification of phonograph recordings.



"All-In-One" Victor 33

A unique feature of the Model 33 is that it assembles into one compact unit for transporting. For operation, the main unit sub-divides into three integral parts. It incorporates a number of the outstanding Victor features such as automatic film protection device, the multiple-wall lamp house with super-efficient ventilation, and the easy-to-clean swing-out lens mount, and keyed-in-position sound system.

Victor especially emphasizes the fact that the Model 33 is not intended for auditorium use. It is adequate for the home, classrooms, and moderately sized as-

sembly rooms, but for large assembly rooms and auditoriums, the larger 10 watt, 15 watt, and 30 watt models of the Animatophone should be used.

Royal Midget Tripod Ready

Central Camera Company, 230 South Wabash Avenue, Chicago, Illinois, has brought out a Royal Midget Tripod, created in response to the demand for a sturdy midget tripod for table use. The new device is constructed to hold the heaviest cameras at all levels from the very table top itself to 13 inches. It comes equipped with tilting top.

A Bausch and Lomb Optical Achievement

A new photographic lens, called the Metrogon, which enables a single photograph taken straight down from an airplane to show three times as much area as has previously been possible from the same altitude, has been developed by the Bausch & Lomb Optical Co.

The importance of the lens in aerial photography and mapping work was explained by company engineers who said it had previously been necessary to fly higher in order to cover more ground but that the new Metrogon fitted to the camera, a plane can photograph three times as much ground without flying so high as has been necessary with the average lens previously used. Thus haze and other factors introduced by high altitude, no longer prevent sharpness and accuracy in aerial mapping.

Some Teaching Tragedies

(Concluded from page 133)

his answer by saying "a piece of stick shaped something like a lead pencil." Then I said, "what is the piece of stick shaped something like a lead pencil for?" He thought for a moment and then answered: "I think it is used for lollipops." A sad commentary on his elementary instruction and his personal opportunities! This man interested me very much. I talked with him at the close of the period. What he said epitomizes what thousands of teachers have told me. He said reproachfully that his elementary instruction was abstract; that in his teacher-training school, there was no visual equipment, no slide material, no collection of object materials. In his science class at high school, the teacher performed all experiments and handled all apparatus. The students were simply spectators, passive participants. This is by no means a rare case. The institutions that have adequate equipment; that provide for effective use—purposeful, organized procedure and such skillful use of visual auditory equipment and materials as will give a maximum of meaningful content to instruction—are still the exception and not the rule. What this gentleman related is one of the greatest tragedies in teaching and it applies to entirely too many elementary, secondary, and college teachers and to too many schools and colleges.

(This article was written in Hendersonville, N. C. My data are in Washington, D. C. If any institution, school administrator, or teacher wishes proof of any statements, it will be gladly furnished upon application to the editor in charge of this department.)

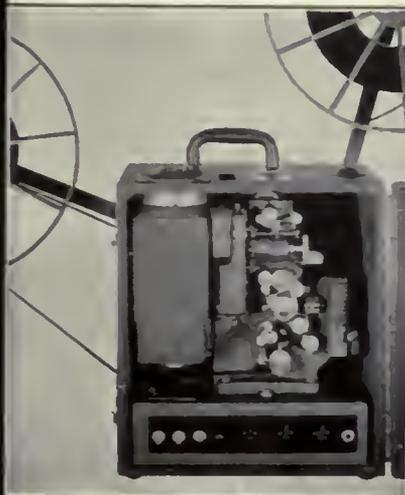
SEES ALL—PLAYS ALL UNIVERSAL 16 MM SOUND PROJECTOR

1+1=2



New All-Purpose Model

Now, for the first time, an ALL-PURPOSE 16 MM Sound Projector is offered to you. Completely flexible for the varied demands of classroom and auditorium



Adjustable as easily and as quickly as your radio to tone quality for small group work but with plenty of built-in reserve power for large audiences. Clear, steady image projected to any desired size. No complicated threading. Easy on film. Requires no trained operator. Handsome modern case design. Can also be used for silent films. A Universal comes to you complete, ready to operate. No extras to buy. May be purchased on the Universal Budget Plan. See your dealer or write for further details to

Universal Sound Projector

Division of
SENTRY SAFETY CONTROL CORP.

1921 Oxford St., Phila., Pa.
Show Room — 1600 Broadway, N. Y. C.

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films
 (A) Discriminating Adults (Y) Youth (C) Children
 Date of mailing on weekly service is shown on each film.
 (The Film Estimates, in whole or in part, may be reprinted
 only by special arrangement with The Educational Screen)

Adventures of Tom Sawyer (Tommy Kelly, Jackie Moran, Ann Gillis) (UA) Elaborate Technicolor screening of Mark Twain classic, with relative emphasis on episodes much changed for theatrical effect. Expertly done. Most pleasing to those knowing book least. Strong in spots. 3-29-38

(A) (Y) Very good (C) Unless too strong

Bluebeard's Eighth Wife (Gary Cooper, Colbert) (Para) Lively, hilariously improbable farce-comedy of super-rich, queer American who stumbles upon French girl in Riviera department store for his eighth wife. Amusing, non-suggestive complications follow, and they wrangle through to happy ending. 4-5-38

(A) (Y) Very good of kind (C) Doubtful interest

Bulldog Drummond's Revenge (John Howard, J. Barrymore) (Para) Hectic thriller of London-Paris chase, by auto, ship and plane, after stolen suitcase of new super-explosive, including murders, labored comedy and dull romance. Too much noise, darkness, greswomness and clumsy narrative. 4-5-38

(A) Mediocre (Y) Perhaps (C) No

Change of Heart (Gloria Stuart, Michael Whalen) (Fox) Rich, breezy, bad-tempered husband drives charming, devoted golf-champion wife to leave him. Golf-playing rival threatens the marriage till husband has change of heart and plots golf. Engaging caddie and dog are chief plot movers. 3-22-38

(A) Amateurish (Y) Not the best (C) No

Crime of Dr. Hallet (Ralph Bellamy) (Univ) Heroic doctor in Sumatra jungle laboratory seeks needed serum from monkeys. Assistant finds clue, but dies by self-inoculation. Hero takes his name and forges signature to finish work for him. Builds respect for research and sacrifice. 4-5-38

(A) (Y) Good of kind (C) Hardly

Dangerous to Know (Tamiroff, Anna May Wong) (Para) Tamiroff does expert smooth sinister role as arch-gangster who dominates city government and, by framing hero, is on verge of winning social, on top of financial and political supremacy. But his adoring "hostess" proves highly melodramatic nemesis. 3-22-38

(A) and (Y) Strong thriller (C) No

First Hundred Years (Montgomery, Bruce, William) (MGM) Artificial yarn of devoted married pair. He makes only \$15,000 a year, but his wife makes money. Shall they live in New York with her, or New Bedford with him? Interlopers, booze, divorce trial, coming baby—and happy ending. 3-29-38

(A) Depends on taste (Y) Doubtful (C) No

Girl of the Golden West (MacDonald, Eddy) (MGM) Long, elaborate screening of the Belasco classic with fine western settings, delightful music and song, and picturesque characters. Romantic melodrama with too many interpolations to be very dramatic. Better acting by the cast than by the stars. 3-22-38

(A) and (Y) Very good of kind (C) Beyond them

Hawaii Calls (Bobby Breen, Ned Sparks) (RKO) Feeble story of two little stowaways, San Francisco-Honolulu, naval plans, spy ring—but mainly series of old familiar Hawaiian customs, costumes and backgrounds, with much singing in Bobby's peculiar sentimental, undulating, nasal tremolo. 3-29-38

(A) Hardly (Y) (C) If it interests

Jezebel (Bette Davis, Fonda, Brent) (Warner) Tragic, tensely interesting role by Bette as wilful society belle of old South. New Orleans of 1852 lives again. Fine restraint in tempo and diction. Sets, acting, direction of the best, but "plague" footage is over long. 4-5-38

(A) Notable (Y) Mature (C) Beyond them

Judge Hardy's Children (Lewis Stone, Mickey Rooney) (MGM) Fine old country judge, called to high-paid job in Washington, gets self and family badly tangled with lobbyists. Loud, rowdy, overacting son steals picture with his girl-kissing prowess and makes "culture" the butt of comedy. 3-29-38

(A) Perhaps (Y) (C) Dubious taste and effect

Kathleen (Sally O'Neill and Irish cast) (Made in Ireland) Authentic Irish atmosphere, backgrounds, characters and dialog make interesting this domestic comedy and romantic melodrama. Heroine must choose between singing stavedore and wealthy young landowner. Typical Irish songs and dances. Picture technique fair. 3-15-38

(A) (Y) Fairly good (C) Little interest

Little Roughneck (Edith Fellows, Leo Carillo) (Columbia) Raucous, charmless comedy about brazen brat and her nuisance mother, supposedly funny but merely impossible, trying vainly to crash the movies until crude but soulful Spanish peen humanizes the girl. Carillo's good role hardly atones for the rest. 3-15-38

(A) Poor (Y) No (C) By no means

Love on Toast (Stella Ardler, John Payne) (Para) Fluffy blonde heroine, with all the ideas, rules big circle of distinguished, white-haired Soup Company directors. Starts vote contest for "Mr. Manhattan" to marry "Miss Brooklyn"—but he marries heroine! Cake throwing and slapstick "chase" furnish most of action. 3-22-38

(A) and (Y) Absurd (C) No

Mad About Music (Durbin, Marshall, Patrick, Treacher) (Univ) Smooth, appealing, finely acted story of half-orphan heroine, hidden in Swiss school by movie-star mother, but she invents and discovers a father. High in character values, charming singing, and real human comedy. 3-29-38

(A) (Y) Very Good (C) Good

Merrily We Live (C. Bennett, Aherne, Mowbray, Burke) (MGM) Uproarious slapstick in high life, done by experts. Billie Burke, as nitwit mother in rich home, sets pace. Supposed tramp, taken in as chauffeur, brings endless complications. Thoroughly laughable romantic farce-comedy of daft family. 3-15-38

(A) Very good of kind (Y) (C) Very amusing

Midnight Intruder (Louis Hayward) (Univ) Destitute hero breaks into empty home where chance enables him to pose as long-estranged son. Later he saves real prodigal from disgrace and restores him to family. Some human interest and entertainment value but incredible and ethics dubious. 3-29-38

(A) Hardly (Y) Doubtful (C) No

Missing Witnesses (John Litel, Dick Purcell) (Warner) Based on recent Dewey investigations, shows brutal racketeer methods, intimidation of witnesses who refuse to testify, etc. Some interest, but situations often unconvincing, and brazen hero and feeble heroine add little story value. 3-15-38

(A) Perhaps (Y) Perhaps (C) No

Over the Wall (Dick Foran, Litel, Travis) (Warner) Inherently decent tenor-singing Irish hero, with hair-trigger fists, is framed by cheap fight-racketeers and jailed. Fine Chaplain cures his riotous instincts, makes him radio-singer, and heroine proves his innocence. Warden Lawes story. 4-5-38

(A) Perhaps (Y) Fairly good (C) Doubtful

Quick Money (Fred Stone, Berton Churchill) (RKO) Heroic, honest mayor defeats efforts of con-man (smoothly done by Churchill) to swindle small town. Mildly amusing little story, with considerable human interest and elementary humor, but too poorly acted to be much worthwhile. 3-22-38

(A) Poor (Y) Hardly (C) Hardly

Rebecca of Sunnybrook Farm (Shirley Temple) (Fox) Title misleading. Worthless uncle exploits Shirley's singing (Sic!) on radio, but she tricks him out of contract to delight and profit of her real friends. Poor use of real little actress in a story to publicize radio and radio technique. 3-15-38

(A) (Y) Fairly good (C) Amusing

Romance in the Dark (Boles, Swarthout, J. Barrymore) (Para) Senseless title for lavish musical with fine music, carefully sophisticated situations, and over-complicated plot. Two lady-killers rivals for two women. Bristles with absurdities in character and action. Much comic effort with little spark. 3-15-38

(A) Depends on taste (Y) Sophisticated (C) No

Sally, Irene and Mary (Alice Faye, and others) (Fox) Stale, flat, noisy and unprofitable in music, lyric and dialog. Alice Faye is a queer star, Jimmy Durante has learned nothing, and Fred Allen better stick to radio. Glass smashing and show-boat rioting serve as features. 3-22-38

(A) Stupid (Y) Poor (C) No

Sergeant Murphy (Ronald Reagan, Mary Maguire) (Warner) Engaging hero follows beloved horse sold by father into army, and insures horse's misbehavior. Both out of army, hero trains the fine animal to racetrack victories, wins English steeple-chase and Colonel's daughter for finale. 3-22-38

(A) and (Y) Pleasing (C) Very good

Sh! The Octopus (Hugh Herbert, Allan Jenkins) (Warner) Laugh-and-scare thriller melodrama of the craziest, laid in abandoned lighthouse—thick with shivers, suspects, dumb detectives and octopus tentacles. No sense to plot or action. When trite ending comes, nobody cares much. 4-5-38

(A) Elementary (Y) Perhaps (C) No

Ski Battalion (Russian Lenfilm, English titles) (Amino) Confused, lumbering propaganda about heroic Red company, on skis and in white robes and hoods, fighting to save far-north Russian province from White army invasion. Mostly solid, benighted folk in brutal, primitive action. 4-5-38

(A) Dull (Y) (C) No value or interest

Slight Case of Murder (E. G. Robinson, Ruth Donnelly) (Warner) Hilarious murder farce that burlesques everything, even police. Beer baron turns proudly legitimate after repeal. Toughest boy character to date. Four corpses juggled around. Crudity, greswomness made funny in gangland English. 3-15-38

(A) Absurd (Y) No (C) By no means

Squadron of Honor (Don Terry, Mary Russell) (Columbia) Artificial concoction glorifying American Legion. Denied Legion support for defeating legislation on arms control, underworld big shots frame Legion's commander for vicious murder. Entire Legion deputized to seek and apprehend real killers. 3-15-38

(A) Hardly (Y) No (C) No

Thank You, Mr. Moto (Peter Lorre) (Fox) Quite greswome mystery melodrama of many murders. Incredibly super-clever detective (Lorre), in violent climax, must himself kill murderer who has stolen priceless ancient scrolls showing location of buried treasure. Chinese sets good. 3-29-38

(A) Depends on taste (Y) Better not (C) No

The Kid Comes Back (Wayne Morris, Barton McLane, June Travis) (Warner) Healthy, wholesome Texas cowboy slugs away, in ring and out, to lose championship but win girl. Blatant dialog by cheap roughnecks, fight game at its lowest and crudest, with little boy admiring it all. 4-5-38

(A) Stupid (Y) No (C) No

Walking Down Broadway (Claire Trevor, Whalen) (Fox) Hectic acts and deafening dialog by six chorus-girls show how gay life can be for cheap people. Accident, two-timing, suicide and murder thin out the group till the one with a brain marries the hero. Smartaleck raucousness. 3-29-38

(A) Cheap (Y) No (C) No

Wife of General Ling (Griffith Jones) (Gai-mont-British) Strong, suspenseful thriller, well-acted sinister roles, rather loosely-knit action. Venomous Chinese War Lord, posing as merchant and smuggling arms across British territory, pits his cunning against secret-agent hero, and loses in final grim climax. 3-22-38

(A) and (Y) Strong thriller (C) No

"SPINNING SPOKES"

One snappy 16 mm silent reel on
BICYCLE SAFETY

THE MARION STUDIO

4106 N. 24th Place

MILWAUKEE, WISCONSIN

News and Notes

(Concluded from page 127)

64% own stereopticons; 42% own silent projectors; 37% own sound projectors; 21% own both sound and silent.

65% have facilities for darkening classrooms—from one room only to every room.

36% own slides; 39% own film strips; 13% own silent films; 4% own sound films; 3% own both sound and silent films.

41% rent silent films; 16% rent sound films; 43% rent both.

61% rent from 1 to 50 films a year; 39% rent from 50 to 500.

39% use instructional films only; 9% recreational only; 52% both.

23% use films in elementary grades only; 25% in grades 1 to 12; 17% in Junior High School only; 35% in High School only.

Of films used, 33% are Science, 17% Geography, 17% History, 10% Health and Hygiene, 6% Social Studies, 4% Literature, 4% Travel, and the remaining 9% cover English, Safety, Nature, Music, and Vocational.

For all visual materials, 46% rent; 44% use "free"; 8% purchase; 2% lease.

47% show a film more than once; 34% once only.

62% hold auditorium showings (60% monthly, 32% weekly, 5% semi-weekly, 3% daily).

About 70% prepare classes in advance of showing; about 75% have discussion or activity, or both, following the showing.

59% have teacher comment during silent films; 15% use sound films as silent, with teacher comment; 49% interrupt showings for discussion.

32% have teachers who have taken visual instruction courses.

34% designate visual aids in course of study; 19% have Directors of Visual Education.

48% finance work through Board of Education; 18% by public showings; 13% by student activity; 13% by general school funds; 8% by student tax; (and 32% can expect financial aid from the PTA).

Of owners of sound projectors, 38% use phonograph attachment for music appreciation and speech classes; 50% use public address system for lectures and announcements.

48% of projector owners advise production of both sound and silent films; 45% sound only; 7% silent only.

31% have 16mm motion picture cameras.

The above, and much more material, together with a complete copy of the Questionnaire used on the 10,000 mailing, may be had without charge in an 18-page type-written form by writing direct to Victor Animatograph Company, Davenport, Iowa.

N. L. G.

"1000 AND ONE FILM DIRECTORY"

This standard, indispensable film reference source appears this year in enlarged format, includes more films than ever, more convenient than ever to use. OVER 4000 FILMS for education and entertainment, elaborately classified according to subject with full information given on each film—whether 16mm or 35mm silent or sound, title, number of reels, synopsis of contents, sources distributing the films (240 such sources listed!) and prices charged. Price **75c.**

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An important contribution to the literature of the visual field. Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph.

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SIMPLE DIRECTIONS FOR MAKING VISUAL AIDS.

By Lillian Hethershaw, Drake University, Des Moines, Iowa.
Directions for making Etched Glass Slides, using Colored Pencils; Etched Glass Slides, using Colored Inks; Paper Cut-out Lantern Slides; Ceramic Lantern Slides; India Ink Lantern Slides—Still Films; Cellophane Lantern Slides; Photographic Lantern Slides; Film Slides; The Electric Map; Spatter Work; Pencil Outlines of Leaves; Carbon Copies of Leaves; Leaf Prints from Carbon Paper; Blue Prints; Sepia Prints.

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Educational Screen
64 E. Lake St., Chicago

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A Trade Directory
for the Visual Field

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1425 Williams St., Denver, Colo.
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City
- Cine Classic Library (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 134)
- Eastin 16 mm. Pictures (6)
Davenport, Ia.
(See advertisement on page 134)
- Eastman Kodak Co. (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Co. (1, 4)
Teaching Films Division
Rochester, N. Y.
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures System, Inc. (6)
330 W. 42nd St., New York City
- Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
- Films, Inc. (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
- Garrison Films (3, 6)
1600 Broadway, New York City
(See advertisement on page 127)
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc. (6)
35 W. 45th St., New York City
(See advertisement on page 133)
- Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton's Travelettes (1, 4)
7901 Santa Monica Blvd., Hollywood,
Cal.
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
(See advertisement on page 133)
- J. H. Hoffberg Co., Inc. (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 130)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 134)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 130)
- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Visual Instruction Supply Corp. (6)
1757 Broadway, Brooklyn, N. Y.
(See advertisement on page 134)
- Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
- ## MOTION PICTURE
- ### MACHINES and SUPPLIES
- The Ampro Corporation (6)
2839 N. Western Ave., Chicago
(See advertisement on page 114)
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co. (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 135)
- Consolidated Theatre Supply Corp. (5)
1600 Broadway, New York City
(See advertisement on page 130)
- Eastman Kodak Co. (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Herman A. DeVry, Inc. (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 110)
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
(See advertisement on page 133)
- Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 131)
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 130)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)
- RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 129)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
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228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
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- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 113)
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131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
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1819 Broadway, New York City
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- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 132)
- Teaching Aids Service
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(Slide-making Material)
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- Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 127)
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REFERENCE NUMBERS

- (1) indicates firm supplies 35 mm. silent.
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- (3) indicates firm supplies 35 mm. sound and silent.
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NUMBER 5

IN THIS ISSUE

*The Guidance Labora-
tory Production at
Teachers' College*

*The Development and
Needs of Visual Aids in
Chemical Education*

*Visual Aids in Teaching
Certain Elements of
Critical Thinking*

*(Conclusion of Proceedings of
Department of Visual
Instruction Meeting)*

*Summer Courses in
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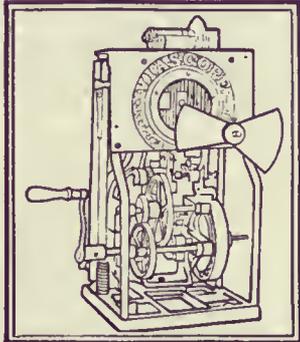
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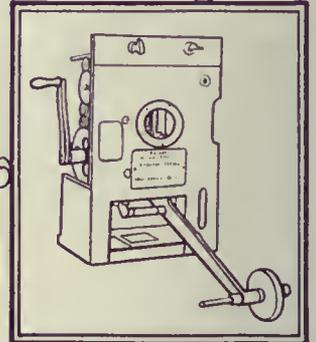
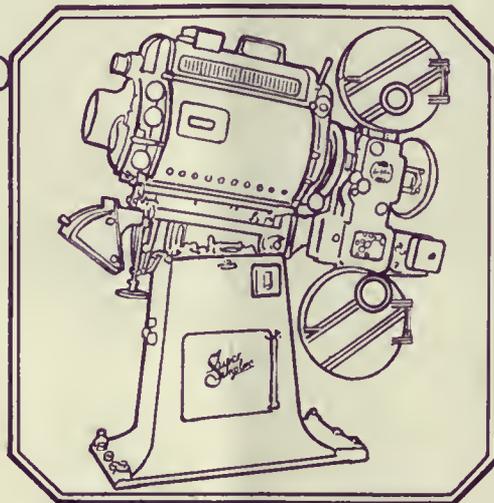
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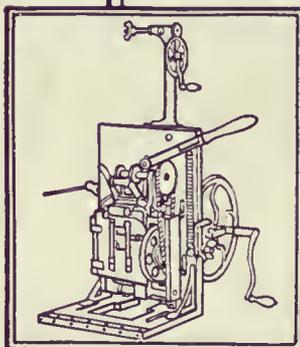
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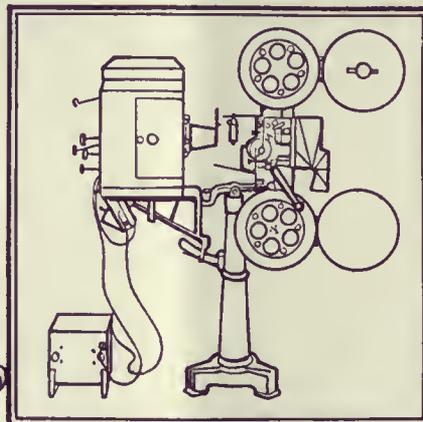
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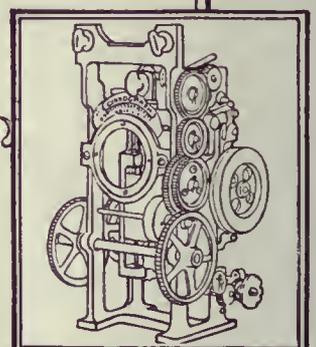
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The EDUCATIONAL SCREEN

MAY, 1938

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NUMBER FIVE

Contents

The Guidance Laboratory Production at Teachers' College. Edward Anhalt.....	147
The Development and Needs of Visual Aids in Chemical Education. Louis A. Astell.....	150
Visual Aids in Teaching Certain Elements of Critical Thinking. Louis M. Heil.....	153
The Department of Visual Instruction Edgar Dale	155
Summer Courses in Visual Instruction.....	157
Clark and the Northwest Territory—In Hand-Made Lantern Slides. By Ann Gale.....	160
News and Notes Conducted by Josephine Hoffman.....	162
School Department Conducted by Wilber Emmert.....	164
Current Film Releases.....	168
Film Estimates	170
Among the Producers.....	171
Here They Are! A Trade Directory for the Visual Field....	172

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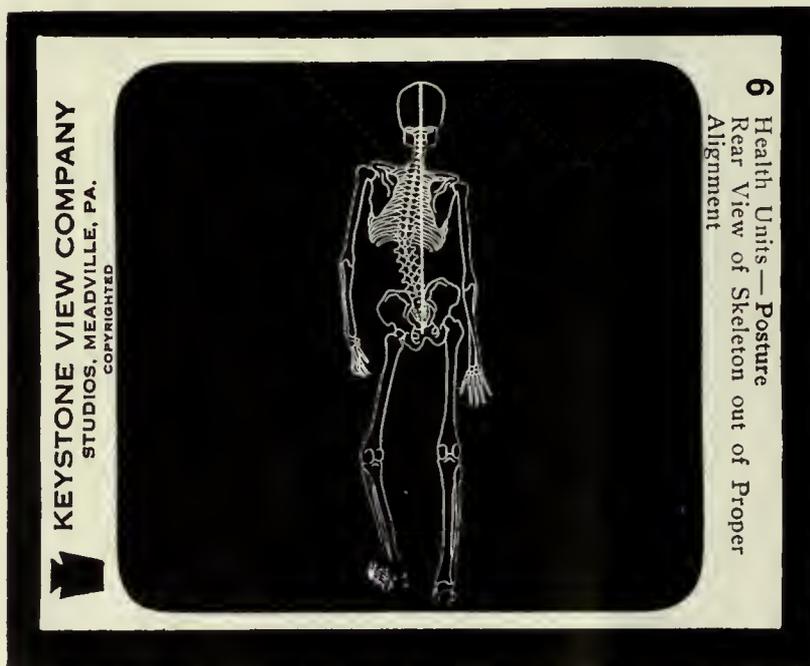
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The Guidance Laboratory Production at Teachers' College

Technical problems arising in the local production of educational films, and their solutions

By EDWARD ANHALT

Educational Cinematographer, New York City

THERE is little doubt that *Problem Child*, the first ambitious film attempted at Teachers' College, Columbia University, was a valuable experience, if nothing else. The completed portions of the film are now in use as part of the psychology curriculum and, as such, have some limited immediate value. For the most part however, the production was conceived as an experiment to test the feasibility of producing a talking film with a somewhat complex plot and theme outside the studio. I wish, therefore, to tell the story of its production for the guidance of those who may enter upon similar or related projects in time to come.

To begin with, the College possesses elaborate and expensive 16 mm sound motion picture equipment. It is beautiful mechanically, but the product of several different manufacturers who, because they themselves are still in the experimental stage, have not co-ordinated with each other. Thus, I found the camera too noisy for the recorder, and the microphone multi-directional in pickup, recording background reverberations and street noises with a resounding clatter. Moreover, the wiring in the lights, unused to the sort of treatment received in more or less professional work, burned, fizzed and shorted with unflinching regularity. The camera possessed none of the primary requisites of the professional camera: silence, ability to change focus and exposure while in operation, accurate and clear parallax or finder-lens, co-ordination in closeups, and the capacity to move or truck smoothly as on a crane.

The latter factor was the springboard from which the picture jumped. Since I criticised the somewhat static camera technique of the College's first tests with the equipment and was asked for constructive suggestions, I offered the idea of a psychological theme using advanced (that is, advanced for the educational film) technique and pleading that the sound-film in its educational usage should go beyond the mere recording of interviews, teaching techniques, etc.

Between Psychology Intern James Dunlap, Scenarist Edna Thompson and myself we developed a script, running seventy minutes or so, involving some fifty child actors, exteriors, classroom, home and laboratory sets and the presentation of a theme revolving around the subconscious hatred of men on the part of a mother, causing her overtly to resent her son as a substitute for her conventional inability to express resentment of her husband. I

asked for some thousands of dollars, for additional equipment and the full co-operation of anyone who might conceivably help in meeting the necessities of the script. We received several hundred dollars and permission to make one reel to "see what will happen".

Dr. Esther Lloyd-Jones, the Director of the Laboratory; and myself then wrote a shooting script and after some truly Herculean efforts on the part of the former rounded all the pre-shooting details into shape. Meanwhile Dr. Leta Stetter Hollingworth had become interested, and through her good offices and those of Superintendent Greenberg of the Board of Education we secured the Board's permission to use the children of the Experimental Classes for Rapid Learners at Speyer School, P.S. 500, for our cast and the school itself as a set.

Once this was established we found the commercial and governmental agencies necessary to our story extremely co-operative. I began to shoot the first sequence, a montage of urban life surrounding the petty bourgeois background in which we had placed Johnny, the problem boy. This culminated in a montage of children of varying national and class backgrounds waking, getting dressed, etc., and walking to school through the city streets. These scenes were taken in my own home, rearranged to represent seven different locales.

In directing the children I explained the more subtle psychological factors of a sequence quite fully. This procedure is radically different from the conventional technique of directing child actors which often uses a totally foreign and unrelated stimulus to produce the desired reaction more or less mechanically. Of course, the children in this case were extremely gifted (130-200 Stanford-Benet), but I am certain from a few brief hours spent in directing children of sub-normal intelligence that frankness and a thorough explanation of what is going on will produce the best results.

On screening the rushes the sound was so impossible that it was decided to post-synchronize. I rewrote the script to omit front angles, revealing lip movements and high key face lighting whenever possible. Also I constructed a dolly or moving truck mounted on miniature balloon tires to get a smoother moving camera.

Following the montage Johnny appears bidding his mother goodbye in the presence of his sister who is obviously the favored child, and fighting with both for the possession of a toy gun to which he

clings throughout the film as an escape symbol. Our greatest difficulty in photographing this scene arose out of the fact that we could obtain only D.C. current and therefore could not use the A.C. camera motor. I had to resort to spring winding and this caused a jumpiness between the stops and starts that were necessary for rewinding. Various motors and transformers should be on hand for such exigencies.

The sequence was completed with faults common to non-studio production. Necessarily awkward lighting conditions caused a flatness; lack of make-up rendered the faces somewhat chalky and the already mentioned inability to focus while shooting caused the actors to blur as they moved in and out of the set focus.

Johnny's difficulties are further delineated in his walk to school. He remains apart from the other children. His solitary play habits demonstrate a tendency toward withdrawal and introversion. These scenes were the most successful of the picture; however, our difficulties may be noted in passing; the lack of time allotted to us necessitated our taking a dozen or so children on location at once. These together with the cameras caused large crowds to collect delaying our work considerably. This will occur almost any time cameras are set up. It is essential to have a large enough staff to guard against such interference. Also, cracks in the pavements caused our dolly to jump frequently ruining many moving shots. A well sprung professional dolly is necessary for this type of work. Commercial producers will lay rails and shoot from a kind of flat car to achieve smoothness over rough ground.

The next sequence carries Johnny into the classroom. Here he shows nervousness and fear of being called on during the lesson, and resorts to the trick of throwing his pencil on the floor and pretending to look for it in order to escape notice. During the entire sequence I kept the camera largely on Johnny, cutting in short shots of the teacher somewhat maliciously savoring his discomfort, the other pupils laughing at him and his sister snubbing his seeming stupidity. This had the double effect of showing Johnny's reactions to the others more or less continuously and permitting the then unrecorded sound track to tell what was going on without showing faces and lips and running the danger of poor synchronization.

As the scenes progress the shots become shorter until Johnny's complete inability to read his lesson and his finally bursting into tears are the only lengthy shots between distorted flashes of sister, mother and daughter in threatening attitudes.

In these last scenes there were serious difficulties. One, children would forget or find it impossible to wear the same clothes on successive shooting days. This caused a number of so-called 'movie-boners.' Two, it was impossible to light the large classrooms adequately or obtain a wide enough camera angle for inclusive shots. Three, the lights became unbearably hot and one actually exploded. This put a stop to the use of lights altogether and

the remaining scenes were taken without artificial illumination.

The end of the school semester and other commitments of mine ended work on the picture here. If the rest of the story, which, briefly, is the therapy performed on both Johnny and the mother by the Guidance Laboratory and the psychological situation shot from the distorted viewpoints of both subjects, is to be completed it will be necessary to do all of the earlier sequences over, since many of the children and the mother have moved to other parts of the country.

It is probable, however, that this will be postponed until greater funds are available. Meanwhile.



A scene from "Problem Child"

The Advanced School of Education at Teachers' College has purchased from me a script for a documentary film on the new developments in the Activity Program in the schools. This would indicate that for the present, production will be in more established channels but from the experience just related there can be little question that the field of the story film and the talking story film is completely open to progressive educators.

The script in question is given in full below. It was written for the purpose of amplifying the concept of the Activity Program in the minds of Teachers and Teachers in training. Production will begin at the Speyer School, the experimental unit conducted jointly by Teachers College and the Board of Education of New York City, when further funds are available. In addition to the indicated score and effects a commentation, largely intended to clarify spatial and temporal transitions, may be utilized.

As distinguished from a scenario, which may be described as a thematic or ideologic statement together with a very general continuity, this is a 'shooting script'—a shot by shot description together with camera directions and actor movements. (For those not familiar with technical film terms a *pan* is a movement of the camera on its own axis; A *truck* or *dolly* is a movement of the entire camera along a path previously marked, generally following moving action; A *zoom-pan* is a fast swinging move-

ment culminating in a sudden stop; A *dissolve* involves the appearance of one scene beneath another before the latter has completely faded out).

Shooting Script For A Projected Film

1.) *Fade in*. The music room. *Near view* of music teacher leading. Children in foreground. *Fade in* of singing: Come Take A Ride in My Flying Machine.

2.) *Wide angle* of class singing.

3.) *Slow pan* along row of children singing.

4.) *Dissolve* from last child singing to same child, gazing intently down and moving arm in writing or painting. *Truck back* revealing his absorption in aviation mural. *Truck along* showing four others working with him on mural spread on floor.

5.) *Truck closeup* of Mural. The children are putting the finishing touches on it. It is the first section.

6.) *Move* with second section as it is raised by hands to blackboard. *Truck back* to view it as hands tack it up.

7.) Third section on wall. *Truck* its length and *truck slowly back* to children sitting in attitudes of intense absorption. *Pan to closeup* of boy in helmet stepping from chair in reenactment of Lindbergh's landing at Le Bourget. Boy: "I am Charles A. Lindbergh." He pulls a letter from his pocket. *Truck to near view* as he hands it to boy in top hat, supposedly Ambassador Herrick.

8.) Class, some standing, give cheers. *Zoom-pan* to Lindbergh and Herrick shaking hands. Cheers fade. *Fade*.

9.) Book opening. Child's hand extracting news clipping.

10.) Ditto.

11.) Ditto.

12.) *Medium view*. Teacher motions to child to come up.

13.) *Low angle*. Child stands and walks forward.

14.) *Front view*. Child reading from clipping. "The world's non-stop flight record was broken yesterday by....., starting from..... and landing at..... The distance covered.....kilometers." *Pan* to teacher as he stops. Teacher: "How many miles is that children?"

15.) Class waving hands.

16.) *From behind*, child at blackboard, working out the problem. Teacher's voice: "What per cent further is that than the previous record we read about? Who remembers the previous record?"

17.) First child finishes problem. *Truck back* to include second starting hers at next board.

18.) *Low angle* of child figuring on black board.

19.) *Wide angle*, class figuring on paper. *Pan up* to full black board of children. Quick *dissolve* to board covered with figures.

20.) Teacher walks into frames and slowly pulls down map of world over figures. *Dissolve* to:

20a) Girl pointing plane route on map.

21.) *Shot* of pointer crossing map. Child's voice: "First the fliers crossed Iraq here, etc."

22.) *From above* children placing airplanes on clap maps.

23.) *Near view* child at globe in front of bulletin board on which is pinned the itinerary of the non-stop flight. *Pan down* as he bends forward and removes plane on pin from globe and turns it, looking for new position.

24.) *Microshot* of plane skimming slowly over map in child's fingers. *Fade* to:

26.) *Wide angle* of class absorbed in film, projector cutting a swathe of light through center of frame. *Truck back* to screen, plane zooms into camera. *Dissolve* to:

27.) Model plane zooming into camera.

28.) *Medium view*. Child A picking it up in doorway of shop. Child B walking in next to him. A walks out of frame as we *move* with B bending to hitch the door.

29.) Pick up A walking, *pan* slightly *ahead* to his removing pliers from table loaded with tools.

30.) B at work table begins to bend down. A comes into frame and places tool on table. B comes up with incomplete air ship tower.

31. *From slightly above* four children come in doorway, splitting in different directions.

32.) *Pick up* little colored boy walking in closeup. He turns his back. *Pan up* with hands as he stretches to remove paint from shelf.

33.) *Longer view*. three other children about table. One holds object to light paint brush in hand, other points to it in discussion. Third mixing paints.

34.) *Further forward* in entrance, remaining children pour in, several in animated conversation with shop teacher.

35.) *Pan* with two children carrying heavy object through crowd of children talking and working with great energy.

36.) Teacher bending over hangar with boy who is painting. Child comes up from behind and taps his shoulder. Teacher turns around and the child comes to left. Another enters frame carrying airplane under discussion. Both begin to question teacher about it. *Slow pan* from them completely around the room over all groups. *Fade* of picture and score to:

36.) to 50.) Short *candid closeups* of individuals and groups functioning as unit. It is suggested that commentation would be most valuable here.

51.) *Last candid*, child operating plane, movement of other children in background. Commentation *fades* to score. Child works plane in accelerating tempo.

52.) *Closeup* of bell ringing.

53.) *Wide angle* of all. Teacher raises hand for stoppage and motions for the things to be put away as some turn towards him; others continuing work.

54.) Child C *from behind* casts quick look over shoulder and resumes work very rapidly.

55.) Teacher in center of clamoring group motions for stoppage to child D. *Pan down* side to child raising hand in gesture asking for more time.

56.) Tool table. Two children, A and another, place tools on it.

57.) B bends down and replaces air ship tower in chest.

58.) C stops, draws breath and admires his work.

59.) D lays down his tool and blows his nose.

60.) *Side above* aforementioned two children lifting heavy object from table and walking back through children gathering equipment together.

61.) Tool table. Hands placing tools down.

62.) Legs crowding and walking out through doorway.

63.) Brush sweeping shavings. *Pan up* and *truck away* to *long view* of child sweeping as another enters frame with carrier to pick up the refuse. *Fade* score and picture to commentation to effect that children are dismissed and leave now on an excursion to airport (life activity).

64.) *Fade in*. Children leaving school, entering bus. Door closing.

65.) *Interior* of bus; airport becomes visible.

66.) Children leaving bus, being greeted by officials.

67-85.) *Candid shots* of places visited and individual reactions and group reactions.

86.) Finally a really large plane is wheeled out and the children gather around it, asking the pilot questions, poking it, touching its surface, climbing on it, etc.

87.) The field officer gives the order to clear the runway.

88.) The children retreat.

89.) Passengers are loaded into the plane.

90.) The propellers are twirled, the motor is started, the roar is heard.

91.) The children are dwarfed considerably by the thundering plane.

92.) *Closeup* of a field officer giving all clear signal.

(Concluded on page 167)

The Development and Needs of Visual Aids in Chemical Education*

Summarizing the progress made in photographic and projection equipment, with suggestions for improvement in the use of visual aids.

By LOUIS A. ASTELL

University High School, Urbana, Illinois

AMONG the more important facts related to language and pictures, is the evidence that for sixty centuries the language of the written word has been with us. This accounts in some measure for our abiding veneration for the printed word above other types of symbols. The first book was printed some five centuries ago, while the first text book including pictures appeared some three centuries ago. It is interesting to note that the camera obscura was described by Leonardo da Vinci a century before the illustrated text book made its appearance.

The chemical process of photography, representing the basis of so much that is visual in education today, had its origin in 1837, just a century ago. The epochal work of Daguerre in Paris and Talbot in England can not be over-estimated in terms of present day developments and needs. The first motion picture machine was sold 31 years ago, and yet as Charters has pointed out, "the motion picture has reached a wider audience than print."

For the sake of clarification, I would like to assume the validity of Weber's definition of a visual aid as "The representation of an object, a situation, or relationship in either two-dimensional line or three-dimensional form, which when it accompanies language, tends to make the latter more interesting, intelligible, and impressive." Thus the stock shelf in the chemistry laboratory becomes a more efficient visual aid when the cardboard cartons are replaced by standardized and carefully labeled glass bottles wherever possible. From such shelves, students may see and associate the chemicals more readily with verbal and other symbolical ideas. It should be added, however, that no matter how well such a shelf has been developed, it will not serve efficiently as a visual aid unless teaching methods and procedures take it into full account. Efficient classroom usage calls for a thorough understanding on the part of the teacher, of the inherent possibilities and limitations of each type of visual aid.

The growth in usage of visual aids, in the more restricted sense of the term, has been phenomenal considering the economic crisis and its dire effects on the schools of the nation. The American Council on Education has shown that by 1935, there were 10,097 silent and 793 sound projectors for mo-

tion pictures in approximately 9,000 of our 280,000 public and private schools. The records of the Visual Aids Service, a central library of educational films and slides operating under the Division of University Extension of the University of Illinois, are arresting. With the beginning of the bureau's first academic year of service, 1932-1933, there were 97 bookings of 16mm. film. Five years later, the bookings for the academic year, 1936-1937 were approximately 9,000 for the same type of film.

When we stop to think of the daily use we make of pictures we soon see what an important place they have in our normal life activities. Thus we note the picture sections of the daily papers; the conspicuous role of cartoons and comic strips; the highly developed use of pictures based on researches conducted by advertising companies as a means of obtaining attention, discrimination, and memory leading directly to sales; to say nothing of the phenomenal sale of such periodicals as "Life" and the staggering attendance at the motion picture theatres even in the period of our greatest economic stress. Through sundry courses, then, we arrive at an understanding of why visual aids should have an important place in the classroom.

Significant Developments

In photography, the prediction of "lenses and films of vastly increased speed, with three dimensional screening, and with natural full color" which I made seven years ago has become more or less commonplace. Doctor Arthur D. Little reports the reduction of exposure time to a millionth of a second. Applied to chemistry, Doctor Little points to the value of such photography in obtaining useful pictures on the formation of chemical materials and then securing significant information from them, and concludes with these words: "A future of industrial usefulness is apparently in store for high-speed photography applied to time as the microscope and telescope have been applied to space."

In the field of micro-photography and projection, the recent developments have been equally amazing. Goetz and Romer, of the California Institute of Technology, have developed an apparatus suited to microcinematography of such things as the determination of the falling speed of suspended colloid

*An abstract of a paper read before the Division of Chemical Education and History of Chemistry at the Omaha meeting, April 30, 1937.

particles in an ultra-microscope, and of the growth of etch figures on crystal planes produced by electrolysis. Loveland and others of the Eastman Kodak and the Bausch and Lomb Research Laboratories have developed a 16mm. camera with a beam splitter eye-piece making it possible to observe the action and the field while the picture is being made.

Other recent developments in photography include work in metals at high heat; stroboscopic photography; cineradiography; and laminography by way of X-rays. This latter development, at the hands of Doctor Sherwood More, has been hailed as "the greatest single step ahead in diagnosis of disease since the discovery of X-rays by William Conrad Roentgen more than forty years ago." Obviously, the records from all such instruments will be found indispensable for purposes of scientific study and for teaching.

In projection as well as in photographic equipment there have been astounding improvements. Several years ago, with only 35mm. projectors from which to choose, the high cost of such equipment greatly limited its use. Today, the 16mm. equipment is rapidly replacing the 35mm. type, and increasing use is being made of 8mm. equipment.

In the field of still pictures, lantern projection for photographic work, both in black and white, and in Kodachrome, may shift with many advantages to the 2" by 2" slide. Film-slide projectors may be had in design suited to the showing of single and double frame pictures printed on 35mm. stock and so designed that the film-slide may be rotated with reference to the light source. Further, the 2" by 2" lantern slide may be used in place of the film-slide. This type of machine, incidentally, may also be had with the sound unit as an integral part and in such form is being used rather widely in sales and in other commercial work. The simplicity, efficiency, and inexpensive aspects of film-slide equipment are sure to meet with wide acceptance once the possibilities are generally understood.

A most significant idea involving the film-slide is that of making copies of books, photographed page by page, on a continuous roll of film, and stored in one fortieth of the space which the corresponding volume would require. Thus, a dozen or more libraries of the country have subscribed to a plan of the Committee of the American Library Association for filming all the British Museum library books printed in English before 1550. With special projectors designed to magnify the film image to normal book-page size, the implications for education in general are of great importance. Among these implications are the following:

- (1) Thesis material which has represented a library problem and which, heretofore, has often been inaccessible may now be reproduced from the typed copy and made available in less bulky form.
- (2) Saving in time for travel to various campuses and countries to obtain information.
- (3) Since duplicates of these compact biblio-films may be made at relatively small cost, there are material economic savings for the student.

Improved opaque projectors may be had as independent units, or in combination with standard stereopticans. The standard stereoptican will continue to serve in its province which includes the use of inexpensive or hand-made lantern slides.

In the field of 16mm. silent motion pictures, the Eastman series of teaching films represents an outstanding development in recent years. The value of these and other silent films of merit should not be lost from sight in our enthusiasm for the more pretentious sound film. The most important single source of sound films for educational use is Erpi Picture Consultants, Inc. Sound films together with the radio and the silent film or film-slide represent possibilities for an intermediate step toward television. There are many ways in which the sound film will stand as inherently suited to classroom needs. It is significant to see that we are beginning to have some examples of both silent and sound films which embody the fund of research that has been accumulating on the subject of what an educational picture should be like.

For the practical school administrator in the average secondary school situation, the question is now what it has always been, that of present expedients. The salaries of classroom teachers in many if not in most states are still under previous ranges, and in some areas they are very much below. It is obvious that we must always have teachers, and the better they are the less expensive they are in the long run. Paying for classroom teachers is a first consideration, and is a sufficient justification for recommending dependable equipment that is less expensive to maintain and to operate. In handling any equipment there are less expensive ways to be considered. As a matter of sound economy, for example, we need to avoid as far as possible the use of less expensive silent films in the more expensive sound machines.

The nature of the learner must always be taken into account regardless of the kind of aid which is used. "The planning of the learning exercise which will result in advantageous use of visual aids," says Umstatted in his text on *Secondary School Teaching*, "requires of the teacher much specific knowledge and many definite skills." But the proper use of visual aids implies a more extensive foundation than is implied by an understanding of the types of visual aids, their mechanical possibilities and limitations, and their correlation with each other as well as with the subject matter. An adequate understanding of the role of these aids implies a re-evaluation of the characteristics of the learner. To such ends. Doctor L. L. Thurstone has been accumulating evidence concerning "perceptual speed" and "visualization" as primary abilities; Doctor G. T. Bushwell, through eye-movement analyses, is able to follow the simple survey types of perceptual experience into analytical and other types of experience representing desired outcomes; and Doctor Ralph M. Barnes, through the studies of the human body in relation to "time and motion." It seems certain that as educators we may well be concerned with the learning process as it manifests itself

through both internal and external responses; with what Alexis Carroll calls, the whole personality.

Significant Needs

Textbooks, teacher training, teacher organization, and experimental studies represent four agencies through which much may be done to improve the usage of visual aids in the immediate future. Except for the lower elementary grades there appear to be few books illustrated with three-dimension or stereographic views and vitalized sketches which begin to approach Doctor Lemon's striking book entitled, *From Galileo to Cosmic Rays*. Again, authors of few books have made use of the criterion of a challenging question under each picture used for the purpose of directing the learning process or of stimulating interest and driving power necessary to aid the future citizens of the nation. Another suggestion is found in the Neurath "fact pictures," previously reported by Doctor Swartzman. Authors and publishers may profit immeasurably through improved methods of illustrations, because of the natural interest aroused in students as well as in teachers. Again, authors and publishers should adopt the standard of including in the textual material if not in the appendix, organized lists of visual and other aids specifically suited for use in connection with the subject matter involved. While this is not a simple task, it represents an invaluable teaching service.

The scarcity of teaching courses in the use of visual and other aids, except in Pennsylvania, constitutes one of the most significant needs for the improvement of classroom work. This condition of affairs over the country as a whole, with notable local exceptions, has led directly to many difficult problems in classroom usage as well as in efficient administration of visual and other related programs. It is unreasonable to hope that there will be an adequate understanding or an efficient use of visual and sensory aids, until Colleges of Education regularly train the prospective teachers in the fundamentals of such work. These courses should be of the laboratory rather than of the survey type. The problem of handling apparatus may serve as an example for consideration in such a course. The importance of this idea is illustrated through the fact that one may no more be expected to handle the various types of projectors efficiently with the basic information that is given in the average instruction book, than one may be expected to drive a new automobile through crowded city traffic on the basis of reading an instruction book.

In teacher training institutions, one of the most significant ideas involving visual aids is that of directing the observation lesson as outlined by Doctor Clark at State Teachers College in Winona, Minnesota. Doctor Clark personally directs observation of the practice teacher groups while the lesson is in progress and without disturbing the regular students. We can not hope to develop the ablest type of teacher in the time at our disposal, unless the training schools, as architectural units,

(Concluded on page 161)

Alfred W. Abrams

1866-1938

A GAIN we must chronicle the passing of an outstanding figure in this field, Alfred W. Abrams, whose notable service of 44 years in New York State education was terminated by his retirement on December 1st, 1934 at the age of 68. Thereafter he divided his leisure time between Florida and New York, but his interest in the visual field never flagged. We had letters from him from Florida. When in Albany, he frequently visited his old Department, now under Ward C. Bowen. His last visit was 12 hours before his death, which occurred in his Albany home on April 2nd, 1938.

Alfred W. Abrams was born in Cobleskill, N. Y., in 1866. He prepared at Cazenovia Seminary and graduated from Cornell University in 1891. His wide teaching experience in New York State began in rural schools. After graduation there followed a four-years High School Principalship at Liberty; another of four years at Oneonta High School; seven years as Superintendent of Schools at Ilion; and in 1906 came appointment to the State Education Department as Inspector of Schools. This long and intimate contact with the actualities of the classroom was an ideal background for his interest and influence in visual instruction. He knew whereof he spoke when he began promotion and scientific application of visual aids to classroom procedure upon appointment as Director of the Visual Instruction Division of the University of the State of New York in 1909.

Dr. Abrams was a staunch advocate of the lantern slide picture. "The mere showing of pictures has little positive educational value," he said. "One of the teacher's most important functions is training pupils to observe and interpret." Logically, then, he stressed the use of very few slides in a class period, holding each long enough for adequate observation, reaction and discussion by the class, permitting recall of previous knowledge, recognition of new facts and relationships through measurement, comparison, judgment and conclusion. He developed a state-wide plan of registering classes adequately equipped for systematic slide-teaching and therefore qualified to receive slide service.

In addition to his masterful development of the Department through 25 years, he found time to teach summer courses in Visual Instruction at Cornell University (3 summers), at Clark University, and at Massachusetts Teachers College at North Adams, Mass. His writings include a "Geography of New York State," a "World Geography" as co-author, the Visual Instruction article in the Encyclopedia Americana and numerous articles in various educational journals. At his death he had nearly completed manuscript for "Picture Expression" It should be possible to publish this final book by an acknowledged leader in visual instruction, written out of his ripe scholarship, his keen thinking and his rich experience.

N.L.G.

Question 5 should demonstrate the error of over-generalization—that it is fallacious to go beyond the evidence to predict what would happen in the southwestern part of the country on the basis of evidence concerning the southeastern part of the country.

Other principles or cautions which should be applied when making interpretations from data or evidence are:

1. Interpretations which reason by analogy in saying that things, processes, conditions, etc., which are alike in some respects must be alike in others must be qualified by indicating that the interpretation at most is nothing more than a reasonable hypothesis. Rayon production just as cotton production has . . .

2. Interpretations which refer to specific points within the data but which are not actually described by the data should be qualified—the qualification depending upon the regularity or trend suggested by the data. In 1933 the cotton thread production was . . .

3. Interpretations, either qualified or unqualified, which involve personal judgments or bias about factors or conditions within the data cannot be justified by the data alone. An example might be: "It is unfortunate that the cotton thread production in the north is falling off."

4. Terms and words which are not synonymous with those of the data should not be used in making interpretations.

5. Interpretations, either qualified or unqualified, in which the assumption is made that everything works in accord with a purposeful or pre-determined plan cannot be justified. It is impossible for the people of the United States to do anything about the downward trend of cotton thread production in the northern part of the country.

6. Qualifications must accompany those interpretations which indicate that a factor which is true of the entire data with respect to time or place, is true of a particular time or place within the data. The cotton thread production in Connecticut during the period 1921 to 1935 decreased approximately fifty percent.

Questions, similar to the five already given, could be devised to direct attention of pupils to a consideration of what is involved in the six additional principles of interpretation.

Some evidence has been presented which indicates the need for developing the ability to make accurate interpretations. Likewise, a suggestion has been made concerning an approach which may be used when a class is dealing with pictorial evidence or data. The question which follows rather naturally at this point is: How is it possible to attain evidence of a pupil's achievement in making accurate interpretations when he is dealing with various kinds of evidence or data? In a test which may be devised to obtain such evidence, a pupil should be given an opportunity to commit the most common errors which are found when the pupil is asked to make his own interpretations from data. This means that an opportunity should be given to him to go beyond the data in various ways. One such test situation is given below:

TEST ITEM A

Statements To Be Judged On The Basis Of The Evidence Presented in the Figure

1. The ratio of the used to non-used spindles in northern mills in 1935 was about one-half of the ratio of utilized mill capacity in 1921.

2. Southern cotton manufacture was greatly reduced by the depression of 1930-1933.

3. In 1929 about half of the cotton spindles in northern mills and about one-seventh in southern mills stood idle.

4. The reduction in the production of cotton cloth was accompanied by still greater reduction of workers employed.

5. The number of active spindles in northern mills showed a consistent downward trend which was not true in southern mills.

6. The use of substitutes for cotton in stockings and dresses

has resulted in a reduction in the amount of cotton cloth.

7. Many persons employed in northern mills before 1921 were forced to find other employment after that time.

8. During the period of 1921 to 1935 there was a shift in the location of cotton mills from the North to the South.

9. In 1931 there were fewer spindles in use in eastern United States than in 1929.

10. The total number of active spindles in eastern United States increased from 1921 to 1935.

11. In northern cotton mills a greater portion of available spindles is in use today than in the southern mills.

12. Less cotton was grown in the United States in 1935 than in 1921.

13. More cotton cloth is being made now in the southern mills than was made in 1929.

In the test item, the pupil is asked to judge the statements. Specifically, he is directed to make a decision concerning every statement in one of the five ways: (1) the evidence itself is sufficient to make the statement true; (2) the evidence suggests that the statement is probably true; (3) the evidence is insufficient to make a decision concerning the statement; (4) the evidence suggests that the statement is probably false; (5) the evidence itself is sufficient to make the statement false. Such a test item should include statements which require the application of those principles of interpretation which have been stated before.

After a pupil has taken a test in which he has judged interpretations made on the basis of several different kinds of data, it is possible to infer several of his more outstanding tendencies on the basis of his achievement. For example, if the pupil consistently judges probably true and probably false statements as being true or false respectively, or if he judges insufficient data statements in any way other than "insufficient data" in a large number of cases, it is possible to say that he has a tendency to go beyond the facts in judging interpretations made on the basis of certain evidence. If the pupil judges true or probably true statements as false or probably false and vice versa, one may say that he has a tendency to make crude errors in judgment; that he seems to be so confused in a problem that his judgments of statements are really opposite to that which the data suggest. In a few cases, it is found that pupils are over-cautious; that is, they do not take as full advantage of the data as they might. For example, a few pupils will judge true or false statements as only probably true or false respectively or they will judge probably true and probably false statements as statements in which there is insufficient data for making a decision. Also from the test, by observing the number of statements which should be marked as "insufficient data" which the pupil has judged to be true or probably true and the number of probably true statements which the pupil has judged as true, it is possible to infer whether he has a tendency to judge statements as having a greater tendency of truth than the data justify or—to express it in another way—whether he has a tendency to say "yes" to statements which should be qualified or seriously doubted. By observing the number of "insufficient data" statements which the pupil has judged to be false or probably false, and the number of probably false statements which a pupil has judged to be false, it is possible to infer the tendency to judge statements as having a greater certainty of being false than the data justify.

These descriptions of pupil's tendencies may serve a variety of purposes. For example, by means of this evidence it would be possible to detect those individual difficulties which a pupil seems to have in making accurate interpretations of data. The teacher could proceed with this information in various ways which may be helpful in overcoming the undesirable tendencies as revealed by the test. The tendencies revealed by the test also serve as valuable evidence when making reports to parents or prospective employers.

DEPARTMENT OF VISUAL INSTRUCTION

President's Letter

AT the New York meeting of the Progressive Education Association recently, I got a great deal of pleasure when Professor Leonard Doob put the point-blank question to arch-propagandist Edward Bernays, "Tell this crowd of teachers who your present clients are." Bernays did not tell us, but the audience reflected the distaste that millions of people in this country are feeling at being "used." They resent the fact that they can't pick up a newspaper and read about an event, as for instance, the Amelia Earhart flight from Hawaii to the United States (financed by a sugar refining organization), without wondering, "Now who started this?"

This train of thought was suggested by a questionnaire which I received the other day, apparently from some market survey group. They didn't want to know very much, merely this: *What cities and colleges have departments of visual instruction?* When you have answered this very simple question, you could take a minute or two for the second one, namely, *How far has the standardization of instructional subjects developed in film production?* There were several other questions.

Now I am not one of those persons who think that all questionnaires are an abomination, but why should an educator answer a questionnaire of this type? No final report or summary of the findings is offered. No check in payment for professional advice flutters out of the letter containing the questionnaire. Yet we may be perfectly sure that the firm making the market analysis will get a big fat fee for relaying such professional advice on to their client. Furthermore, as with the propaganda of Edward Bernays, we didn't know who the initial client is.

Nor is this merely a personal problem. Commercial groups attempt to use the Department of Visual Instruction of the N. E. A. for their own ends. We have requests to place this or that speaker on our program—speakers with commercial axes to grind. No clear-cut or arbitrary rule can be laid down in cases such as this, but it is true that a decrease in commercial emphasis at our programs meets with the favor of our members. Further, attempts to get financing through commercial companies, for carrying forward the work of the department, are met with a good deal of unfavorable criticism. Obviously, we cannot be a professional group in high standing unless this commercial emphasis is subordinated or, better still, eliminated entirely from our work.

I get a second kind of request in the mails, and I hope that some genius can devise a good simple answer for the not infrequent question (usually on a postal card), "Will you kindly send me information about visual education?" And what would you do with a request like this: "I am going to teach a course in visual aids this summer. Please send me a copy of your materials." Or, "Will you kindly send me a list of films that we can use at a Woman's Club meeting on June 22?" Then add to this scores of specific, clear-cut

questions which seek answers which our society ought to be able to give.

This suggests an extension of our function as a clearing house of information. We must remember, however, that a clearing house is a function and not a location. The *Education Index*, found now in any good educational library, clears data on all educational articles. The *Educational Screen* clears information on visual instruction. The American Council on Education, through its film project, clears certain data on films, teacher-training and the like. A book such as *Motion Pictures in Education*, published by the H. W. Wilson Company, clears digest information on articles, books, and pamphlets in this field. The excellent bibliographies at the end of each chapter in these books are another example of a clearing function.

The puzzled newcomer does not know these things. He may not have access to a good library. He can be helped by a central clearing house. Some of the information may be in inaccessible journals, foreign and otherwise. Someone must dig it out and pass it on. This, too, might well be a function of our society.

Mr. Wilber Emmert, of Indiana (Pennsylvania) State Teachers College, has just been appointed chairman of a committee on clearing-house functions. If you have any proposals that you would like to pass on to him, he will be glad to get them.

Three other committees have been appointed, namely, Editorial, Miss Etta Schneider, Teachers College, Columbia University; Teacher Training, Mr. Paul Reed, Board of Education, Rochester, New York; and Permanent Secretary and Membership, Mr. Abraham Krasker, School of Education, Boston University. These persons, too, will welcome assistance.

The summer meeting will be held in New York City, June 27, 28, and 29. An excellent program is being prepared and will be printed in the next issue of the *Educational Screen*. We hope you can be with us.

—EDGAR DALE

See Roster on Next Page

Membership expiration in April, May or June is shown by (A) (M) or (J) respectively. If such letter follows your name it is time to use the coupon.

Department of Visual Instruction
 Box 3046 University Station, Columbus, Ohio
 Gentlemen:

I hereby renew my Membership in the Department of Visual Instruction and attach a remittance for \$2 to cover dues for 1938, including magazine subscription and other services.

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Membership Roster --- May 1938 --- Department of Visual Instruction

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Greene, Mrs. R. W. Ia. (J)	Rohrer, Pauline Mich. (J)		
Gregory, W. M. Ohio (J)	Roper, A. E. Ohio (J)		
Hamilton, George Pa. (J)	Ruch, H. R. Pa. (J)		
Hansen, J. E. Wis. (J)	Schaper, Mamie Tex. (J)		
Harcastle, Richard Mo. (J)	Selden, Joseph P. Mich. (J)		
Hath, Arthur Md. (J)	Sellers, Orval E. Ohio (J)		
Haworth, Harry H. Cal. (J)	Shapiro, A. Ill. (J)		
Hayes, Mrs. D. P. Ill. (J)	Shaver, John H. N. J. (J)		
Healy, Hazel M. Wis. (J)	Sherman, H. M. Pa. (J)		
Heimanan, F. E. Pa. (J)	Short, Robert M. Ohio (J)		
Henderson, H. A. Ind. (J)	Siegel, Arthur S. Mich. (J)		
Hethershaw, Lillian Ia. (J)	Sigman, James G. Pa. (J)		
Hill, Grace A. Mich. (J)	Slauson, Virginia Ia. (J)		
	Smith, Harvey N. N. Y. (J)		

New England Branch

Austin, Scott Mass. (J)	Barnstable School Dist. Mass. (J)	Berry, Arthur J. Mass. (J)	Bettencourt, William Mass. (M)
Bickford, Gladys C. Mass. (J)	Chapman, Leland H. Mass. (J)	Christiansen, F. J. Mass. (J)	Cole, Lee Mass. (J)
Condon, Chester H. Mass. (A)	Davis, Dwight S. Mass. (J)	Erickson, Carleton W. Mass. (J)	Finklestein, Rose Conn. (J)
Fisk, Harrison S. Mass. (J)	Flannery, Charles F. Mass. (J)	Krasker, Abraham Mass. (J)	Leavitt, Lawrence G. Vt. (J)
Lyons, John H. Conn. (J)	Meyers, Samuel Conn. (J)	Moyer, Jas. Mass. (J)	Reynolds, Edward A. Conn. (J)
Roberts, Thelma B. Mass. (J)	Rummel, Paul Mass. (J)	Sargent, Theodore Mass. (J)	Sawyer, Edmund R. Mass. (J)
Smith, Howard A. Mass. (J)	Temple, Edward H. Mass. (J)	Toomey, Ursula K. Mass. (J)	Walch, Roy H. Conn. (J)

Institutional Memberships

Admin. Library, Pittsburgh Pa. (J)	American Library Assn. Pa. (J)	Chicago Ill. (J)	Board of Education, Naperville Ill. (J)
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William McGuffey H. S. Miami University Ohio (J)	Nichols Intermediate School, Evanston Ill. (J)	Noble School, Detroit Mich. (J)	Normal Community High School Ill. (J)
Pedagogical Library, Philadelphia Pa. (J)	Public Library, Cleveland Ohio (J)	Roosevelt Jr. High School, Hamilton Ohio (J)	Standard School District, Oildale Cal. (J)
State Normal University, Normal Ill. (J)	State Teachers College Libraries at Chico Cal. (J)	at Kearney Neb. (J)	at San Diego Cal. (J)
at Terre Haute Ind. (J)	State University, Exten. Ia. (J)	University of Kan. Bur. of Vis. Inst. Kan. (J)	Univ. of Hawaii, Library, Teachers College Hawaii (J)
Visual Edu. Service, Hawaii (J)	Visual Aids Com. Ridgewood Schools N. J. (J)	Visual Edu. Dept., Fresno Schools Cal. (J)	Walsh School, Summit Ill. (J)
West Texas State Teachers Coll. Lib. Tex. (J)	Wilson Teachers College D. C. (J)		

Summer Courses in Visual Instruction

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Alabama

University of Alabama, University
June 6-July 15 and July 15-Aug. 13
Photography (3) G. G. Quarles

Arizona
State Teachers College, Tempe June 6-Aug. 11
Visual Instruction (2) Dr. Frederick Ristor

California
Chico State College, Mount Shasta City June 18-July 29
Photography (2)

College of the Pacific (Stockton), Lake Tahoe Aug. 8-27
Visual Education George Eby

San Francisco State College, San Francisco June 20-July 8
Photography (2)
University of Southern Calif., Los Angeles June 20-July 29
Audio-Visual Education (2) Annette Glick Byrne
Methods of Teaching the Use and Appreciation of
Educational Films and Radio Programs (2)
Marjorie Dowling Brown

Colorado
Colorado Agricultural College, Ft. Collins June 18-July 30
Visual Education (1¾) Lloyd E. Aspinwall
Photography (1¾)

Colorado State College of Education, Greeley June 17-Aug. 13
Visual Aids in Education (3, 4) Bales

University of Colorado, Boulder June 20-July 22 and July 25-Aug. 26
Visual Aids (3) Lelia Trolinger
Education Through Motion Pictures (3) Lelia Trolinger
Photography (3) Julian M. Blair

University of Denver, Denver
Vitalizing Instruction through the Use of Visual Aids
E. H. Herrington

Western State College, Gunnison June 18-Aug. 20
Administration and Supervision of Visual Education
Philosophy and Psychology of Visual Education
Methods and Materials of Visual Education (6-8)
Mary Ann Dale

Florida
University of Florida, Gainesville, July 25-Aug. 26
Audio-Visual Education (2) William Louis Goette

Georgia
State College for Women, Milledgeville June 15-July 22
Visual Instruction (1½) L. F. Sykes

University of Georgia, Athens June 15-July 22 and July 26-Aug. 26
Visual Aids in Education (2) T. R. Wright

Illinois
College of St. Francis, Joliet June 27-Aug. 6
Visual Education Sister Mary Dolores

University of Illinois, Urbana June 20-Aug. 13
Visual and Auditory Instructional Aids (2) L. A. Astell

Western State Teachers College, Macomb June 13-July 22
Visual Instruction (4) Alvin B. Roberts

Indiana
Purdue University, Lafayette July 6-July 27
Visual Aids in Education (3) Justus Rising
Industrial Photography (3) E. J. Kohl

Iowa
Iowa State College, Ames
Visual Methods in Industrial Arts Education
June 22-Aug. 27 Prof. Fred J. Schmidt

Elementary Photography—Physics 615 June 15-July 21
Photography in Scientific Work—Physics 650

State University, Iowa City June 28-July 28
Demonstration lectures on Visual Aids
L. W. Cochran and members of faculty

(Figures in parentheses show credit hours for course, where such information has been given)

Kansas
University of Kansas, Lawrence June 7-Aug. 3
Visual Education in Elementary and Secondary
Schools (2) Fred S. Montgomery

Kentucky
University of Kentucky, Lexington June 13-July 16
Visual Teaching (3) Louis Clifton
Administration of Visual Aids (3) W. Gayle Starnes

Louisiana
State University, Baton Rouge June 6-Aug. 4
Visual-Auditory Aids in Teaching (3) J. E. Hansen
Loyola University, New Orleans
Visual Education Lucile Bostick

Maine
University of Maine, Orono
Visual Education Paul S. Miller

Maryland
University of Maryland, College Park June 27-Aug. 5
Visual Education (2) Dr. H. H. Brechbill

Massachusetts
Boston College School of Education, Chestnut Hill July 1
New Sensory Aids in Teaching J. A. Hennessey
Boston University, Boston July 5-Aug. 13
Visual Education in Nature Study (2) Earle A. Brooks
Motion Pictures in Education (2) Howard M. LeSourd
State Teachers College, Fitchburg July 5-Aug. 12
Visual Education Management (2) Carleton W. Erickson
Visual Aids in Education (2) Carleton W. Erickson

Michigan
Michigan State College, East Lansing June 20-July 29
Visualizing Instruction (3) Dr. E. L. Austin
Western State Teachers College, Kalamazoo June 27-Aug. 5
Audio-Visual Education (4) Ray C. Pellett
Photography John R. Fox

Minnesota
State Teachers College, Moorhead June 13-July 22
Visual Aids in Teaching (1) C. P. Archer
State Teachers College, St. Cloud June 13-July 22 and July 23-Aug. 27
Visual Education (4) Roland Torgerson
University of Minnesota, Minneapolis June 13-July 22 and July 25-Aug. 26
Visual Aids in Teaching (3) Ella C. Clark

Missouri
University of Missouri, Columbia June 13-Aug. 5
Problems in Visual Education (2) W. C. Bicknell
Washington University, St. Louis June 17-July 29
Visual Education (3) Alma B. Rogers

Nebraska
Visual Instruction (2) June 6-July 15 and July 18-Aug. 20

New Jersey
State Teachers College, Glassboro June 27-Aug. 5
Visual Education in Primary Grades;
Visual Education in Upper Grades and Junior High
George Wright
State Teachers College, Trenton, June 28-Aug. 6
Photography

New Mexico
Normal University, Las Vegas One week course June 13
Visual Education Anna Dale
State Teachers College, Silver City June 6-July 29
Photography (3)

New York
Alfred University, Alfred July 5-Aug. 12
Visual Education H. O. Burdick

<i>Columbia University</i> , New York	July 6-Aug. 13		<i>State Teachers College</i> , Lock Haven	June 20-July 30
Audio-Visual Aids to Instruction (2)	Dr. M. R. Brun-		Visual Education (1)	J. Ulmer Levi
Research in Visual and Auditory Education (2-4)	stetter, Prof. Fannie W. Dunn, Dr. V. C. Arnsperger		<i>State Teachers College</i> , Mansfield	June 27-Aug. 6
Laboratory Course in Audio-Visual Instruction (1)	Dr. V. C. Arnsperger		Visual Education (2)	
	Etta Schneider		<i>State Teachers College</i> , Shippensburg	June 20-Aug. 1
<i>New York University</i> , New York			Visual Education (1)	Leslie C. Krebs
Laboratory Course in Visual Aids	July 6-July 24		<i>University of Pennsylvania</i> , Philadelphia	June 27-Aug. 9
Practical Application of Visual Aids	July 27-Aug. 12		Visual and Sensory Techniques (2)	John Minnick
	John H. Shaver		<i>University of Pittsburgh</i> , Pittsburgh	July 6-Aug. 12
<i>State Normal School</i> , Potsdam	July 5-Aug. 12		Visual Education (2)	Mr. Olander
Selection and Use of Visual Aids (2)	Everett L. Priest		The Materials of Instruction (2)	Mr. McMurry
<i>Syracuse University</i> , Syracuse	July 5-Aug. 13		<i>Villanova College</i> , Villanova	June 27-Aug. 6
Visual Education (3)	Melvin Brodshaug		Visual Education (4)	Harold F. Thompson
North Carolina			<i>Washington and Jefferson College</i> , Washington	June 13-Aug. 6
<i>Normal and Teachers College</i> , Asheville	June 6-July 16		Visual Education (3)	James B. Anderson
Visual Aids			<i>Waynesburg College</i> , Waynesburg	June 20-Aug. 19
Motion Picture Appreciation	Hazel L. Gibbony		Visual Education and Sensory Techniques (3)	Cecil O. Riggs
Ohio				
<i>State University</i> , Bowling Green	June 13-Aug. 5		South Carolina	
Audio-Visual Education in Elementary Education (3)			<i>University of South Carolina</i> , Columbia	
Audio-Visual Education in Secondary Education (3)			Audio-Visual Education	Leon McCormack
Administration of Audio-Visual Aids in Education (3)	L. L. Ramseyer		South Dakota	
			<i>State Normal College</i> , Spearfish	June 6-July 16
<i>Capital University</i> , Columbus	June 13-July 23		Visual Education	H. A. Henderson
Introduction to Techniques of Visual Education (2)	B. G. Zimpfer		Tennessee	
<i>Kent State University</i> , Kent	June 20-Aug. 12		<i>Agricultural & Industrial State College</i> , Nashville	
Radio and Visual Aids in Education (2)	Dr. A. L. Heer		Photography (3)	Vernon Winslow
Photography (3)	J. T. Johnson		<i>University of Tennessee</i> , Knoxville	July 21-Aug. 26
<i>Miami University</i> , Oxford	June 20-July 29		Audio-Visual Aids to Education (3)	S. E. T. Lund and H. H. Walker
Use of Visual Aids in Instruction (1)	B. A. Aughinbaugh		<i>George Peabody College for Teachers</i> , Nashville	
Recording Experiences (1)	D. H. Harris		Visual Instruction (emphasis on application to physical education)	R. J. Andrews and Harry Kuklin
<i>Ohio State University</i> , Columbus	June 21-July 27		Texas	
Visual Aids	Edgar Dale		<i>Abilene Christian College</i> , Abilene	June 7-July 16
<i>Ohio University</i> , Athens	June 13-Aug. 5		Audio-Visual Instruction (3)	G. C. Morlan
Visual Instruction (2)			<i>Texas Technological College</i> , Lubbock	July 19-Aug. 25
<i>Western Reserve University</i> , Cleveland	June 20-July 29		Visual Aids in Education (3)	W. B. Irvin
Visual Education Materials and Methods in Science (3)	Ellis Persing		<i>University of Texas</i> , Austin	June 7-July 18 and July 18-Aug. 29
Visual Instruction (3)	W. M. Gregory		Use of Visual Aids in Education (3)	B. F. Holland
Photography (3)			Photography (2)	
Oklahoma			<i>West Texas State Teachers College</i> , Canyon	June 6-July 15
<i>Okla. Agri. and Mechanical College</i> , Stillwater	May 28-July 30		Audio-Visual Aids	E. E. Sechrist
Visual Instruction; Photography			<i>North Texas State Teachers College</i> , Denton	June 6-July 16 and July 18-Aug. 25
<i>University of Oklahoma</i> , Norman	June 7-July 31 and Aug. 2-Aug. 27		Photography (3)	L. L. Miller
Visual Aids in Education (2)	Robt. Boyd Gunning		Washington	
Oregon			<i>Central Washington College of Education</i> , Ellensburg	June 15-Aug. 16
<i>Oregon State College</i> , Corvallis	June 20-July 29		Visual Education (3)	Loren D. Sparks
Organization and Supervision of Visual Instruction (3)	George Eby		<i>University of Washington</i> , Seattle	June 20-July 20 and July 21-Aug. 19
Construction and Use of Visual Aids (3)	Eby-Welch		Production of Radio Programs, Electrical Transcription, and Pictures for Educational Purposes (2½)	
Written, Pictorial, and Graphic Teaching Aids (3)	Mr. Welch		Radio, Recordings, Slides, and Motion Pictures in Schools (2½)	Philip A. Jacobsen
<i>University of Oregon</i> , Eugene	June 20-July 29		West Virginia	
Photography (3)			<i>West Virginia University</i> , Morgantown	
Pennsylvania			Visual and Audio-Visual Instruction (3)	H. B. Allen
<i>Juniata College</i> , Huntingdon	June 15-Aug. 12		<i>State Teachers College</i> , West Liberty	H. B. Allen
Visual-Audio Aids (3)	Paul Rummel		Visual Education	
<i>Muhlenberg College</i> , Allentown	July 5-Aug. 12		Wisconsin	
Visual Instruction (2-4)	Harold E. Miller		<i>Central State Teachers College</i> , Stevens Point	June 20-July 29
Photography (4)	John V. Shankweiler		Audio-Visual Education	Prof. Jayne
<i>State Teachers College</i> , Bloomsburg	June 20-Aug. 21		<i>State Teachers College</i> , Milwaukee	June 27-Aug. 13
Visual Instruction (1)			Photography (1)	Manfred Olson
<i>State Teachers College</i> , Edinboro	June 20-July 30		<i>State Teachers College</i> , Platteville	June 13-July 22
Visual Instruction (2)			Visual Instruction (2)	
<i>State Teachers College</i> , Indiana	W. E. Emmert		<i>University of Wisconsin</i> , Madison	June 27-Aug. 5
			Visual Instruction (2)	Freeman H. Brown



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Clark and The Northwest Territory--In Hand-Made Lantern Slides

By ANN GALE

Art Department, Lindblom High School, Chicago

THESE six slides tell the story of George Rogers Clark's conquest of the Northwest Territory, a phase of American history, interesting to seventh and eighth grade students.

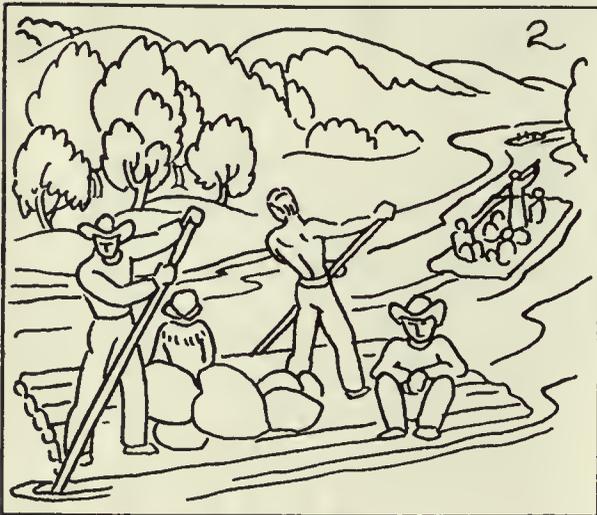
1. October, 1777, George Rogers Clark sets out for Williamsburg, a journey of 622 miles, to ask help for his ambitious plan to conquer the Old Northwest.
2. In June 1778, Clark and his men go down the Ohio on their way to Kaskaskia.
3. July, 1778, Clark and his men captured Kaskaskia while

the soldiers there were enjoying a grand ball.

4. Clark offering the Indians who were incited by the British to raid settlements, the red belt of war or the white belt of peace.

5. Clark and his men crossing swollen rivers in February, 1779, on their way to Vincennes to surprise Hamilton, the British commander, who had taken the fort.

6. Clark and his men with deadly accurate marksmanship silencing the British guns at Vincennes and eventually capturing the fort.



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.

Visual Aids in Chemical Education

(Concluded from page 152)

and as institutions recognizing the importance of method as an aid to imparting knowledge, reflect the best thinking of our time. It is of more than passing interest to note that visual and other aids may be used to teach teachers as well as to teach students.

State and other committee or organization work specifically concerned with visual and other aids is another significant need in many geographical areas. Possible functions of such committees or organizations include:

(1) Maintaining relations with the Committee on Motion Pictures in Education, under guidance of the American Council of Education.

(2) Making approvals on the basis of special standards for the various types of visual and other aids in some such manner as is used by the American Medical Society and other organizations for commodities in general.

(3) Lending encouragement for the production of specific needs in visual and other aids. Films, for example, need to be produced in various subject matter fields where the information is difficult to present without such an aid. This material, obviously, should be produced for use in a restricted number of grade levels. Production of fractional reels to be supported by slides or film-slides is another desirable step.

(4) The development and publication of details whereby the classroom teacher may produce visual aids of genuine teaching value.

(5) Encouragement for the authorship of feature articles and lesson plans to support approved films and other visual aids for which there are no teacher's manuals. A project on copper by the writer, which appeared in the EDUCATIONAL SCREEN some time ago, illustrates some of the possibilities of such correlation.

(6) Encouragement of the use of visual aids on the basis of inherent values where textual material and the literature appears weak. Newly developed fields as well as enrichment materials represent sources for such development.

(7) Selection and publication of articles involving architectural designs for classrooms, lecture rooms, and laboratories. Emphasis, here, should be made on the facility with which the various types of equipment might be used.

Finally, experimental studies specifically related to such fields as chemistry, in relation to such aids as films and slides, have been fragmentary in nature. Frequently, in the past, these studies entailing much time and effort were not conceived as joint efforts of the subject matter departments together with the psychology and education departments. It appears that too few studies have been made which involve various types of still pictures, and that there is a definite need for studies in the direction of visual and other aids suited to the needs of the changing conception of curriculum content.

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NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

Harvard Develops Films to Improve Reading

To train adults and children for efficient, high-speed reading, as well as to correct slow or faulty reading habits, Harvard psychologists have developed a motion picture which will "steer" the eye in the movements of natural, rapid reading. The Harvard laboratories are the first to apply motion pictures to this training, and preliminary tests indicate that the new films should prove to be the most effective and least expensive device yet available for this work. The films can be used by any individual or institution possessing a 16 millimeter projector.

The inventors are Professor Walter F. Dearborn, Director of the Harvard Psycho-Educational Clinic; Dr. Irving H. Anderson, Instructor in Education; and James R. Brewster, Director of the Harvard Film Service.

Through photographs of the lightning-like movements of the eyes in reading, scientists have found that in scanning a line of type, the human eye does not move steadily, but makes several stops. Between a slow and a fast reader, it has been found, the main difference lies in the number of stops made per line. Through these new movies, the eyes of a slow reader are forced to follow the movements that a more skillful reader's eyes would make under the same circumstances. Thus, the habits of able readers can be duplicated with great accuracy and flexibility. An outstanding feature of the motion picture technique lies in projecting the main body of the text so that it is barely apparent, while significant groups of words are flashed into sharp visibility. This represents a very close duplication of actual experience in reading. Likewise the motion pictures can be graded in speed and difficulty to the abilities and needs of students at all levels from the grade schools through to college and beyond.

The new Harvard film technique is believed to be superior to the older methods of teaching speed in reading, over eye movements under conditions very close to those of actual reading.

A County Visual Service

To meet the need for reference material and teaching aids in the schools of Mendocino County, California, where many of the smaller schools are isolated and the children could not enjoy many of the varied experiences a modern program demands, a circulating library of visual aids was established which is helping to solve the county's curricular problems. Through the cooperation of the county superintendent of schools, six sound-on-film motion picture projectors were placed in as many centers in the county, a county library of 30 films formed, and arrangements made to secure other films from visual education centers. A

portable electric generator permits projection in schools not supplied with electricity. Fifty strip-films can also be supplied from the county office. Further, a unit library was established from which books, pamphlets and mounted pictures are available to every elementary teacher.

Educators' Organization Pleads for Better Films

Because of the immense influence of the motion picture, radio and the press, a group of outstanding educators have organized The Institute for Propaganda Analysis to "help the intelligent citizen detect and analyze propaganda." The motion picture is the first media to be examined and "revealed for what it is." The educators charge that the Hollywood producers provide few films which give a realistic picture of life, contenting themselves with stereotyped stories which play a significant part in propaganda, frequently producing grossly inaccurate portraits of races, nationalities and customs. A few films of true social significance have been produced, the success of which should prove that public taste is capable of appreciating films of greater social value.

The Institute believes that the movies should enlighten as well as entertain and, therefore, demands that the motion picture industry recognize this obligation. Further information on the work and theories of this group may be obtained through their monthly letter (\$2.00 a year). The headquarters address is 132 Morningside Drive, New York City.

Visual Education Institute in New Jersey

The Central New Jersey Visual Education Institute is holding its first annual meeting in Highland Park on May 19th, in conjunction with the Third Annual Visual Education Institute of Middlesex County. The afternoon session will be devoted to demonstrations on the use of visual aids, and the evening meeting to visual education clinics on all elementary and high school subjects.

Arthur M. Judd, Supervising Principal, New Brunswick, is chairman of the meeting, which is sponsored by the New Jersey Visual Education Association.

Some Visual Aids Statistics

A survey recently completed by the University of California shows that visual aids are used in 8,806 school systems in the 48 states to supplement text book education. New York ranks first in audio-visual education, with a school population of 1,885,207 and 1,298 projection machines in the schools. Pennsylvania is second with a school population of 1,498,606 and 958 school projectors. California comes third with a school population of 1,551,510 and 849 motion picture projectors in the schools.—(*The Motion Picture and Family.*)

DeVry Visual Conference Program

Many prominent educators will participate in the program of the DeVry Conference on Visual Education and Film Exhibition, to be held at the Francis Parker School in Chicago, from June 20 to 23 inclusive.

Mr. William E. Morse, Jr. of Idaho will talk on the organization and working details of a cooperative county film service. Mr. H. E. Ryder, County Superintendent of Schools, of Fremont, Ohio, will give his views on practical aspects of school distribution and cooperative methods. Miss Amelia Meissner, Curator of the St. Louis Museum, is to give an interesting and informative talk on use of special films in history and other subjects. Mr. L. W. Cochrane of the University of Iowa will speak on specialized use of films for college class-work and will exhibit an excellent color production which he has made.

Dr. James E. Bliss, who has contributed valuable information in the field of actual educational productions and organized the cinema library for the Western Reserve University of Cleveland, Ohio, will talk on technical film problems as applied to educational film production. Along similar lines will be the address of Mr. A. P. Heflin of Lane Tech, who has organized the Movie Camera Club. He will exhibit a film which presents short student interviews of graduates, and another on school foundry work. The Lane Tech High School will also send Miss Eleanor Mossman to demonstrate the use of motion pictures for training in English classrooms. Mr. William L. Zeller, prominent Peoria lecturer, will show his bird films in color, and discuss their utilization in lower grades.

Visual educationists from important government offices will participate. Mr. George T. Van der Hoff of the FHA administration will exhibit a housing film and present the government's part in modern film education. Mr. J. A. Mercey, Assistant Director of Information of the National Farm Security Board, will speak on documentary films and their importance in educational work. He will screen "The River" and touch upon the unusual production aspects of this film. Data on film distribution methods and educational adaptation, will be presented by Miss Effie Bathhurst of the U. S. Office of Education.

Miss Katherine Troy, of the Chicago Parks District, will talk on recreational films and present an unusual marionette film. The National Council of Teachers of English will send the chairman of its Committee on Standards, Miss Helen Rand Miller, author of "Film and School." Her discussion will be titled "Reading Books and Seeing Motion Pictures."

Mr. Jack Gallagher, a Hollywood producer of note, will tell the conference what Hollywood is doing for educators in the way of creating new pictures with real educational value.

Honoring Mr. Herman A. DeVry on the twenty-fifth anniversary of the DeVry Corporation, the Conference will give a testimonial banquet on the evening of June 22nd, in the Sherman Hotel, Louis XVI room. Prominent speakers and guests will be present and a brilliant floor show is being arranged for the commemorative affair.



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SCHOOL DEPARTMENT

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Director Visual Education, State Teachers College, Indiana, Pa.

The Elementary School Museum

By **GEORGE W. WRIGHT**

Supervising Principal, Glassboro, N. J.

THE school museum is a visual-sensory aid in the educational program of the typical elementary school.

How shall it best be begun? By beginning. The wise teacher may bring to class a few specimens or exhibits relating to the topic being studied. As a result of the enthusiasm created by children examining this material, asking questions concerning it, looking up reference material, making other research and investigation, and class discussions, the teacher will suggest that perhaps the children might have interesting material at home that would supplement studies if brought to class. The avenue is now open. The little lad, whose parents came from Italy, will bring in pictures, postcards, handkerchiefs, lace, and other interesting objects. In the study of Italy his exhibits

and his explanations will be valuable contributions. He becomes a more important member of the school social group. The same situation is true in treating other countries and cultures.

When travel is mentioned, children's travel experiences and their collections will aid to advantage. When food sources and supply are studied, the grocer's girl, the baker's boy, the druggist's daughter, will carry samples from shop to schoolroom. Perhaps the pleased parent, if invited, will take time to come to the class and talk about the materials and their educational implications.

When a collection of some of these products is made, the teacher in the typical elementary school will arrange to have a small label bearing the donor's name attached to the gift or loan. This acts as an acknowledgement to the donor and serves as a stimulus for further contributions. Attics, cellars, cupboards, and closets at home will be carefully searched by children, merchants will be visited, and industries explored for materials of instruction for the classroom. Your museum is now begun. Let the teacher who doubts the success of this method but try and observe the rapidity with which the classroom is filled with objects, specimens, models and pictorial material. Care must be exercised, however, to utilize only those materials that may be of educational value in the classroom.

How shall these exhibits be preserved? There must be a particular place to keep them. One possibility is the individual classroom museum. Another is a school museum. Since the ensuing educational step, from school or classroom museum to books with explanations concerning this material, is but a direct and natural one, it is advisable to correlate the school museum and library.

The museum material should be carefully catalogued. Children will welcome this experience. Habitats may be made, and material mounted to portray a life-like setting. All school departments may closely correlate and contribute to the museum development. If a school library-museum is inaugurated, an administrative schedule for loaning and returning may be employed. This makes for ease of operation.

Building the museum upon materials, merchants, parents and friends supply in the community, naturally limits the objects, specimens and models to the experiences of the community members. Other articles could be integrated with the program. Where may one obtain additional needed materials? Chambers of commerce, industrial and commercial concerns, travel agencies, governmental bureaus, will gladly cooperate in sending materials and detailed descriptive literature upon request. If the teacher and pupils earnestly endeavor to build up, through the Club Exchange of the Instructor, a correspondence club with schools in other states of the union and foreign countries for exchange of letters and illustrative materials, they will integrate

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Visual Geography Lessons

By RHEA B. FRANK

Elementary School, Calumet City, Ill.

SIX years ago when I started to teach in Indiana, I found the hardest subject to present to the 4B children was geography. The text, "The Earth and Its People" seemed to be too difficult to read and the subject matter so remote to the experiences of the children. Our term is divided into six week periods—the first period presents the world as a whole to the children and a visit to the Belgian Congo; the second period, a visit to Baffin Island; and the third period, a journey to Arabian desert.

I had the feeling I was doing all the work and the children weren't getting much out of it; didn't even enjoy it. So I tried to build up the course, psychologically, with the three laws of learning as my main objective: 1. readiness, 2. exercise, and 3. effect. I can say honestly that I have never spent a happier year, have never had such enthusiasm from children and supervisor, and never had such satisfactory results in tests as this last year. Since visual aids helped me most to get these results, I shall tell in detail my modes of presentation.

1. *Readiness.* At the beginning of each period I gave an "overview" movie—that is a movie that would give a good idea of the people we were to study, their mode of living, houses, soil, climate, etc. I considered this the "mind set," as Kilpatrick puts it, and just let the movie, although a silent, talk for itself. Then we had quite a discussion. Where is this land? Why do they dress as they do, etc.? Never have I experienced a disinterested or apathetic attitude in the children. Sometimes we wrote down our questions using our language periods for this. Then we ran the movie again to search for our answers. I stopped the movie when we came to a part that answered a question and ran it over at that place, letting the child whose question was answered discuss it, and find his answer.

2. *Exercise.* Now we were ready. We read our text. I nearly always treated the text as work type reading lesson. Many times as group reading lessons, giving the best readers opportunities for research reading and individual reports. The National Geographic magazine was a great help in this, and we searched for pictures, any kind, anywhere, everywhere. A special bulletin board was preserved for all pictures and articles we could find. I chose the unit as the unit into which my whole work was to be integrated: language, reading, health, nature, and even some arithmetic. Unknown to the children but for my own satisfaction I divided the unit—each of the three—into these sub-heads, 1. food, 2. clothing, 3. shelter, 4. transportation, 5. fuel, 6. customs.

All the time we worked for a meaningful vocabulary. Slides helped a lot in this. We made nearly all of our slides and used them as guessing games. I made a few, but the children made nearly all. I had only

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a few pieces of glass, but used them over and over. For instance to cinch the word mosque, I drew a mosque on the slide, projected it, and let a child trace the outline on the blackboard. If a child knew, I let him do it, if not, I wrote the word underneath the picture. To differentiate later, I showed the slide again and had them choose correct answers. I tested often this way, using multiple choice.

I tried to make the children "why" conscious, and pictures helped in this. The heat of the Jungle, the ice and snow of Baffin Island, the arid lands of the desert affected the lives of the people and caused their food, clothing, shelter, etc to be as it is. I tried to make these people real and here pictures helped, especially ones found in current publications. I used stereographs as I would encyclopedias— as references.

3, *Effect*: From a purely selfish standpoint this has been the easiest kind of teaching. Gone has been my feeling of "doing all the work." It has been so easy to direct and guide the children's activities, especially when they have been sold on the idea. And, since learning is a natural mental process that comes from satisfaction, both the children and I have learned a great deal.

The tests I gave showed almost perfect scores, although they are the ones supplied by the manual to the text, and the same ones six years ago the children groaned over. I tested often by pictures. I numbered each and had a question on it to be answered, sometimes by one word, sometimes multiple choice, often completion.

Room length murals were made to illustrate life in the countries studied. Peak holes were made—a jungle land, a desert, and eskimo land. Twins from these lands came to visit American twins. Comparisons and contrasts were subtly made, and I feel a real understanding and sympathy was established.

At no time was there a matter of discipline. As Kilpatrick says, "If everybody saw that subject matter is good, only because it furnishes a better way of behaving—if everyone saw these things, we should have, as we ought to have, a different kind of school."

Guidance Laboratory Production

(Concluded from page 149)

93.) *Low angle* of plane straining at the blocks. Dust and wind churned by the propellor.

94.) *Near view* of the children intensely absorbed. The blocks are kicked away from beneath the plane. Plane slowly hovers over the camera. *Pan sideways* to children, and *up* after plane.

95.) *Near view* of children, still intensely absorbed, turning heads to watch it. *Dissolve* to:

96.) *Double exposure* of plane flying seen under the children entering bus, one by one, walking into gloom and illuminated for an instant by the strong light of the sun outside. The plane *fades*, the children remaining. They *fade*.

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Current Film Releases

Bell & Howell Exclusive "Universal" Features

Twenty-seven Universal feature pictures, are announced as available henceforth in 16mm. through the Bell & Howell Filmosound Library. The list includes outstanding late releases such as *The Road Back* and *Top Of The Town*. These two will become available in 16mm. only after January 1st, 1939, but the remaining twenty-five, as well as fifty short subjects, can be rented at once.

Among the features are *Counselor at Law* (John Barrymore), *Beloved* (John Boles) and *There's Always Tomorrow* (Robert Taylor). On historical topics there are such titles as *Sutter's Gold*, an epic story of California, that depicts the historic clash between miner and farmer in the days of '49, and *Little Man, What Now?* dealing with the uncertainties of post-war Central Europe. Another group of pictures was chosen for occupational background. These include *Magnificent Brute* (Steel), *Airmail*, *Radio Patrol*, *Destination Unknown* (Sea), *The Big Cage* (Animal capture and training), *Conflict* (Lumbering), *Mother's Millions* (Finance), *Gift Of Gab* (Radio). A complete list of titles as tentatively selected, will be sent free upon application to Bell & Howell.



The Bear Flag of California
(A scene from "Sutter's Gold")

Fifty short subjects include such offerings as *Going Places With Lowell Thomas*, and *Stranger Than Fiction*. Then there are three "big author" serials, *Heroes Of The West* (Peter B. Kyne), *Lost Special* (A. Conan Doyle), and *Clancy Of The Mounted* (Robert W. Service).

For schools, churches, and other social groups, it is necessary for each location to be approved by Universal at New York, through their local exchange, before film service is rendered. Where applications come from towns in which there are no theatres, or from schools for showing during school hours, there is usually little question of approvals.

Over 500 additional reels from the film library of W. O. Gutlohn are being placed into circulation this

month through the Bell & Howell Filmosound Library at Chicago. The list includes forty feature films, and a large number of short subjects, many of them of value for classroom teaching as well as auditorium showing. Subject matter fields in which this new list offers material include musical appreciation, physical culture, geography, mechanics architecture, biology, zoology, photography, aviation, physical science and a series of Children's Hour programs.

New Gutlohn Releases

Frank Buck's *Bring 'Em Back Alive*, the well-known feature picture of adventures in the Malayan jungle, is a recent addition to the Walter O. Gutlohn, Inc., 16mm sound film library. They also announce that they have just released *Austria Vanishes*, a one-reel 16mm. sound film of a timely major historical event, and *Let's Sing Again*, a musical drama starring Bobby Breen, produced by RKO.

New subjects added to the popular Bill Corum Sports series include *Inside the Ropes*, *Bugles from the Blue Grass*, *Gentleman Sports*, *Tomorrow's Halfback*, *Winter Sports*, *Never Catch the Rabbit*, and *Row Mister, Row*. Another series of value for school use consists of ten reels entitled *Neptune's Mysteries*, *Hermits of Crab-Land*, *Beach Masters*, *Winged Pageantry*, *Underground Farmers*, *Living Jewels*, *Swampland*, *Deadly Females*, *Forest Gangsters*, and *Desert Land*. These films were made by the well-known Woodward brothers of "The River" fame.

Eastin Adds Silly Symphonies

Another distributor to handle the five latest Disney Silly Symphony releases in 16mm. color. *The Grasshopper and the Aunt*, *The China Shop*, *Old King Cole*, *The Pied Piper* and *King Neptune*—is Eastin 16mm Pictures of Davenport, Iowa.

Two Erpi Pictures Announced

Two of the 24 instructional sound films listed on Erpi's 1938 production program have been completed. They are *Digestion of Foods* which will make up the sixth subject of the Human Biology series and *Dashes, Hurdles and Relays* depicting champion performances in the 100 yard, 220 yard and 440 yard events. This latter film is the first of a series dealing with track and field athletics. Additional subjects in this series will be forthcoming.

Museum of Modern Art Gets British Films

The Museum of Modern Art Film Library, New York, has added thirteen British documentary films, produced in England during the last three years, to its collection. The films were brought here by Paul Rotha, a leader in the movement in England.

The films are, *Air Outpost*, *Children at School*, *Enough to Eat*, *Eastern Valley*, *For All Eternity*, *Granton Traveler*, *Housing Problems*, *Night Mail*, *Roadways*, *The Smoke Menace*, *Today We Live*, *We Live in Two Worlds* and *Weather Forecast*.

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THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Arsene Lupin Returns (Douglas, William, Bruce) (MGM) Famous gentleman crook, long supposed dead but living honestly and incognito, deftly recovers jewel stolen from eminent family whose daughter interests him. Smooth, suspenseful, intricate mystery-romance, with good dialog, comedy and no gore. 4-12-38
(A) (Y) Very good of kind (C) Beyond them

Battle of Broadway (McLaglen, Donlevy) (Fox) Raucous, uncouth farce, reverting to years ago. Two rowdy roughnecks and their doddering boss, supposedly "American Legionnaires," brawl, wrangle, doublecross each other over "dames", smash crockery, furniture and heads. Asylum wedding for climax. Glorified crudity. 4-26-38
(A) Crude (Y) (C) Certainly not

Bulldog Drummond's Peril (Howard, Barrymore) (Para) A scientist's formula for making synthetic diamonds, sought by rival crooks, starts chain of hectic events, including murder, explosions and hand-to-hand combats as hero chases criminals from London to Switzerland and back. Involved and overdone thriller. 5-3-38
(A) Mediocre (Y) Exciting (C) No

College Swing (Burns, Allen, Raye, Hope, Horton, etc.) (Para) Delirium of vaudeville horseplay in present-day taste, with meaningless music and dance desperately Africanized; unrelieved by sense or sanity save some real comedy by Gracie. Great fun to many; others will think it artistically demoralizing. 4-19-38
(A) Depends on taste (Y) (C) Amus. but doubtful

Condemned Women (Eilers, Shirley, Philip Duncan) (RKO) Depressing story of women in prison, bitterness, jailbreak, women shooting women—but wise warden, nice young doctor, kindly judge manage romantic but illogical "happy ending." Somewhat informative on prison life but slight value otherwise. 4-26-38
(A) Unpleasant (Y) (C) By no means

Dance of the Virgins (Music accompaniment and titles) (Bennett Pictures) Sedate, charming little romantic tragedy, made in Bali with native actors, in Technicolor. Highly informative on Bali's lovely landscape, flowers, customs, elaborate temple dances, and interesting Balinese ethics. 4-12-38
(A) Novel (Y) Good (C) Too mature

Doctor Rhythm (Crosby, Carlisle, Devine, Lillie) (Para) Crazy combination of hilarious burlesque, slapstick and romance. Bing is a Doctor (!) masquerading as a policeman and hired as bodyguard to protect heroine, infatuated with fortune-seeking crook. Lillie's comic antics share honors with Bing's crooning. 5-3-38
(A) Dep. on taste (Y) Prob. amus. (C) Not beat

Dybbuk, The (Polish Cast) (Made in Warsaw) (Yiddish, fine English titles) Impressive picture in stately tempo, expertly acted, of a tragic and beautiful love affair among humble, devout people. Strange mingling of tradition, religion, naive faith and superstition. Long, slow, difficult, but artistic and rich in human values. 5-3-38
(A) Unusual (Y) and (C) Entirely beyond them

Everybody's Doing It (Preston Foster, Sally Eilers) (RKO) Brainless farce about loving heroine trying to inspire spineless puzzle-contest artist (heavily played by Foster) to work. Racketeers sell answers, kidnap hero, etc. Made comic (?) by reeling drunks, face-slappings, frying-pan knockouts, etc. 4-19-38
(A) Stupid (Y) Worthless (C) No

Fools for Scandal (Lombard, Gravet) (Warn) Penniless French marquis, incognito, chases and is chased by whimsical American movie queen through Paris. Plot and action thin and flimsy but merrily played. Notable charm and cleverness in two roles. Ralph Bellamy sadly miscast. Some rhymed dialog, alas! 4-26-38
(A) Good of kind (Y) Perhaps (C) Hardly

Gaiety Girls, The (Patricia Ellis, Jack Hulbert) (U.A.) Mildly diverting British-made comedy with mistaken identity theme. Chance incident links unsuspecting chorus-girl's name with that of millionaire banker whom she's never met. When she does, she thinks him a reporter, starting merry complications and romance. 5-3-38
(A) Perhaps (Y) Fair (C) Doubtful int.

Her Jungle Love (Dorothy Lamour, Ray Milland, Lynne Overmaw) (Para) Fantastic absurdities, silly falsities, weird efforts at bizarre thrills, all in Technicolor! Aviators, natives, African animals on South Sea islet, maudlin romance, grewsome deaths and earthquake. Eye-filling, expensive, stupid. 4-19-38
(A) Depends on taste (Y) No (C) No

Hollywood Stadium Mystery (Neil Hamilton, Evelyn Venable) (Repub) Mildly puzzling and agreeably suspenseful little thriller, not unduly violent. Writer-heroine and district-attorney-hero collaborate to solve queer death of pugilist in ring and furnish romance. The latter is more emphasized than the killings. 4-26-38
(A) Hardly (Y) (C) Fairly good

International Settlement (George Sanders, Dolores del Rio) (Fox) Grim Shanghai-war melodrama. Soldier-of-fortune hero, tangled in million-dollar munition-smuggling, runs afoul of tough "agents." Wounded, he thinks heroine betrayed him but she gives blood to save him and all is well. Acting ordinary. 4-19-38
(A) Depends on taste (Y) No (C) No

Joy of Living (Irene Dunne, Fairbanks, Jr.) (RKO) Fast, merry romantic comedy in current vogue. Irene delightful as hard-working stage star rescued from selfish, parasitic family by gay hero. Many uproarious sequences, and much beer, involved in her emancipation. Sophisticated but probably harmless. 5-3-38
(A) Entertaining (Y) Doubtful (C) Unsuitable

King of the Newsboys (Lew Ayres, Ann Sheridan) (Republic) Initial human interest in slum hero and heroine turns to crude melodrama of shady ethics. She turns racketeer's mistress while ne'er-do-well hero wins swift riches from news stands, goes broke—and they are humble and happy again. 4-12-38
(A) Mediocre (Y) No (C) No

Love on a Budget (Prouty, Byington, Shirley Drane) (Fox) Not up to standard of previous JONES FAMILY films. Entertainment and human values largely obscured by artificial situations growing out of conflict between bride and groom over money matters. Climax especially unconvincing. 5-3-38
(A) Hardly (Y) Fair (C) No interest

Lenin in October (Russian, English titles) (Amkino) Vivid, generally convincing picture of the real Lenin and his master coup of October 1917. Complex preparations in dingy, primitive quarters end in triumphant storming of Winter Palace and full victory. Well done despite crudities. Usual propaganda. 4-26-38
(A) Good of kind (Y) (C) Undesirable

Maid's Night Out (Joan Fontaine, Allan Lane) (RKO) Inane but harmless farce. Rich man's son scorns job in father's dairy but supposed maid on milkman's route changes his mind. Stupidly slow start, bawled dialog, mediocre acting outweigh rather amusing and original "chase" climax. 4-12-38
(A) Poor (Y) (C) Perhaps amusing

Patient in Room 18 (Patrick Knowles, Ann Sheridan) (Warner) Detective poses as patient in hospital to solve \$100,000 radium theft. Old stock devices for thrill and suspense. Disjointed action, clumsy continuity, heavy attempt to be funny and amateurish acting make poor mystery-melodrama. 4-12-38
(A) Poor (Y) Mediocre (C) No

Port of Missing Girls (Harry Carey, Judith Allen) (Monogram) Nice little San Francisco cabaret singer, involved in gangster killing, finds self on tramp steamer. Kindly captain hides her in friendly Shanghai honky-tonk. Gangster-smuggler has designs on her but wild, ridiculous fight saves day. 4-19-38
(A) Dull (Y) Poor (C) No

Prison Nurse (H. Wilcoxon, Marian Marsh) (Repub) Unpleasant, thrilling melodrama. Bitter young Doctor, serving jail sentence for mercy death, goes through prison typhoid epidemic, jailbreak, wild ambulance chase and murder indictment before cleared by loyal nurse. Waste of all concerned. 5-3-38
(A) Poor (Y) and (C) Certainly not

The Rat (Anton Walbrook, Ruth Chatterton) (RKO) Glamorous Parisian thief, guardian of young heroine, is briefly dazzled by rich adventuress. Her cast-off roue turns to heroine, who shoots him. Spectacular trial brings startling results and happy ending. Rather good thriller. Made in Paris. 4-19-38
(A) Good of kind (Y) Mature (C) No

Reckless Living (Nan Grey, Robt. Wilcox) (Univ) Human, rather amusing little racetrack story with betting the main theme. Hero heads band of track followers who generally pick wrong horses, quits when he wins stake but gives it to needy friend and takes trainer job and a wife. Well directed and acted. 5-3-38
(A) Passable (Y) Hardly suitable (C) No

Scandal Street (Lew Ayres, Louise Campbell) (Para) Innocent heroine, waiting to marry engineer-hero away on foreign assignment, is involved in petty scandal and murder charge by small-town gossips, aided by brattish child liar. Feeble in plot, acting and direction, with dramatic-value nil. 4-12-38
(A) Poor (Y) Poor (C) No

Storm in a Teacup (Good British cast) (G-B) (U A) Plans of domineering provost of little Scottish town seriously changed by engaging dog and his pals, with help from keen journalist and provost's daughter. Dramatically uneven, confusing, conclusion arbitrary, but mostly thoroughly amusing. 4-19-38
(A) Novel (Y) Fairly good (C) Fair

Swing Your Lady (Bogart, Fazenda, McHugh, Jenkins) (Warner) Hilarious nonsense farce with good cast, centered on crude romance of super-dumb wrestler with woman blacksmith. Features burlesque wrestling and vaudeville Weavers in hill-billy music. Slapstick numbskullery made as funny as possible. 4-12-38
(A) Depends on taste (Y) (C) Doubtful value

Tarzan's Revenge (Glenn Morris, Eleanor Holm) (Principal) Usual formula, reasonable thrills. Evanston family on safari after zoo specimens. Daughter (who swims better than she acts) meets Tarzan (same) who saves her from beasts and from lewd "Indian Prince" with grand palace in heart of Africa. 4-12-38
(A) Hardly (Y) (C) Probably good

Test Pilot (Gable, Loy, S. Tracy) (MGM) Powerful picture, superb technique, with three notable roles expertly done. By turns clever, delightful, stirring, nerve-wracking. Some tense dramatic moments of real life, some unreal. Wholesale drunkenness seems vital to aviation. Vast appeal, uncertain effect. 4-26-38
(A) Outstanding (Y) Doubtful (C) No

Tip-Off Girls (Evelyn Brent, Larry Crabbe) (Par) Fast, exciting, highly embroidered gangster-G-Man thriller, with truck-hijacking made practically a major U. S. industry! Usual ingredients of sinister "big boss", tough henchmen, brutal killings, G-man activities, chases, and final hectic climax. 4-26-38
(A) Hardly (Y) Better not (C) No

When the G-Men Step In (Don Terry, Jacqueline Wells) (Columbia) Attractive counterfeit-printing racketeer vs. his less engaging brother, a loyal G-Man. Former falls heroically before gang guns, so latter wins heroine. Feebly acted melodrama, with sympathy misdirected and slight character interest. 4-19-38
(A) Elementary (Y) Hardly (C) No

Wide Open Faces (Joe E. Brown) (Colum) Joe's usual comedy antics largely futile in story inferior to his previous ones. Honest small-town soda clerk, some obvious crooks, gangster molls, lost money, abandoned hotel, and stupid chase for climax. Not good for Joe's reputation. 4-26-38
(A) Poor (Y) Poor (C) Hardly

Among The Producers

General Science Film Slides

As a companion to its physics and chemistry series, Visual Sciences of Suffern, New York, now offers a new film slide series in general science, consisting of the following eleven films, averaging forty frames each: *Water, Air, Levers, Inclined Planes, Pulleys, Energy, Heat, Sound, Light, Magnetism, Electricity.*

While intended primarily for junior high schools, the new series will also be found of value in grade schools, where the teaching of science is begun. In addition, these films may be used effectively in high school physics classes as a memory refreshing preface to the study of topics in more advanced form. No special manual is needed with the film slides, since all the frames are self-explanatory.

Kodak 16mm. Enlarger

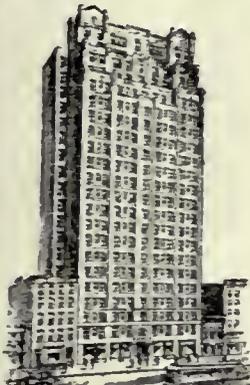
A compact new enlarger for making black-and-white negatives from single frames of 16mm. motion pictures is announced from Rochester by the Eastman Kodak Company. Negatives may be made quickly and simply from either black-and-white film or Kodachrome, and from these enlarged negatives both contact prints and greater enlargements are possible. Owing to the extremely fine grain of laboratory-processed reversal film, and the absence of silver grain in Kodachrome, the enlarged negatives are claimed to be of excellent technical quality.

The enlarger is of particular value to the amateur movie maker who possesses no darkroom or other facilities for making enlarged "stills". It permits the making of a series of negatives in rapid succession, and eliminates the need of immediate processing. The film can be developed at leisure by the maker, or sent to a photo-finisher. One of the major virtues of the new device is that it facilitates the making of enlarged "stills" at the time the movie reel is edited.



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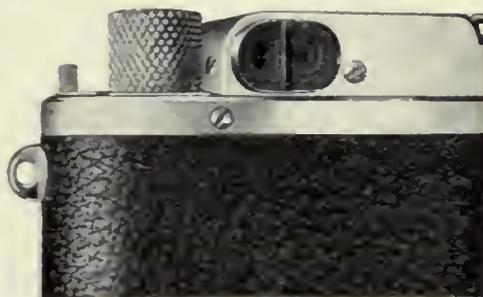
KENMORE HALL

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way. A film gate, mounted before the enlarger lens, has a mask opening the exact size of the 16mm. frame. The film is positioned over this opening, between guide pins. A locating pin engages one perforation, keeping the film in alignment. After positioning, the cover of the gate is closed, and a brief exposure made by incandescent light. Photoflood light is most suitable for enlarged negatives from Kodachrome. The enlarger loads with 616 size Kodak Film, and eight negatives are obtained from each roll, each negative 2½ by 3¾ inches. Full operating instructions are included with each enlarger. The retail price is \$15.

Leica Model G-1938

The illustration shows a close-up of the viewfinder and rangefinder eyepieces of the new Leica camera, Model G-1938, announced in the April issue of the EDUCATIONAL SCREEN. The model is equipped with Leitz Xenon f:1.5 speed lens and Rapid Winder.



Central Photographic Almanac

A new 128-page Photographic Almanac and Bargain Book of Cameras and Supplies has been issued by Central Camera Company, Chicago. A special month-by-month illustrated Photographic Calendar, a handy Exposure Table, Film and Plate Speed Table Guide to Correct Exposure and other hints for better pictures, are features, in addition to descriptions of all the latest developments in photography. The Almanac is available free upon request.

HERE THEY ARE

A Trade Directory
for the Visual Field

FILMS

- Akin and Bagshaw, Inc. (6)
1425 Williams St., Denver, Colo.
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City
- Cine Classic Library (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 166)
- Eastin 16 mm. Pictures (6)
Davenport, Ia.
(See advertisement on page 166)
- Eastman Kodak Co. (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Co. (1, 4)
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 165)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures System, Inc. (6)
330 W. 42nd St., New York City
- Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
- Films, Inc. (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
- Garrison Films (3, 6)
1600 Broadway, New York City
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc. (6)
35 W. 45th St., New York City
(See advertisement on page 161)
- Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton's Travelettes (1, 4)
7901 Santa Monica Blvd., Hollywood,
Cal.
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- J. H. Hoffberg Co., Inc. (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 166)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 166)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 166)
- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Visual Instruction Supply Corp. (6)
1757 Broadway, Brooklyn, N. Y.
(See advertisement on page 161)
- Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

- Y.M.C.A. Motion Picture Bureau (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago

MOTION PICTURE MACHINES and SUPPLIES

- The Ampro Corporation (6)
2839 N. Western Ave., Chicago
(See advertisement on page 146)
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co. (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 161)
- Eastman Kodak Co. (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Herman A. DeVry, Inc. (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 142)
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 166)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)
- RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 159)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 167)
- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 145)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Colonial Art Company
1336 N. W. First St., Oklahoma City,
Okla.
- Informative Classroom Picture Ass'n.
48 N. Division Ave., Grand Rapids,
Mich.

SCREENS

- Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 169)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Institutional Cinema Service, Inc.
130 W. 46th St., New York City

- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

- Conrad Slide and Projection Co.
709 E. Eighth St., Superior, Wis.
- Eastman Educational Slides
Johnson Co. Bank Bldg.,
Iowa City, Ia.
- Edited Pictures System, Inc.
330 W. 42nd St., New York City
- Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 166)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 144)
- Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 166)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 164)
- Teaching Aids Service
Jamaica Plain, Mass.
(Slide-making Material)
(See advertisement on page 167)
- Visual Education Service
131 Clarendon St., Boston, Mass.
- Visual Sciences
Suffern, New York
(See advertisement on page 166)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

- Herman A. DeVry, Inc.
1111 Armitage St., Chicago
(See advertisement on page 142)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 144)

STEREOPTICONS and OPAQUE PROJECTORS

- Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 141)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 144)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 164)
- Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 163)
- Williams, Brown and Earle, Inc.
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EDUCATIONAL SCREEN

Magazine Devoted Exclusively
to the Visual Idea in Education

JUNE, 1938

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IN THIS ISSUE

*Visual Aids in
Extension Classes*

*The Administration of a
Visual Education Program
in a Small College*

*Possibilities in the Use of
the School Newsreel*

Microphotography

*Developing an Integrated
Community Program by
Use of Visual and
Auditory Aids*



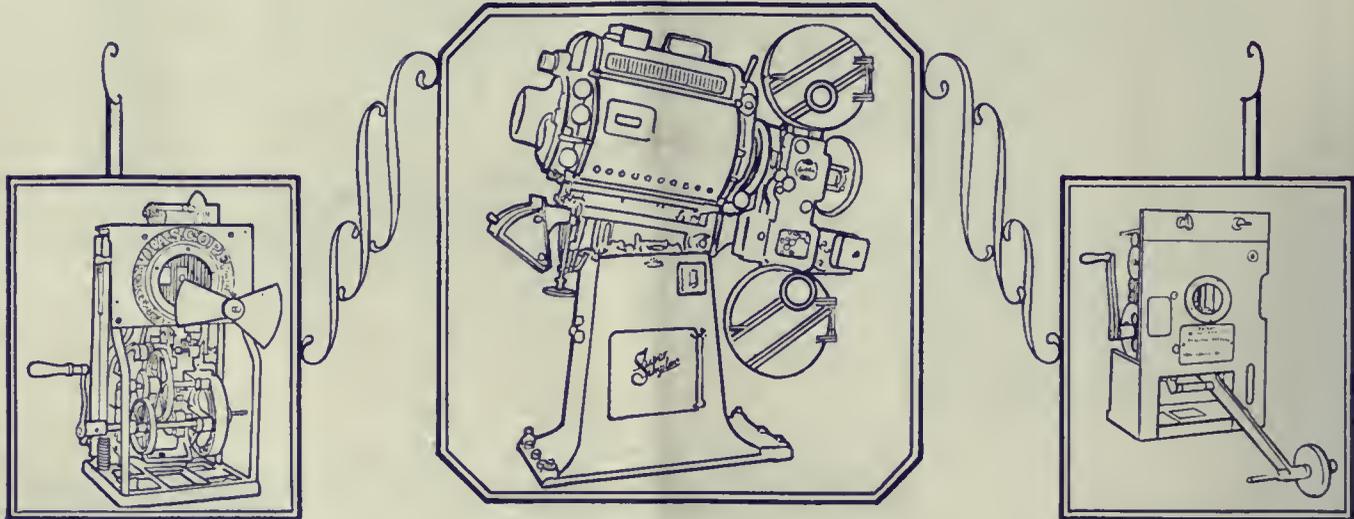
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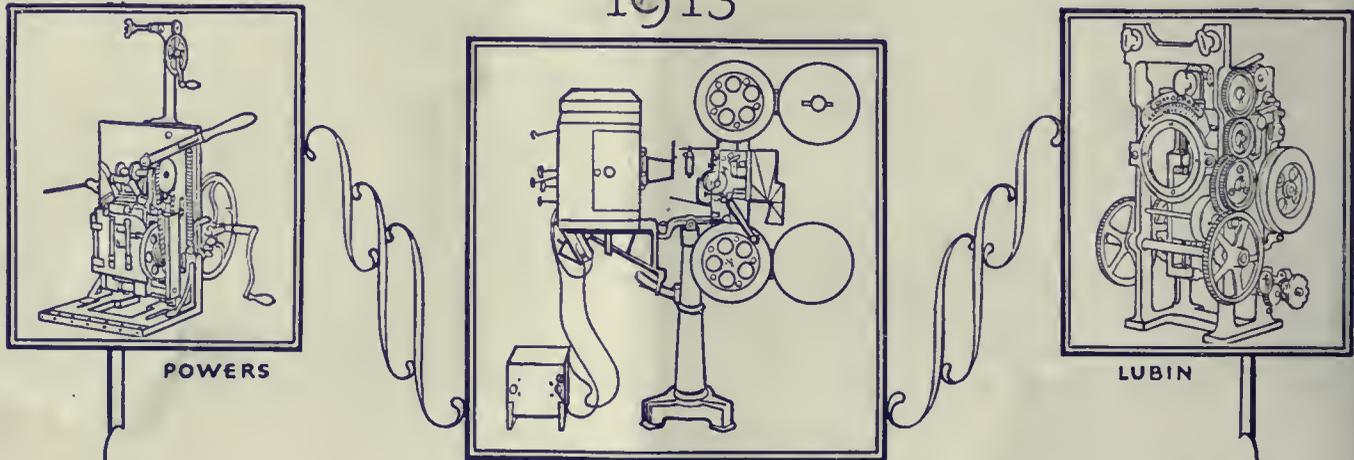


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The EDUCATIONAL SCREEN

JUNE, 1938

VOLUME XVII

NUMBER SIX

Contents

Visual Aids in Extension Classes. H. M. Genskow.....	179
The Administration of a Visual Education Program in a Small College. Sherman P. Lawton.....	181
Developing an Integrated Community Program by Use of Visual and Auditory Aids. W. W. Whittinghill.....	183
Microphotography H. O. Burdick and D. W. Weaver, Jr.....	184
Possibilities in the Use of the School Newsreel William G. Hart.....	185
The Department of Visual Instruction Edgar Dale	187
Farm Safety—In Hand-Made Lantern Slides By Ann Gale.....	188
Among the Magazines and Books Conducted by Nelson L. Greene.....	189
News and Notes Conducted by Josephine Hoffman.....	192
School Department Conducted by Wilber Emmert.....	194
Current Film Releases.....	198
Film Estimates	200
Among the Producers.....	202
Here They Are! A Trade Directory for the Visual Field....	204

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The Shorewood Opportunity School is a vocational and adult school operated under the supervision of the Shorewood Board of Vocational and Adult Education, which is part of the system supervised by the Wisconsin State Board of Vocational and Adult Education. The school was authorized in 1921. Since Shorewood is a residential community, there is a limited demand for vocational instruction other than in the commercial field. The tuition of Shorewood residents who wish work in trade and industry classes is paid at the Milwaukee Vocational School, and Shorewood has developed a cultural and recreational program. About a hundred different classes are offered, ranging from current economic and social problems, foreign language, human behavior, thoughts of the philosophers, modern book reviews, English usage, interpretive reading, persuasive and public speaking, the speaking voice—to applied arts, art metal, woodworking, drawing and sketching, homemaking activities, photography—to an *a cappella* choir, harmony, group piano, violin, and vocal instruction—through the commercial field—to body rhythmic movement, fencing, swimming, German rhythmic, tap dancing, ballroom dancing, and contract bridge. About 3,350 men and women were enrolled in these classes during the past season.

In addition to class activities, a Sunday afternoon lecture series and dramatic and music programs are sponsored. An indoor recreation program is conducted during the winter, and an outdoor program of playground ball and horseshoes under lights, and tennis during the summer. An indoor swimming pool is open throughout the year.

The program has been outlined briefly to show that the school buildings, equipment, and grounds are used extensively for community purposes. Only limited uses have been made of visual aids in this community adult education and recreation program. One phase of the program that has used the motion picture and stereopticon extensively has been the Sunday afternoon lecture series. This program brings to Shorewood outstanding men and women from the lecture platform. It is financed about one-third through a free will offering, one-third through a ten cents reserved section fee, and one-third through contributions from the Shorewood Board of Vocational and Adult Education. Some of

the weekly programs given from October to March, for the past year and the coming season, follow:

— 1937-1938 —

Lecturer	Subject	Illustration
Captain Patrick Smith	<i>Japan's New Empire</i>	M. P.
Deane Dickason	<i>Lure of South Seas</i>	M. P.
Burton Holmes	<i>Beautiful Switzerland</i>	M. P.
	<i>All Over France</i>	and Slides
Major James Sawders	<i>Gay & Magnificent</i>	M. P.
	<i>Argentine</i>	
Dr. Victor G. Heiser	<i>An American Doctor's</i>	
	<i>Odyssey</i>	
Harry Ostrander	<i>Spain & the Mediterranean</i>	M. P.
Col. Chas. Furlong	<i>Last of the Old West</i>	M. P.
Dudley Crafts Watson	<i>Moods of Mexico</i>	Slides, Music
Carl Sandburg	<i>Afternoon with Carl Sandburg</i>	
Aloha Baker	<i>Lives of a World Wanderer</i>	M. P.
Hettie Dyhrenfurth	<i>Himalaya — Throne of the Gods</i>	M. P.
Julien Bryan	<i>Turkey Reborn</i>	M. P.
Margaret Ayer Barnes	<i>Adventures of An Accidental Authoress</i>	
William Seabrook	<i>An Expatriate Returns</i>	
Grey Owl	<i>Mississauga</i>	M. P.
Gustav Grahn	<i>In Lion Land with Movie Camera</i>	M. P.
Dr. Louis Berg	<i>Why We Misbehave Like Human Beings</i>	
Tony Sarg	<i>Afternoon with Tony Sarg</i>	
Branson De Cou	<i>Hawaiian Islands</i>	M. P.

— 1938-1939 —

Ruth Bryan Owen	<i>This Business of Diplomacy</i>	
Dudley Crafts Watson	<i>Along the Danube</i>	Slides, Music
Major James Sawders	<i>Italy Today</i>	M. P.
Capt. John Craig	<i>Danger is My Business</i>	M. P.
Gutzon Borglum	<i>Great Stone Faces</i>	
Howard Cleaves	<i>Wilderness Thrills</i>	M. P.
Harrison Forman	<i>Into Forbidden Tibet</i>	M. P.
Harry Ostrander	<i>New Journeys in Old Asia</i>	M. P.
		and Slides
Soo Yong	<i>The Good Earth</i>	
Carveth Wells	<i>Through Mexico by Trailer</i>	M. P.
Julien Bryan	<i>Inside Nazi Germany</i>	M. P.
Branson De Cou	<i>Spring Cruise to Europe</i>	M. P.
		and Slides

The attendance at these programs averages about one thousand. The attendance is generally larger at illustrated lectures than at those without illustration. It takes names such as Dr. Victor G. Heiser, Carl Sandburg, or Tony Sarg to draw an overflow house with-

* Read before "Conference on Visual Education and the Adult", University College, Northwestern University, May, 1938.

out illustrations. Frequently much lesser names draw a capacity house with pictures.

Two motiograph deluxe 35 millimeter projectors which have recently been modernized with new lamp houses and lenses are used for the motion picture projection. A thousand watt Spencer double dissolving stereopticon is used for the colored slides. An attempt has been made to limit the motion pictures to 35 millimeter because satisfactory projection from 16 millimeter projectors at the throw of about 115 feet has not as yet been obtained. Many of the travel lectures are going into the 16 millimeter field, and the need of an arc light 16 millimeter projector is evident. Color films which are almost impossible for lecturers to obtain in the 35 millimeter film are quite readily available on the 16 millimeter film.

The opaque projector has been used extensively in two classes—interior decorating and art appreciation. In these classes most of the two hour period is spent examining the pictures on the screen. Sometimes as much as fifteen minutes is spent on one picture; at other times several pictures are flashed on the screen one after the other just to show the predominance of one detail. During the showing of the pictures, there is the presentation by the instructor and additions, criticisms, and questions by the class members. The membership of these classes is made up entirely of women.

In order to bring out more clearly the use of the opaque projector in these classes, I want to present some of the subjects discussed in the first and second semester in the interior decoration class. They are as follows:

First Semester

1. House in general—meaning of interior decorating.
2. Architecture—English, Tudor, Elizabethan—Jacobean—Carolean—Georgian—classical—15th to 18th centuries.
3. Furniture—age of Oak—Gothic—Tudor—Jacobean—Stuart (16th & 17th centuries)—age of walnut, Queen Ann—Chippendale—(17th & 18th centuries)—classic & Adam—Hep-plewhite—Sheraton (18th century).
4. Balance & arrangement—good taste in arranging furniture.
5. Color—theory and color pictures.
6. Window treatments—pictures of draperies and curtains.
7. History of fabrics—linen, cotton, wool, silk, rayon, celanese.
8. Italian Renaissance—its meaning—architecture, paintings, learning.

Second Semester

1. French architecture and furniture—Louis XIII—Louis XIV—Louis XV—Louis XVI—Empire—Provincial.
2. Early New England life—Pilgrim, Dutch, Connecticut.
3. Early 18th Century—Houses—Pennsylvania, Virginia, Mount Vernon.
4. Color schemes, carpets, wall paper, chintzes, fabrics.
5. Houses of Maine—1800—Bulfinch, Greek Revival, Victorian.
6. Furniture of 19th century—Duncan Phyfe, Empire, Victorian, and other subjects such as—House plans (Modern Williamsburg houses and others)—Accessories—Early American glass, Staffordshire china, Lustreware—Balance and Arrangement—pictures of well balanced rooms—Antique exhibit—etc.

Marion Cryderman, instructor of the interior decoration class, says this about the use of the opaque projector:

"Any well printed picture may be used, providing it is

printed on a good quality paper and is of a suitable size for the projector. Small pictures may be used but must be mounted on cardboard. If not of fairly stiff paper, held or fastened on pasteboard, the image will not be clear and will show unevenly. Photographs, unless securely mounted, because of the edges curling, are difficult to use.

"The pictures I have found most satisfactory are those taken from good magazines, printed clearly on good paper. Pictures in the inexpensive magazines are not clearly enough printed for screen work. Some of my most interesting and best pictures I have taken from 'Arts and Decoration,' 'House and Garden,' 'House Beautiful', Architectural magazines, and catalogues from the 'Anderson Galleries' in New York (no longer available) showing fine antique furniture and works of art, put up for sale by collectors of estates.

"Plain and colored post cards can be mounted or held in place by clips. Larger pictures also can be shown by merely holding in place against cardboard.

"By showing pictures in this way, in conjunction with the lecture, the subject under discussion can be studied minutely, making clear all lines and detail. The use of the projector, illustrating any subject in interior decorating, is invaluable."

Laura Lapham Lindow, instructor of the art appreciation class, makes these comments regarding the use of the opaque projector:

"In the teaching of the psychology of picture appreciation, called 'Art Appreciation', to my class of adults in the Shorewood Opportunity School, I trace the great epochs of the art of painting, and it would be almost impossible to explain the differences in the approach to art of the various periods, without visual means being available. Each epoch has its characteristics as to form, rhythm, color, and composition and an opaque projector aids me to analyze these points to advantage for the entire class.

"Several companies make splendid reproductions of the famous works of art. These are photographed in color directly from the original paintings and are faithful records of the world's greatest art. When the class is assembled I project on the screen the prints pertaining to the epoch which we are studying.

"The University Prints, Newton, Mass., the Arttext Prints, Inc. of Westport, Conn., and E. A. Seeman Prints Co. of New York City have provided me with the best examples of color reproduction although books and magazines have been mutilated to obtain the necessary material. The Bureau of Educational Research of the State University of Iowa publishes an aesthetic judgment test in which two prints of the same painting are shown, one with the correct composition as the artist has arranged his painting, the other with the objects in slightly different order. By use of visual means, the opaque projector, I am able to project these two pictures on the screen simultaneously, analysing the integral parts for the class, aiding them to become observing of aesthetics.

"To obtain the ultimate value of a work of art, one must give it more than a passing glance. A picture which has taken several hours to paint, which has been painted by an artist who has spent years in learning to paint, which has taken days to arrange, which has gone through many changes and revisions during its making and which is so durable that it will last for hundreds of years should demand of the observer a time of thoughtful contemplation. To assume that one can get out of a picture all that is in it through seeing it for a short time is to admit a lack of appreciation. So my class has the advantage of a period of contemplation while the picture is on the screen, one of the many reasons in favor of visual education."

Though the opaque projector is ideal in classes such as interior decoration and art appreciation, its field is distinctly limited and its value is not as broad as is the motion picture projector.

A few rather unorganized attempts have been made to use the motion picture projector in adult classes. A notable example was a series conducted several years ago by a man who has traveled extensively with his camera. He had a very fine library of his

own motion picture films taken in Spain and the Latin American countries. His pictures were good, but the entire work of the class centered around the films without enough time for introduction and discussion.

Plans are now under way for a course in science for adults in which the 16 millimeter sound films will be used extensively as illustrative material. In closing I must say that we fully realize that we have scarcely scratched the surface in the use of visual aids.

The Administration of a Visual Education Program in a Small College *

Describing the careful selection, evaluation and adaptation of educational films to the curriculum

By SHERMAN P. LAWTON

Director Radio and Visual Education
Stephens College, Columbia, Mo.

THIS is the third year of our classroom motion picture program at Stephens College. During the first year, we used five times as many films per student as any other comparable school that we know about. During the second year of the program the figure tripled, and this year that total is tripling. Approximately 3,000 reels will be run through our machines this year. This is a minimum of 500 hours actual running time, an average of more than two reels for every class hour of the school year. Obviously, such a quantity of service involves great detail of administration. Five hundred hours of running time means at least 1000 hours of curriculum study, film cataloging, personal contacts, promotion, editing, film and machine care, correspondence, records, ratings, etc.

Films are used on our campus for three purposes: for direct instruction; as a basis for discussion; for the teaching of motion picture appreciation. The appreciation work is coupled with a production unit which is still in the infant stage. A program of such proportions, even though localized, demands so much detail of organization and records that in a school of only 1200 students the part time of ten people is required to keep the organization operating efficiently.

The central committee governing general policies and determining the budget is made up of the Dean of Instruction, the Dean of Administration, and the Head of the Division of Skills and Techniques. The director of radio and visual education who is responsible to this central committee, an instructor "in charge of operations," a part time photographer to whom the production work of the college is really incidental to his teaching of Photography in the art department, a full

time secretary, three catalogers and typists, and three machine operators complete the personnel.

We feel that we might have over-promoted our movie program. Possibly we have encouraged the classroom use of motion pictures (a) beyond our capacity to administer properly, (b) beyond the capacity of our faculty to use the films fully with all of the advantages that can accrue from instructional cinema, and (c) beyond the available supply of good films. We have some evidence that this is the situation. Naturally we have taken steps to correct it. These steps will be clear from the following summary of our administrative procedure.

1. First of all, as a visual education service staff to the campus, it is our obligation to know what is being taught in as many courses as we can. We gather this information by talking with other faculty members, by sitting in classes, and from course outlines which staff members submit each year to the Dean of Instruction.

2. Then we try to find out what films are available. From dozens of distributors we collect catalogs listing thousands of titles.

3. Our third step is to select titles of films that we believe will fit into our curriculum. We then make up a card catalog of our own. In this catalog we list for each film the title, the various distributors from whom it is available, the rental price of each distributor, the length of the film, a description of the subject matter the distributor claims the film contains, and the courses in which we believe it will fit. For example, the description of a film may lead us to believe that it should fit into a course in social problems, humanities, and a course in history.

4. We then send to each of the instructors concerned a statement that such a film is available and we offer to get it for preview. A new requirement in at least one

* Prepared for the "Conference on Visual Education and the Adult," University College, Northwestern University, May, 1938.

division of our school is that no film may be selected for classroom work unless it has been previewed or seen by the instructor in charge.

5. If, after the preview, the instructor feels that the film is of sufficient merit and pertinence, he asks us to get it for him at a certain time and to be shown in a place of his own choosing.

6. We stamp the card "Approved" if the instructor thinks the film will suit his needs. We stamp it "Recommended" if he thinks it is very good, and provided it has technical excellence in photography and sound.

7. We are a service organization. We correspond to a library. When an instructor asks us for materials it is our job to try to get them for him. This means that we must get the equipment, the operator, and the film to the right place at the right time and project the film with care and effectiveness.

This service has been greatly simplified during the current year by the construction of the Cinema Laboratory, a classroom especially built for the effective showing of films. Previous to the construction of this classroom the machines were transported to as many as twenty locations within a single week. Now more than ninety percent of our projections are in the Cinema Laboratory to which the instructors bring their classes. Our experience in this respect differs from that of some other places. First of all, having a theater for the special purpose of showing classroom movies does not seem to create the attitude on the part of the students that they are going to a "show." Neither does the use of a regular operator rather than the teacher tend to create this attitude. The attitude which students have toward a movie showing is dependent upon the instructor, not the place in which the film is shown nor the method of showing. In any case, if some of our showings might assume the aspect of entertainment, we feel it is so much the better as long as students get the material.

8. After each class showing we ask the instructor to rate the film used.

First of all he tells us in what ways the film has proved to be of help in his course. In 16% of the cases of film use during the current school year, motion picture films clarified material which the class had already covered. In 5% of the cases the film gave additional facts to previous class material. One-tenth of the films served as a summary of material that had already been covered. In 15% of the instances, the film served as an introduction to a subject which the class was about to undertake. The principal contribution of one-fourth of the films was that they made the material more vivid or interesting. In 17% of the cases the film provided a general background for fuller appreciation of course materials. In a few instances instructors felt that films had helped them integrate with work offered by other departments.

The second question that instructors are asked is: if the film was of no assistance to your class, please indicate why. Throughout three years of such reports, no instructor has reported that the subject matter was too far removed from what the class was studying. This fact, we believe, is the result of fairly careful film selection. Based on the showing of about 2000 reels, 1.25%

of the showings resulted in reports that the subject matter was too simple; 1.66% that the subject matter was too complex; 1.25% that the same material had been covered more effectively by some other method. Other negative comments offered by instructors (in rare instances) have been that the film was a little dull, not clear, hodgepodge, or lacked dramatic effect.

The third question that we asked of instructors is whether the accuracy of material, scope of material, thoroughness of material, organization, etc., has been good or bad. Instructors consistently rate at least two-thirds of the films very high as regards to content. The most frequently mentioned weak point is that the material is out of date. Besides accuracy, scope, thoroughness and organization of material, films are rated on titles, photography, speaking, other sound, acting, costumes, and setting. All items considered, 8% of the films that we have used have been rated as poor and 13% as below medium quality. 16% are considered of adequate merit, 28% very good and 32% excellent.

The percentage of films that get good ratings has not increased over a three year period; thus it appears that the quality of films used on this campus has not improved. However, we have found a greatly increased use of films not on our "Approved" list. Many instructors believe that even a poor film is better than no film and so are willing to try a few new titles each year. It is, we find from our records, the use of these films that has kept the average film rating at the same three year level—the films with high ratings are repeated from year to year, but not usually those with a rating below five on a scale of ten.

9. We now approach another question on which each film user is asked to report. This question concerns the methods by which he tried to get the maximum value from the money and time expended: what methods did you use to make the film effective by tying it in with other course materials? We feel that asking this question of each film user not only gives us a pretty fair picture of what is going on, but the very fact that the instructor has his attention called to the various ways of using films effectively might encourage the adoption of some of the methods. We discovered, for example, that although 27% of the reports claimed that the instructors told students what to look for in the film, only 23% of them had previewed the film or had even seen it before. Then it was that we began our campaign to have no unpreviewed film used in a class.

Effective methods of film use were reported to us as follows; in about four cases out of ten the classes had discussions about the film afterward. In some cases instructors have asked to have the film shown twice with discussion of the main points of the film between showings. Other instructors have found it helpful to have the chairman of a class committee preview the film. Lectures previous to or following the showing are probably too common. Reference back to the film frequently in projects that follow the film showing seem to be very helpful.

10. Finally, we ask each instructor to offer comments on our service so that we can improve our weak spots or continue our more effective procedures.

Developing an Integrated Community Program by Use of Visual and Auditory Aids*

Summarizing the purposes and activities of visual instruction in a great city's public school system

By W. W. WHITTINGHILL

Director Visual Instruction, Detroit Public Schools

PRESENT trends indicate that increasing discussion and attention have been given to school and community relationships during the past few years. Rapid changes have been inaugurated both in the method of determining the programs and also in the type of content to be used. Everyone may remember the time when the instructional program carried on in the schools was presented in accordance with the hands of the clock and through page numbers of text books. Several years passed and we found ourselves in a new world—a new social structure in the making, which necessitated new educational policies, methods, procedures, materials, and interpretations for a reconstructed curriculum from the kindergarten through the university and into community life.

The essentialities involved in developing a community program by use of visual and auditory aids are numerous and somewhat complicated. It is necessary to survey conditions and to become acquainted with all organizations and individuals who are to be considered in this type of community activity. We believe it is a responsibility of public relations to keep them informed and interested not only by providing them with certain information but also to have them become active participants. The diagram of avenues and action which has been distributed to you portrays this network.

Business and industry have been great users of visual and auditory aids. Business organizations plan for extensive advertising, and advertising is nothing more than the effective use of practically all types of visual and auditory aids. If the public schools, in cooperation with the community, could finance advertising programs comparable to those used by business and industry, their problems of interpretation and integration would approach solution more simply and more directly.

In developing a community program such as exists in Detroit, it has been necessary to establish plans, procedures, and a calendar of activities with all necessary rules and regulations. The community program now operative in Detroit has been established during the last twenty years. There were few organizations participating when the program started. Each year others have been added and the diagram gives a partial picture of this community combine. Each organization, agency, or corporation maintains its independence and identity within the community. This portrayal does not

then mean that some five thousand or ten thousand community units are in operation simultaneously. In reality, these units have regularly scheduled activities and yet it is not unusual to find, on some occasions, many of them participating in a city-wide activity program.

These same organizations have set up definite plans of procedures. Plans are exchanged so that all concerned may have an opportunity to become acquainted and educated with the coordinated system. Time does not permit me to give in detail the typical procedures generally set up and approved. However, the following information will serve as a cross-section. A definite policy for the use of teaching aids in the public schools has been established. Teaching aids which are distributed from the central library are always previewed, evaluated and approved by instructional committees in cooperation with the Department of Visual and Auditory Education before they are recommended. These aids are classified in a bulletin and made available to the public schools.

In addition to this type of teaching aid, many exhibits relating to school activities and community programs are organized and used in the schools. Frequently, the schools plan their own exhibits within the building and they are used for what are known as "School and Community Nights". Occasionally, organizations other than the schools prepare exhibits and, in instances, these are labeled as traveling exhibits and go from school to schools. There has been a bulletin prepared which presents information concerning the visits to various organizations within the Metropolitan area. Thousands of school children each year visit industrial plants, stores, hotels, the art institute, radio stations and newspapers. These experiences are very valuable for the children and represent one of the finest types of school and community relationship. This plan also includes cooperation with commercial organizations relative to the use of teaching aids sponsored and produced by them.

It is necessary that there be policies and procedures concerning the use of these aids, so that previewing is made possible. In selecting films and slides and other aids, public schools need to differentiate between materials used by commercial organizations for sales promotion and materials intended for instructional purposes. These aids should be approved for use in the schools on the basis of the degree to which they add to

* Read before "Conference on Visual Education and the Adult," University College, Northwestern University, May, 1938.

Possibilities in the Use of the School Newsreel

A crisp expose of the benefits derivable from the student news-reel by live-wire methods

By WILLIAM G. HART

Director of Visual Education,
Lowrey School, Dearborn, Michigan

THE MAJORITY of teaching devices are capable of much more effective use than appears on the surface. Particularly has this been evident in the case of the student newsreel in its evolution as a part of the instructional program in our Junior High School during the past six months.

As originally conceived the newsreel was designed to serve as an interesting record of highlights of the school year. Sponsored and financed by the Student Council, the film provided experience in planning and budgeting available finances, selecting worthwhile portions of school activity, composing subtitles, and initiation into certain rudimentary principles of movie making. These things it did—and much more.

It early became evident that as an agency for painlessly molding student opinion the newsreel was unsurpassed. Thus, when the student court was set in operation the Newsreel Committee immediately filmed typical violators of school regulations, their progress

through the court, and subsequent punishment. A much more wholesome understanding of the reason for certain rules appears to have followed.

Shortly afterwards a student was struck and injured by an automobile as a result of careless bicycle riding. The Newsreel Committee swung into action, re-enacted the scene in cooperation with the police, and followed with a series of shots of thoughtless bicycle use under the subtitle "Do You Do These Things." The ultimate effect is difficult to measure, but much discussion of the desired type followed, and the experiment was successful enough to bring forth a substantial police appropriation to produce on a more elaborate basis a picture directed toward bicycle safety.

Numerous other uses of this nature are planned. When the lawns become littered with papers, as happens annually with the advent of spring, pictures will be taken of the unsightly grounds. Experiments in encouraging good sportsmanship at athletic contests, pedestrian safety and care of school furniture and equipment are being considered. The newsreel is winning its spurs as a most efficient device for molding the thinking of a student body toward issues as they arise.

Another valuable by-product of the newsreel has been the experience afforded students in preparing and delivering over the public address system a running comment and explanation of the film in the best Lowell Thomas fashion. In each case the edited reel is screened before the committee, each of whom makes notes and prepares to cover whichever of the showings can best be arranged in his schedule. Improvement in technique has been marked enough to justify the starting of a "radio broadcasting studio", where students are given actual practice in preparing and delivering to their classmates in another room various types of radio programs.

One of the most promising leads in our brief experience with the Newsreel has been its ability to cut across traditional boundaries of subject matter and to bring together in a common project numerous "departments". Working most actively in production activities have been the journalism class, the student government, the auditorium classes, and the art department, the last group cooperating closely with the project in developing title lettering and backgrounds. Skill has progressed to the point where colored-background titles are being turned out.

Certainly not of least importance is the place of the newsreel in the public relations program of the school. From its very inception, inquiries were constantly received from parents and friends who wished to ob-



Filming a Safety Movie



Shooting a Scene from Puppet-Making



Chairman of Newsreel Committee at Work on Titles

serve their children as they appeared in newsreel activities. Interest has reached a point where a local

theatre magnate has offered to attempt showings in his theatre with nearly 2000 capacity.

Thus the newsreel has won for itself a place of considerable importance in our school program. Our experience, however, is relatively short. Far more significant results are doubtless possible.

Editor's note: Have you made a moving picture in your school? If so, will you tell the other schools who have made pictures and those who want to make them, about it?

The National Council of English Teachers is making a survey of school-produced films. Will you please supply information as to title and subject of your film, a description of it, length, whether 16mm or 35mm, silent or sound. If you are carrying on activities in this field, please write Mr. Hardy Finch, High School, Greenwich, Connecticut for a blank upon which to report them.

Microphotography

Being a detailed account of an ingenious and effective adaptation of available apparatus to a new need.

By H. O. BURDICK and D. W. WEAVER, Jr.

Departments of Biology and Chemistry
Alfred University, Alfred, N. Y.

THE PART necessity plays in mothering invention is frequently evident in photography if the lack of adequate funds prevents the purchase of expensive equipment. We wished to make 35mm. film strips and slides for lectures in biology and chemistry. Our only available equipment was an Eastman Recomar 33 and an Argus 35 mm. camera. The former used only $3\frac{1}{2} \times 4\frac{1}{4}$ " plates or cut film and it was impossible to critically focus the latter on various-sized diagrams so that they would be properly reduced to fill a double-frame opening (24mm. x 36mm.) on 35mm. film. By combining parts of both Recomar and Argus cameras, a microphotographic camera was produced which was well suited to our needs. A description of this photographic hybrid follows.

Figures 1 to 4 show the finder made from a metal plate holder of the Recomar. Most of the back was sawed off leaving only the butt (A) and hinge (D) of the plate holder. The hinge was then pried loose and soldered to the butt as shown. A piece of sheet metal ($E) 3\frac{1}{4} \times 3\frac{5}{8}$ " was soldered to the free edge of the hinge. The butt of this plate holder (from now on referred to as plate holder No. 1) was pushed in place along the plate holder guides on the back of the Recomar so that the hinged plate could be swung back out of the way but still be firmly held by the butt of the plate holder.

The spring tension back and hinged plate rack were removed from another metal plate holder (No. 2) and

pushed into place against the butt of holder No. 1 already in position. Careful measurements were taken to establish a point on both holder No. 1 and the plate of No. 2 exactly opposite the center of the Recomar lens.

The lens barrel of the Argus was removed by taking out the 4 screws on the face of the camera. The Argus film case without the back was placed against the back of plate holder No. 2 so that the Argus lens barrel aperture was centered over the Recomar lens. The screw holes in the case were likewise indicated. After cutting the openings for the barrel aperture and the screw holes, the plate holder No. 2 was screwed against the face of the Argus case with a piece of black velvet between to exclude light. This made a light proof film carrier when both the plate holder cover and the Argus film chamber cover were in place.

The focusing unit was constructed of light sheet metal and mounted on plate holder No. 1 after a $2 \times 1\frac{5}{8}$ " hole had been cut around the point marking the lens center. A piece of ground glass was fastened in place on this small metal turret (see figures 1 to 4). The ground glass surface must be at the same distance from the Recomar lens as the film strip in the Argus or it is evident that the negatives will not be sharply focused. This distance can be easily measured from the guides for plate holders on the Recomar to the level of the negative in the Argus as shown in figure 4.

In practice, we open wide the diaphragm and shutter

on the Recomar, swing the focusing device into place (sketch 1) and shift the camera lens or change the distance from diagram to lens to get the proper-sized image on the ground glass. Critical focusing is done with the Recomar lens ratchet while examining the image with a magnifying glass. The focusing chamber is swung aside but its base is not removed from the plate holder guides (sketch 2). The diaphragm is usually stopped to 8 and the shutter closed. The Argus film carrier, already loaded with film, is pushed into place against the butt of the focusing unit and the cover of the plate holder attached to the Argus is pulled out sufficiently for proper exposure of the film. All exposures are made with the shutter control on the Recomar. After exposure, the cover is pushed back into place and the film turned for the next exposure. The Argus film carrier is pulled out of position far enough to allow the focusing unit to be swung into place for the next picture. This procedure eliminates the delay involved in replacing the film case on the plate holder track after each exposure. Exposures can be taken almost as rapidly as the pictures to be copied are arranged.

Eastman Safety Positive or Agfa Positive film may

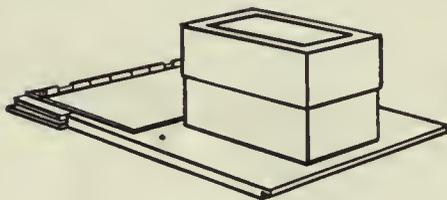


Fig. 1

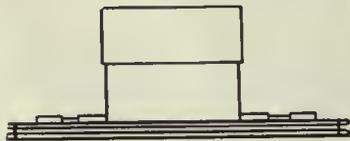


Fig. 2

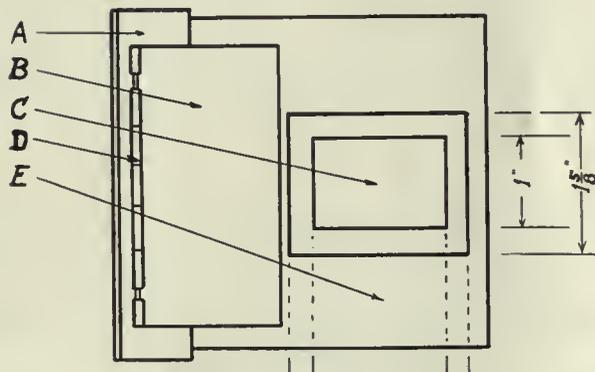


Fig. 3

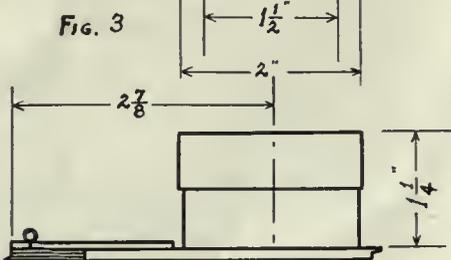
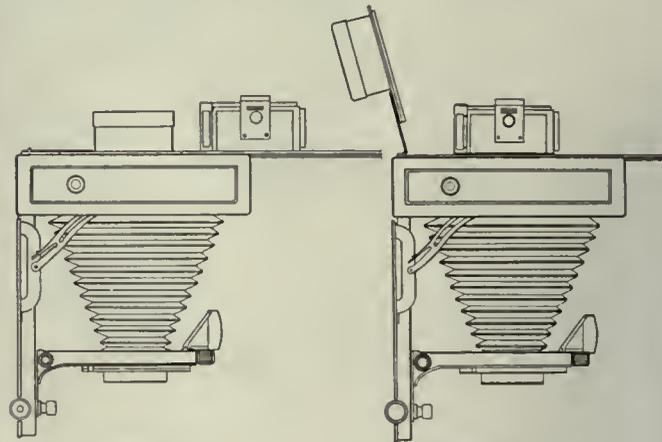


Fig. 4

be used for both negative and positive strips and developed in Eastman D-16 or Agfa Positive Film Developer. Process film is also excellent for reproduction



Sketch 1

Sketch 2

of black and white line drawings. Color pictures are accurately reproduced with Kodachrome A.

Film bought in bulk is much cheaper than spool film, costing about one cent per foot. If only a few pictures are to be copied, a short strip of film is rolled onto the spool. This method eliminates the necessity of exposing a complete roll of 18 or 36 frames before development. The shorter strips are cut between frames and made into 2" x 2" slides. We have found the S.V.E. Tri-Purpose Projector to be excellent for both film strips and slides.

The combination Recomar and Argus described here has a definite place in the field of visual education and its advantages are: low cost, flexibility, accuracy in focusing; it can be used for closeups or distant views, black and white or color reproduction, copying or landscapes.

The authors acknowledge the services of Mr. Leon Bassett in assembling this photographic unit and for his line drawings showing the specifications.

Developing a Community Program with Visual Aids

(Concluded from page 183)

the effectiveness of instruction something that would be lacking without their use. Approved teaching aids should have definite instructional value comparable to that of the teaching aids which have been purchased by boards of education. Teaching aids containing more than a minimum amount of advertising or implications which point to the absolute superiority of the specific product or of a particular commercial organization should not be used in the public schools. With this type of procedure, many of these organizations are able to produce films which have many values for use in the schools and community.

Cooperation with the press, radio stations, theatres, departments of City government, and all other agencies utilizes main avenues for action relating to those community interests in which all are vitally concerned. An integrated program by use of visual and auditory aids provides a balanced education for the public schools and the entire community.

DEPARTMENT OF VISUAL INSTRUCTION

President's Letter

IT HAS been a pleasant and enlightening experience to have been President of the Department. We have grown markedly during the year. Our low point in membership was 320. Today we have 550 paid-up memberships. The sharp increase has been due to a number of factors. First, of course, is the general increasing interest in visual instruction. This is attested to by the fact that in 1933-34 the Educational Index listed 33 articles in Visual Education; in 1935-36, 44; and in 1936-37, 67. But more important than this increase in interest has been the unflinching energy and zeal of our members, especially in the Metropolitan and New England branches, in recruiting new members. But even with this sharp increase in memberships there are still literally hundreds of eligible persons, some of them even teaching courses in this field, who do not belong to our organization.

The activities of the New England and Metropolitan branches suggest that we need to regionalize our work a great deal more than we have in the past. Many teachers cannot afford to come to our national meetings. There are regional and state opportunities for us to not merely increase our membership, but more significantly to serve educational needs. Especially important in this connection are the audio-visual conferences which have been held at Atlanta, Nashville, Evanston, Columbus, Jamaica Plain, New York and many other centers during the past year.

Our association needs to engage in some big projects on which we can get the combined thinking and activity of our membership. Activities such as those involved in the production of the film, *Spooking of Safety* met wide-spread approval in the referendum we held on this subject. Obviously, there are other activities of this and related topics in which we might engage.

We need to increase our publications' program. I would tentatively suggest a series of inexpensive pamphlets in which we might deal with a number of problems facing us in the field of visual education.

Our visual instruction is weak on theory. We have of necessity emphasized the promotional aspects of the work. Yet, unless our theory is well-grounded, we shall run into difficulty. When, how, with whom and why should these various concrete materials be used? These questions have not been adequately answered. Furthermore, we do not know the best ways to integrate these various ideas one with the other and with other media of communication, especially reading. How can reading improve excursions? How can excursions improve reading? Of what value are documentary films in improving sensitivity to social problems so that students will be moved to read widely and intelligently in the fields of housing, soil erosion, flood control, and the like?

We need rigorous evaluation of the courses offered in visual instruction. Is there undue emphasis on mechanical skills? Is there sufficient emphasis on

(Concluded on page 190)

PROGRAM

Department of Visual Instruction of the N.E.A.
June 27-30, 1938, New York City

President, Edgar Dale, Ohio State University, Columbus

Secretary-Treasurer, Lloyd L. Ramseyer, Ohio State University, Columbus

Local Chairman, Rita Hochheimer, Vice-President of the Department

Department Headquarters, Room 318, Pennsylvania Hotel, Seventh Avenue and 32nd Street

Monday, June 27—2:00 P. M.

American Museum of Natural History, Lecture Room, 5th Floor. Joint Meeting with the Department of Secondary Education

The Photo-play Appreciation Movement

William Lewin, Weequahic High School, Newark

Forum Discussion

Tuesday, June 28

American Museum of Natural History

Room 202, Duplex Hall

11:00 A.M.—*Business Meeting*

1:00 P.M.—*Old Timers Get-Together Luncheon*

American Museum of Natural History, Flying Bird Hall

2.30 P. M.—*Afternoon Session*

Word of Greeting from the Metropolitan Branch

Rita Hochheimer, Asst. Director, Bureau of Visual Instruction, New York City Schools

Experimental Use of Visual Aids in Teaching Reading

Alex Jardine, Director of Audio-Visual Education, Public Schools, Evansville, Indiana

Pictorial Techniques in Publicizing Education

Howard A. Shiebler, Secretary to Superintendent of Schools, New York City

Improving Illustrative Material in Textbooks

Samuel B. Zisman, A. & M. College of Texas

Wednesday, June 29

American Museum of Natural History

Room 202, Duplex Hall

10:00 A.M.—*Election of Officers*

12:30 P.M.—*Informal Luncheon*

Standish Hall Hotel

2:00 P.M.—*Afternoon Session*

Visualizing Life—Today and Tomorrow

Marian Evans, San Diego Public Schools, Calif.

Film Production in the Schools

Hardy Finch, Greenwich High School, Conn.

Character Education Through Visual Expression

Mary Brady, Harmon Foundation, New York City

The D. V. I.—A Closeup and a Long View

Edgar Dale, President of the Department

3:45 P.M.—*Planetarium—Visit and demonstration*

Thursday, June 30

10:00 A.M.—*Excursion to Motion Picture Studio*

Admission by ticket only. These may be secured at Department of Visual Instruction Headquarters.

Farm Safety—In Hand-Made Lantern Slides

By ANN GALE

Art Department, Lindblom High School, Chicago

Subjects Suggested By R. N. SOUTHARD, Westbury Public Schools, Westbury, Long Island, N. Y.

WHEN pupils begin to study the problems of safety in the upper grades, (from 5-8) hand-made slides can be used very effectively as a basal means of instruction. Of all the many phases of safety, farm precaution was selected by Mr. Southard because of Westbury's location in a rural area.

1. Most falls occur in the home falling up or down stairs, tripping on loose rugs, or stepping on marbles and toys.

2. Fruits and vegetables that have been sprayed should be washed before eating. Animals never should be permitted

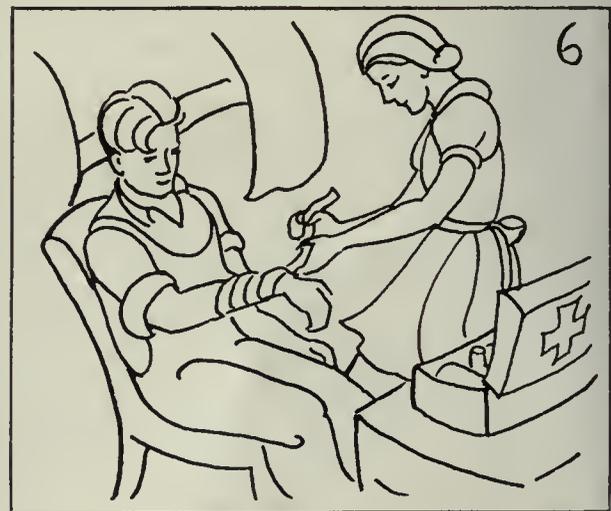
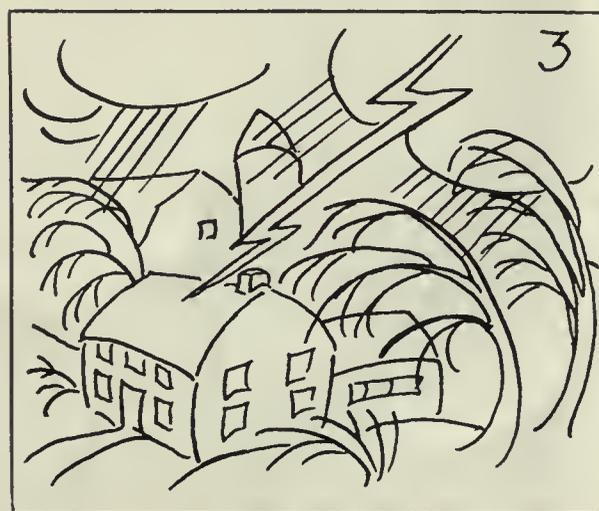
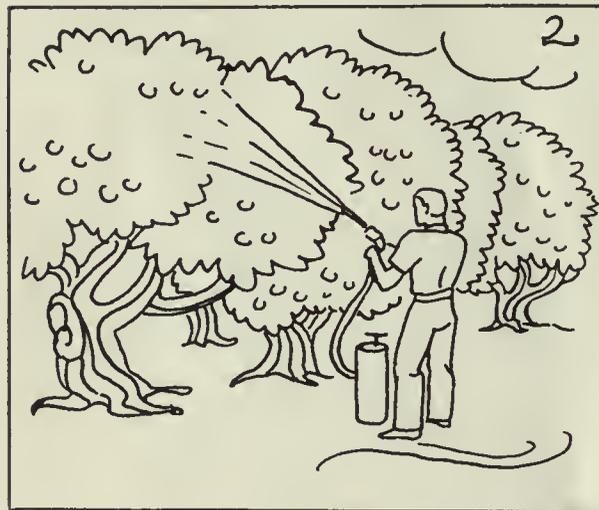
to graze in an orchard after fruit has been sprayed until after a heavy rainfall.

3. Lightning is one of the common causes of farm fire losses, Be ready to put out its fire when it strikes.

4. Rats and other vermin spread contagion. They should be exterminated quickly.

5. Ticks from animals carry spotted fever to humans by means of the mosquito and fly. Don't offer breeding places for mosquitoes.

6. Every farm should be equipped with a first aid kit.



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 THE MAGAZINES AND BOOKS

Conducted by Nelson L. Greene

Education (April) A number of educational magazines follow the practice of devoting one issue a year entirely to visual education. In "Education" for the present year it is the recent April issue. The eleven articles by well known writers therein are the following:

Will the Film and School Join Hands? (5pp), by F. Dean McClusky, after sketching various fiascos and blind alleys of our chaotic past, concludes that the solution will be "educator brains, plus technicians, implemented by capital"—which has been the conviction of many for some twenty-years past. *The Literature in Visual Education: Its Strengths and Weaknesses.* (6pp) by Fannie W. Dunn and Etta Schneider, emphasizes the great extent of the literature, its uneven quality, and the need for sounder and more critical treatment of practically every aspect of the field. *Seeking New Objectives through Use of Films.* (7pp) by Edgar Dale, comments on the paucity, inadequacy and limitations of educational film material, the fact that our present stock offers merely concrete topical films, and asserts the vital need for films to "explore the whole human scene from childhood to old age," to give social perspective by interrelating and humanizing factual knowledge. *The Sociological Approach to Motion Pictures in Relation to Education.* (6pp) by Frederic M. Thrasher, is concerned chiefly with theatrical movies, and educational by-products derivable from them. *And Still They Gaz'd...* (5pp) by Charles F. Hoban, Jr., is a forceful discussion of past educational films, the misuse of sound, and the specific sort of film to ensure learning of the right kind. *A Critical Evaluation of Teaching Films.* (5pp) by F. L. Lemler, summarizes results from over 8000 teacher judgments on nearly 400 films, gathered over a four year period. The evaluation form used is included. *Administrative Techniques for Effective School Use of Visual Materials* (4pp), by Lloyd L. Ramseyer, urges deeper and wider cooperation between visual aids administrators and teachers, with illustrative suggestions for many phases of the work. *In-Service Training in Visual Instruction.* (5pp) by Paul C. Reed, points out strongly the inadequacy of present special courses available and emphasizes the importance of in-service training by a continuing program, wide in scope. *Visual Instruction in Adult Education* (5pp), by Hazel L. Gibbony, surveys the present achievements of film in this field and shows the great future values obtainable from sound films for adults. *A Teaching Experiment with Visual Aids.* (3pp) by Joe Park and Ruth Stephenson, presents succinctly an experiment with two balanced groups of 15 students each, in teaching a specific topic with and without visual aids. *How To Make Lantern Slides.* (7pp) by W. T. R. Price, is a very complete exposé of the chief procedures in making slides of all kinds for many educational purposes.

Michigan Education Journal (XV :460-61, May, 1938) "Teachers as Movie Makers," by J. Harry Adams.

How the Bay City, Michigan, teachers produced a feature film to show the community the way the schools of their city function, is described crisply by Mr. Adams, Principal of Central High School. Sound effects were achieved by reading the accompanying script, using microphone and amplifiers. The cost of the production (\$1,000) was more than defrayed by the admission prices, as the film was seen by thousands of local citizens.

The Journal of Geography (XXXVII: 202-205, May, 1938) "A Picture Library and Its Use," by Nora Riley, Northwest Junior High School, Kansas City.

Here is presented a practical plan for geography teachers who may not know what to do with the wealth of illustrative material which accumulates after their temporary use in class. Have the children mount the pictures in a scrapbook which can then be cut up and the pictures sorted by countries, units, or topics. Select about thirty good pictures for each unit, number each picture, and formulate an objective test to be answered from the pictures and the printed legends. The test is put on a card and placed in a manila envelope with the pictures. Such a library can be kept in active circulation throughout the year.

The Journal of Education (121: 53-54, February '38) "A Camera Club for the Small High School," by Stephen A. Griffin, Principal.

Camera clubs have been part of the campus life of many colleges and universities, but not many high schools have inaugurated this splendid school activity. It is pleasing, therefore, to come across this brief report of a two-year-old camera club at Livermore Falls High School, Maine. The outline given of the club's program will doubtless prove stimulating to other schools contemplating this extra-curricular activity.

Hygeia (16:109-112, Feb. '38) "X-Rays a Way to Better Health through Photography," by Walter E. Burton.

This is the fourth article on a most interesting development in medical circles. In the laboratories of the University of Rochester, was recently produced the first colored motion picture of blood circulation, in this case that of the intestinal membrane of a rabbit. The blood cells, pictorially projected, were approximately 100 million times their actual size.

Natural color photography is being used widely in recording troubles involving color changes in the human body. Infra-red photography has been recently improved as to speed, and sensitivity into the invisible red region of the spectrum. These heat rays penetrate the skin and show details ordinarily invisible. In bacteriology, photo-micrographs aid in research concerning microbe actors. Stereoscopic X ray pictures aid in many hospitals in seeing conditions in the third dimension. Tiny cameras are swallowed by the patient for recording stomach appearances.

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HUMAN AFFAIRS—1938. 204 pages, Paper \$5.50, Cloth \$11.00 Reviews the educational and intellectual status of the world today. Reprints the introduction to the 22nd edition of Private Schools.

A BRIEF GUIDE TO PRIVATE SCHOOLS—3d edition, 1938, 160 pages. Illustrated. 25c. Day and Boarding-Schools and Junior Colleges by classification. Chapters on Selecting the School.

THE SUMMER CAMP GUIDE—3d edition, 1938, 104 pages. Illustrated. 25c. Describes and lists the 400 Better Private Camps.

Circulars and Table of Contents on request.

PORTER SARGENT, 11 Beacon St., Boston

New Study Guide

Men and Oil—a Manual to accompany the film—by Robert B. Weaver, Department of Social Science, Laboratory Schools, The University of Chicago.

This is more than a perfunctory pamphlet for enclosure with the two-reel educational film on the development of the Pennsylvania oil industry, as condensed and edited by Ralph Jester from the theatrical motion picture *High, Wide and Handsome*. In expertly condensed form, it is a manual for study and reference which greatly enriches the results possible from this interesting film. It leads the students on to eager research on many aspects and ramifications of social history that are but fleetingly suggested in the course of the picture. The film gives the dramatic essentials, vivid data, swift glimpses in a long story, and above all it stimulates and inspires to further study and mastery of the wealth of learning material presented and suggested in the booklet. Even so good a film as *Men and Oil* can realize but a fraction of its educational value unless an adequate manual such as this is used in conjunction.

The first section is an 18-page "Brief History of the Development of the Petroleum Industry," with illustrations and elaborate charts, which should be read before the picture is seen. Then follow twelve "Major Understandings You Should Gain from this Story of Men and Oil," which also is for careful reading in advance of the showing. With such preparation the class is ready to see the picture with maximum profit.

The outstanding scenes of *Men and Oil* are then summarized, with thought-provoking questions for answer by the student from what he saw on the screen. Some still pictures from the film are included as a helpful key to the student's recall. Next—something which should be a part of every manual accompanying a talking film—a complete copy of the words spoken by the narrator's voice, as it comes in at intervals through the picture. The student is urged to "try to recall the scenes to which they apply" (which will not always be easy). Then, for test purposes, come twenty well chosen Informational Questions and seventeen Questions of Understanding. Finally, a set of twelve detailed Student Activities based on the twelve Major Understandings expected to be derived from the film, as mentioned above. An example Bibliography concludes this excellent piece of work, a 44-page miniature textbook for teachers and students alike. NLG

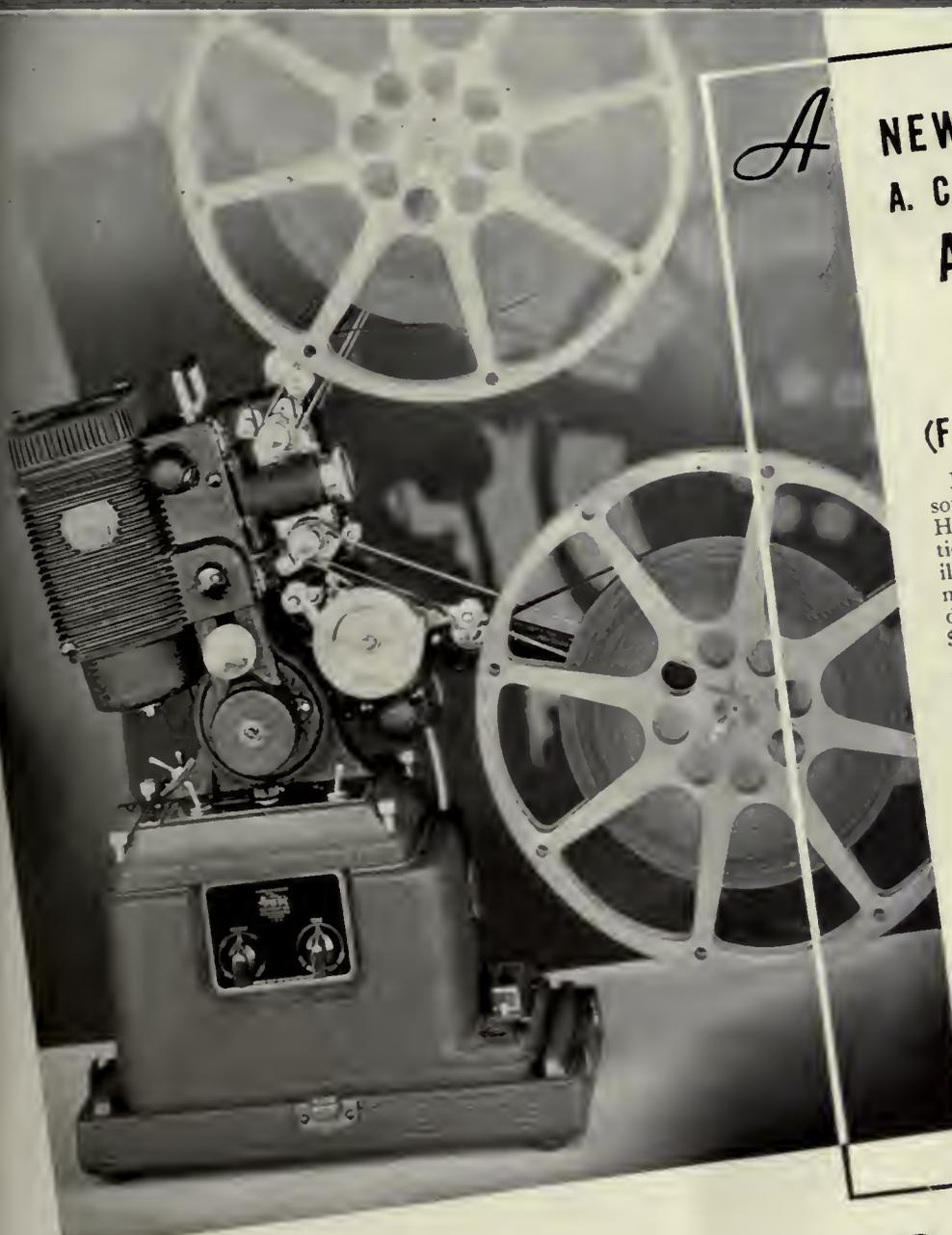
Department of Visual Instruction

(Concluded from page 187)

demonstration? Are the courses really functional as far as teachers' needs are concerned? What are the standards for a course in visual instruction worthy of receiving graduate credit? Obviously, these are problems that must take long-time cooperative thinking to solve, but we shall never work out satisfactory solutions unless we begin some rigorous planning to do so right away.

This present year has been a very stimulating one for me. It has renewed my faith in the democratic, cooperative way of solving problems. EDGAR DALE

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NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

Report of Northwestern Meeting

An important conference held May 13th and 14th on Northwestern University's Chicago campus marked the establishment of an experimental and service center for the development of visual education programs for adults. This brought together leaders in three major areas as indicated by the three sections of the program—"Visual Aids in Industry," "Visual Aids in Community Programs," "Visual Aids in College Classes."

The significant feature of the Friday evening session on "Visual Aids in Industry" was the appeal of business to institutions of higher learning for research and guidance in the effective use of visual aids. On the Saturday morning program, public school men stressed the value of film materials as a means of interesting the community in functional education. Speakers on this topic were: H. C. Bauer, Superintendent of Schools, Lakefield, Minn.; H. M. Genskow, Director Shorewood Opportunity School, Milwaukee; W. W. Whittinghill, Director Visual Education, Detroit Schools; and C. R. Crakes, Principal Senior High School Moline, Illinois. The college section also met on Saturday morning under the chairmanship of Professor G. L. Freeman, Director, Visual Education Project, Northwestern University. Techniques of introducing films in classes, and problems in the administration, production and evaluation of these materials were discussed by R. M. Kissack, Director of Visual Education, University of Minnesota; Dr. S. Lawton, Director of Visual Education, Stephens College, Columbia, Mo.; Dr. Frank Freeman, Professor of Education, University of Chicago; and Dr. W. C. Johnson, Associate Professor of Chemistry, University of Chicago. Running concurrently with the formal program was an equipment exhibit and a series of informal film screenings.

The high spot of the entire conference was a luncheon round table held Saturday at the Lake Shore Athletic Club in which a group of University College instructors discussed with the speakers of the morning, prob-

Thorne Hall, Chicago
Campus, Northwestern
University



lems in the development of the Northwestern University Visual Education Project. Dean Stevens announced the establishment of an educational film library of over 200 selected titles. These are for use primarily in the classes of the University College but may be secured by outside organizations. Several experimental studies in the use and evaluation of available materials will be made in the college classes, and a series of general evening programs built around feature-length educational film will be inaugurated in the fall. It was also announced that the University College will conduct other conferences in the field of visual education, and seeks to discover areas on which such meetings should concentrate to be of greatest service.

Nashville Audio-Visual Education Conference

Over 250 persons attended the first Audio-Visual Education Conference held at George Peabody College, Nashville, Tennessee, May 14, 1938. The Conference was sponsored by the faculties of four Nashville institutions: George Peabody College, Ward-Belmont School, Scarritt College and Vanderbilt University; but was held for the benefit of the entire region within a radius of 200 miles of Nashville.

The Conference was keynoted by Dr. Edgar Dale, who spoke upon "The Place of Audio-Visual Education in the Curriculum." Mr. Donald P. Bean, of the University of Chicago Press, talked about "The School's Responsibility for Visual Material" with sound films to illustrate the use of visual material at three levels. Dr. Howard A. Gray, of Erpi Classroom Films, demonstrated "The Proper Classroom Use of Sound Films." Mr. J. C. Wardlaw, Director of General Extension of the Georgia University System, defined the requirements for a regional audio-visual service center, such as it is hoped may be developed at Nashville.

In addition to members of the Peabody faculty and student body, representatives of fourteen other schools, colleges, and universities in the Nashville area registered their attendance at the Conference. Tennessee outside Nashville, as well as Alabama, Georgia, and Kentucky, were also strongly represented.

The Conference was arranged by Dr. M. L. Shane of Peabody College, acting as chairman of an inter-faculty Audio-Visual Education Committee. Closely collaborating with Dr. Shane were Dr. J. E. Windrow, who graciously placed the Peabody Demonstration School at the disposal of the Conference, and Dr. A. F. Kuhlman, Director of the Joint University Libraries. Dr. Shane presided at the morning session and Dr. Kuhlman at the afternoon session.

Visual Progress in the Northwest

U. S. Burt, Head of the Department of Visual Instruction of the Oregon State System of Higher Education, reports that at the Inland Empire Educational Association's annual meeting held this spring at Spokane, Washington, some 6,000 school people of the Northwest were in attendance. Mr. Burt, chairman of the Visual Instruction Section, was in charge of the section's program at the convention and was reelected chairman for 1938-39. The Visual Instruction Section is one of the oldest sections of the Association and this year stepped up into first place as having the largest attendance, averaging about 500.

Mr. Burt, in cooperation with Rex Putnam, State School Superintendent of Oregon, also arranged a five-day Visual Instruction Clinic, from May 9 to 14, at various Oregon educational institutions for the purpose of acquainting educators with the latest classroom films, projection equipment and visual instruction methods.

The Oregon library of educational visual aids, as developed by Mr. Burt, is now rated in second place in the nation, in respect to the number of subjects available and also in quantity distribution. The library now consists of 650 different motion picture films and 800 different sets of slides. These materials during the past year were shown before 1,017,603 people. Use of materials from the department has increased 265 per cent since 1932 and the present year's increase over last year is more than 50 per cent.

Texas Group Have Visual Program

Further evidence of increasing interest in visual education, is the session held May 19th in Galveston Texas. Mrs. J. N. Olson, chairman of Visual Education for the local Parent-Teacher Council, which sponsored the meeting, reports it was Galveston's first visual education conference, and attracted a fine attendance. A popular feature of the program was the showing of local films made by teachers.

Additional Summer Courses in Visual Instruction

Since the appearance of our May issue, which contained data on courses in visual instruction to be given this summer, we have received announcements of a few more, which are listed below.

Illinois

Northwestern University, Chicago Jun. 20-Aug. 13
Visual Aids and Radio in Education Paul C. Reed

New Jersey

State Teachers College, Upper Montclair
Visual Instruction E. Winifred Crawford

North Carolina

Elon College, Elon College Jun. 2-July 9
Visual Aids course in both summer terms July 9-Aug. 19

Pennsylvania

Lehigh University, Bethlehem July 5-Aug. 13
Marywood College, Scranton Jun. 25-Aug. 5
Visual Aids to Teaching (3 cr.) Sister M. Sylvia

South Carolina

Furman University, Greenville Fred W. Alexander

Texas

Hardin-Simmons College, Abilene
Visual Education (3 cr.) Dean R. A. Collins



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SCHOOL DEPARTMENT

Conducted by **Wilber Emmert**

Director Visual Education, State Teachers College, Indiana, Pa.

Planned School Exhibits Vitalize Instruction

IN THIS presentation there is given, first, a brief overview of the scope of visual-sensory aids, then a discussion of exhibits in general, and finally a word about school exhibits.

The theory underlying the use of visual-sensory aids in education is based upon the concept that sensory experiences are necessary for mental activities. Sensory experiences produce memory images which can be called upon to mentally solve problems confronting the individual. As one grows intellectually, he gains the ability to deal with abstract symbols—the spoken or written words, numbers, and graphic representations—and to make bodily responses to the abstractions as readily as to the concrete situation or thing.

Experimental studies have revealed definite and specific functions for each of the various visual-sensory aids used in school work. In general, they all tend to make abstractions meaningful, provide correct initial concepts, conserve time in learning, and enrich instruction.

The school journey is a school exercise designed to provide complete sensory experiences relative to such

phenomena as cannot be brought into the school room. It brings the pupils into direct contact with a functional situation in which the elements being studied are perceived in their various relationships as they actually exist, and it provides these experiences in all their elements of concreteness. *The object-specimen-model, and the museum* provide real concrete things (or replicas), but removed from their natural settings and from their functional relationships, which are often necessary for a complete understanding of the material being studied. *Pictorial materials*—flat pictures, motion pictures, lantern slides, stereographs—present images of objects for study. Even this very realistic material must be interpreted in order to make it fully meaningful to the child. Research studies have revealed specific techniques for the selection and use of pictorial materials, as well as the educational outcomes to be expected from their proper use. For example, the stereograph, because of the three dimension effect, produces an illusion of reality and makes the things more life-like and understandable to the child. Motion pictures, among other things, contributes educationally to the development of generalizations and to the understanding of relationships. *Graphic material*, in its various forms, presents varying degrees of abstraction in its symbolizing of object, situation, fact, or idea. All these different visual-sensory aids, and their variants, may be employed in the school exhibits prepared. A clear concept of the function of each must be definitely understood to make the exhibit meaningful and effective. Furthermore, a thorough comprehension of the specific function of the exhibit, as such, is necessary if its full values are to be realized.

It is generally recognized that the prime function of an exhibit—commercial, school, or civic—is to attract attention to and arouse interest in a particular need, or to create a demand that a certain thing be done. This is usually achieved through the use of symbols—abstractions which need interpretation to make them concrete. It should no longer be regarded as enough, in the exhibit field, merely to fill a hall with pictures, diagrams, and models. If information is to be spread effectively through symbols, more of the interest-compelling presentations should be taken advantage of. The more concrete the idea, the surer it is of making a lasting impression and moving people to do the thing suggested by the exhibit.

Too often would-be exhibitors are concerned with the mechanics of making the exhibit—whether the panels should be made of composition board or canvass, whether they should be made so that the exhibit can be transported from place to place, school to school; whether ready made materials can be purchased for

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the occasion; whether free material can be obtained; and how much can be crowded into a given space. While these are important factors, consideration should be given to such fundamental questions as how to find the special and limited audience to whom the exhibit should be addressed and adapted; how to select from the mass of information such facts and illustrations as will catch the attention and hold the interest of this special and limited audience; and even, whether an exhibit is the best form in which to present the message.

There is a greater chance of success of an enterprise, great or small, if it is approached with a clear-cut, definite plan based upon such an analysis as a good business man would make. Exhibition work is no exception to this rule. The exhibitor—commercial, school, or civic—will do well to thoroughly plan his work and follow the lead of authorities in this field of endeavor. The following well tried plan is recommended for consideration.

Problems of Exhibit Planning¹

1. *Plan*—Plan the whole enterprise by asking questions similar to those in this outline.
2. *Purpose*—What are the results sought? Why does it seem likely that an exhibit will help bring about these results?
3. *Audience*—What groups or types of people do you wish the exhibit to reach? Even among those selected you may need to make a choice. If so, which group can you hope, or does it appear practicable, to reach?
4. *Method of Exhibiting*—What will you do with your exhibit?
 1. Place. Where will you display it?
 2. Time. For how long will you display it? A week, month, year.
 3. Occasion. What sort of an occasion will you make of it? Conspicuous event? An accident to some larger occurrence? A specialized project?
5. *The Exhibit Contest*—What are the raw materials, the facts, the ideas to be set forth? What are the tests of suitability and adaptability?
6. *Form of Exhibit Materials*—What type or form will best display the raw materials? That is, are small panels to be used? Posters, models, cartoons, objects, or combinations of several of these forms?

What special features or attractions will add to their effectiveness?
7. *Exhibit Arrangement*—How will you utilize the floor space? How will the exhibits be placed? Will there be arrangements for demonstration space?
8. *Interpretation*—How shall the exhibit be explained to the visitors? Will there be an explainer? Short talks? Printed matter? Or will the interpretation be through titles, labels and explanatory statements?
9. *Organization and Construction*—How will you get the exhibit made? Who will sponsor the exhibit? How can professional and volunteer cooperation be secured?
10. *Publicity*—How will you get people to come? Will you use newspaper, advertising space, personal appeal?
11. *After-Use*—How will you follow up the exhibit to get people to act upon what has been demonstrated? Will you distribute printed matter? Will you furnish a reference list? Will you make a mailing and visiting list?
12. *Cost*—How much can you spend on the whole enterprise? Who will pay for it? How will you distribute the cost over panels, advertising, management, and other items?

(1) Routzahn, Evert G. "The A.B.C. of Exhibit Planning."

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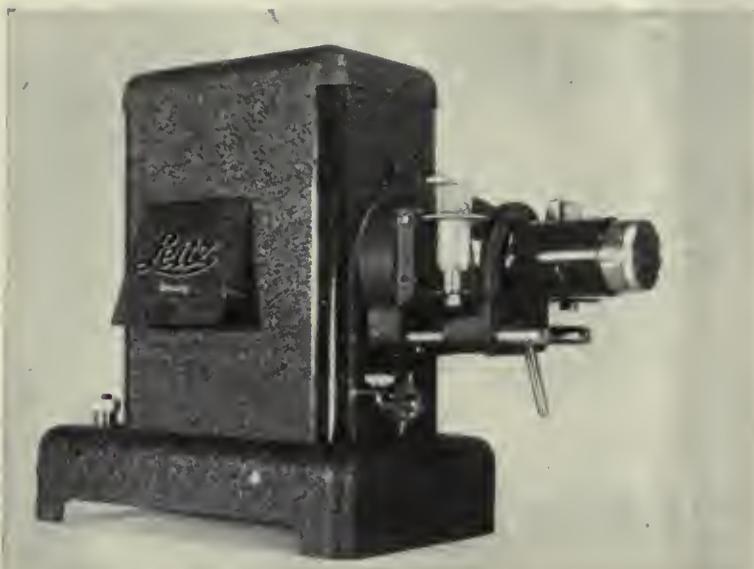
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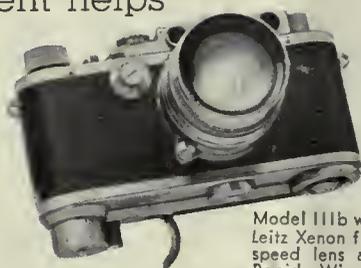
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School exhibits range in extent and complexity from the more or less simple classroom exhibit, to the more elaborate museum exhibit housed in a special room, and on to the extensive commercial type of exhibit. However, "the twelve point program" just outlined is applicable to each type, and the teacher concerned with the classroom exhibit, the principal in planning the museum, and the superintendent in outlining the plans for the community exhibition can gain much from its consideration.

Since each type of exhibit is designed for a different purpose, it is necessary that the educational objectives be fully appreciated by the exhibitor. As Dr. Hoban said in a recent address; "Countless investigations have been conducted on whether it is better to add up or down, but none on why you should add at all, and what you should do about your addition. It is time that educational objectives be more carefully considered." Teachers, principals, and superintendents have been having exhibits made, but just why—and what have they done about them!

In addition to imparting information and bringing about a change in attitudes on the part of the audience viewing the exhibit, the classroom teacher should be concerned with the specific outcomes possible from the construction of the exhibit. She should see in such work a teaching situation in which habits, attitudes, abilities, and skills are developed in the child. By having the pupils systematically plan and build exhibits, opportunities can be provided for an integrated program of activity in which the media of the exhibit can be

assembled, arranged, and displayed as a part of the regular school program. Science, English, mathematics, and art class work can each contribute its share to the enterprise. Problem solving situations can be provided by the necessity of planning the exhibit, and deciding on the type of materials to be placed in it. Thus the pupils will discover for themselves the specific functions of pictures, posters, objects, movies, slides, labels, and other abstractions encountered in the learning process. They can immediately apply this knowledge in their efforts to get their messages across to the exhibit visitors. They learn greatly by attempting to express themselves in term and form which will bring about their desired results in other people. The classroom teacher has a wonderful opportunity for real teaching through exhibit work. She can lead the pupils to a realization of the necessity of thoroughness and mastery of subject matter; to an understanding of how learning takes place; to an appreciation of the different forms of adequate and effective expression and communication; and to the formulation of successful problem solving endeavors.

The principal can build upon the experiences of the classroom teacher, and, in addition, secure the cooperation of larger groups in preparing display materials for permanent museum use. Through these materials he has not only effective teaching tools for the various subjects, but object lessons for the teachers in their exhibit work. He can demonstrate through the museum the various types of exhibits and museum arrangements—(1) small exhibits of collections on a

shelf, (2) collections in cases in the corridors of the school building, (3) those housed in a special room convenient of access, and (4) those occupying an entire building. By the arrangement of materials he can effectively teach the recognized fundamental principles of museum display, namely, (1) progressive stages of development; (2) the principle of functional display; (3) the integration of materials into a total meaningful relationship; and (4) the relationship of the materials to contemporary civilization.

Through his stimulation, leadership, and supervision, standards of excellency in workmanship and display can be established for all materials going into exhibits and museum arrangements. These will provide the pupils and the teachers with guides for their planning and construction work.

The schools of Pennsylvania are unusually fortunate in that a new agency is providing museum and exhibit materials of high quality for use in a majority of the subjects and units of work in the schools. High praise should be given to the W.P.A. Museum Extension Project materials now being widely distributed throughout the schools of the Commonwealth. Pictures, posters, models, puppets, maps, graphs, lay-outs, text materials, reference lists, sources, dioramas, etc. provided by this organization are authentic, artistic, well planned, and usable. Teachers should become acquainted with these materials and should acquire them for their own use. They, along with other exhibits, can perform a valuable service in making the instruction in the schools more meaningful and effective. Conscious of the fact that it is the effective use of the material rather than the thing itself that is important in learning, the W.P.A. Museum Extension Project staff has prepared outlines, guide sheets, reference lists, text materials, and other aids for the teacher and pupils. Since these projects are financed through W.P.A. funds, there is no cost to the district or school for the materials. Such valuable teaching aids should not be overlooked by teachers, principals and superintendents.

Within recent months considerable attention has been given to the motion picture and other projected materials as aids to overcome the limitations of learning and to improve the quality of instruction in the schools. This is fine and should be encouraged and understood by the teachers and administrators. However, since the high cost of such material apparently precludes the general, wide adoption of such teaching aids, it might be well for the schools to give an equally thorough consideration to the school museum and the school exhibit as teaching devices. Materials are right at hand at little or no cost, in the main. The educational outcomes in terms of attitudes, habits, abilities, appreciations, and skills are great. Existing state, city, commercial, school, and educational museums stand ready to assist the schools with their materials, teaching staff, and techniques. The school could soon acquire these techniques, build their own exhibits and museums, have ready at hand valuable teaching materials, and concurrently construct and use their exhibits in class work. Let us give more attention to exhibit construction and planning, and the use of the museum in school work.

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Current Film Releases**Film Review****The Wedding of Palo (6 reels) (16mm)**

(Distributed by Walter O. Gutlohn, Inc.)

A notable contribution to anthropology is this feature length film on native Eskimo life along the fjord-indented shores of southeastern Greenland. It is close to being life at its hardest. The famous explorer and writer on Arctic lands, Knud Rasmussen, who died in 1933, did the filming. The footage has been edited, supplied with appropriate background music and real Eskimo dialog. A few more titles would be advantageous.

The simple plot gives continuity and unity to the production. A charming little heroine, Navarana, is sought in marriage by two rival suitors, Palo and Samo, whose courting methods are thoroughly unique. Rivalry leads at last to the "drum duel," a contest in mockery which continues until Samo is goaded into stabbing his victorious foe. At this juncture the heroine's tribe is just moving to its winter home southward in omnibus canoes. When Palo has recovered—by fantastic curative rites and medicaments—he starts off alone in his kayak through hurricane seas (though "only our forefathers dared that"), finds Navarana's new home, declares his right to her, and the parents "cannot refuse such heroic pursuit." He seizes his beloved, straps her behind him on the kayak, retraces his mad course through the chaotic sea and, just for good measure, kills his rival who has paddled forth furiously to meet them. And so they were married.

But the copious details on all phases of primitive life in the frozen north, which the Greenland-born Rasmussen knew so well, constitute the picture's chief educational values. The rugged, rocky coast, largely free of snow, with hot springs steaming adjacent to walls of glacial ice, and the natives swimming among ice cakes in the fjord—No vegetation save low-growing flowers and edible berries during the brief summer—Dogs, musk oxen, seals, bears, and fish, the only fauna—No igloos, but, instead, hide-covered shelters with rocks holding down the edges, or overturned boats with side-curtains of skins—Weird cooking and eating methods, totem carving, strange dancing, fright masks, gymnastics on the horizontal rope, and quaintly beautiful costumes of the diminutive women.

There are picturesque moments when hunters describe their feats with seal and bear—when the heroine skins a seal with unbelievable deftness—when "the salmon have come" and the whole tribe spears meals for a month in a few hours from the shore—when engaging youngsters learn to shoot and paddle their toy bows and kayaks—when shy swains, all but speechless, offer their naive gifts of covered bone or hide—when moving day comes and the whole tribal economy is merely rolled up in hides and paddled off to new homes—and finally those magically handled kayaks, defying wind, wave, ice and rock, perhaps the most incredibly seaworthy craft ever devised by man. There is plenty of teaching material here for those who know how.

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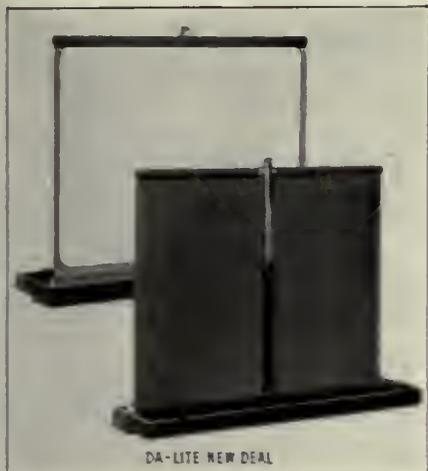
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The Mail, a single reel, 16mm. sound-on-film subject, just completed in Hollywood specifically for the school market, is announced for exclusive distribution by the Bell and Howell Filmsound Library. The film follows the letter through the post office routine to its delivery. As a narrator reads in full all written captions and titles, signs, etc., the film can be used for pre-reader children as well as for the older grades.

All the thrills of big game fishing have been packed into *Big Fish*, a movie just released on 8 and 16mm film, by Castle Films, Inc. Latest in the *Sport Parade* series, the picture covers the high points of battles with tarpon, sailfish, tuna, shark, and a whale. Wholesale fishing is also pictured in the salmon field.

A novel series of half-hour talking picture lectures by masters of the law have been presented recently to the legal world by Film Foundation of America, Inc., First National Bank Building, Boston, Mass. The subjects now completed are Professor Samuel Williston, of Harvard University, on *Consideration*, Professor Joseph Henry Beale, of Harvard University, on *Jurisdiction for Divorce*, and John Henry Wigmore, Dean Emeritus of Northwestern University's Law School, on *Rationale of Evidence*. In the first two films Professor Felix Frankfurter appears as introducer of the subject and lecturer.

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New S.V.E. Device Rewinds FilmSlides

The Society for Visual Education, Inc., originator and largest manufacturer of the filmSlide stereopticon, after many years of experimentation, has developed a device which automatically takes up the filmSlide and rewinds it into a storage can ready for use. Until now the filmSlide after being shown has had to be rewound by hand. The film under this method is allowed to hang from the projector and sometimes touches the floor. Here it may become tangled and may collect dust. Rewinding the film by hand often leaves finger marks upon it.

The S.V.E. Automatic FilmSlide Take-Up is the first practical attachment for filmSlide projectors that rewinds the film as it is being shown and fully protects the film emulsion. The device fits all S.V.E. Pictrol projectors and some models of Argus projectors. Its advantages are especially appreciated by users of S.V.E. Tri-Purpose projectors. When the head of this model is turned to the horizontal position for horizontal double frame filmSlides, the take-up keeps the filmSlides up out of the way. This is particularly important when showing a filmSlide which has horizontal and vertical pictures and which necessitates changing from the horizontal to the vertical position and vice versa. It can be easily attached. There are no complicated parts to wear out—no gears nor mechanism. A specially designed storage can receives the film, which enters it in a manner that assures rewinding in the proper sequence for the next showing.

The S.V.E. FilmSlide Take-Up is furnished with one take-up storage can. Additional storage cans can be obtained at a nominal cost. There are two sizes. No. 1 (1½" in diameter) holds film strips with as many as 175 frames or pictures. No. 2 storage can (1-15/16" in diameter) holds up to 350 frames. For further information address the Society for Visual Education, Inc., 327 S. LaSalle St.

Bell & Howell 16 mm. Arc Projector

With its new Filmoarc sound film projector, which employs an arc lamp for 16mm. film illumination, Bell & Howell assert that sufficient light is available for projecting brilliant images from 16mm. film, color or black-and-white, in even the largest of auditoriums. The Filmoarc, they explain, was designed from the start as an arc projector, and so represents a great advance over what might have been achieved by placing an arc lamp back of an existing projector. The motor is in front of the film moving mechanism. A new ventilating system was developed particularly for this model.

Both sound and silent film speeds are provided, so that either type of film may be shown at the proper operating speed. Film reels as large as 1600-foot are accommodated. Film rewinding is done by a secondary

electric motor, and without operating projector mechanism, projector motor, or arc lamp. The Filmoarc amplifier produces an undistorted output sufficient for large auditoriums, the manufacturer's description states. All adjustments for sound regulation and projector mechanism control are centralized upon the sloping control panel of the amplifier, where provision is made for operating with twin projectors. Provision is made for using the latest type crystal microphone. Two heavy-duty high-fidelity permanent magnet speakers are standard Filmoarc equipment.

Two Filmoarc models are offered. One provides a roll-away stand which supports projector, amplifier, and rectifier. The other, more compact, mounts the projector upon a stand having adjustable legs, while the amplifier rests upon a smaller stand directly beneath. Below the amplifier the rectifier is located.

Expansion of the Wm. H. Dudley Service

The William H. Dudley Visual Education Service, Inc., 736 S. Wabash Avenue, Chicago, was established in 1929 by Mr. Dudley, upon retirement from the University of Wisconsin where for sixteen years he was director of visual education, and Miss Mira E. York, also of the University of Wisconsin. Miss York is widely known as an authority and expert in the production of colored educational lantern slides. The unique feature of this service has been the development of the Circuit Plan, originated by Mr. Dudley. There has been a steady growth of this service among hundreds of schools in fifteen states throughout the country. The need of additional personnel became so apparent that recently a large share of the service was sold to the Creative Society of Mankato, Minnesota, which will take full charge of the circuit service June 15, Mr. Dudley and Miss York remaining in active participation in the much enlarged service.

After a wide teaching experience followed by his years at Wisconsin University, and climaxed by heading up an active visual education service in the Middle West and Eastern territory, Mr. Dudley is planning to pass on his fund of experience and knowledge to a new group which, under his guidance, can serve more schools and with increasing effectiveness.

The Creative Educational Society has been conducting a nation-wide business of a closely allied character. Born in the depths of the depression, in six short years they have achieved the enviable record of selling their products in every state in the union, every province in Canada, Cuba, Australia, and the Hawaiian Islands. The officers are all young progressive business men who have had wide experience in the school publishing field and have studied the needs of visual education in the average school.

Two years ago they decided to go into the motion picture field and after careful consideration of this cir-

cuit distribution plan decided to join the Dudley Visual Education Service. They have embarked on a big expansion program designed to strengthen the circuit service in every conceivable way. The service will be continued under the present name of William H. Dudley Visual Education Service with offices in Chicago and Mankato, Minn.

New Wenzel "Ace" Projector

The Wenzel Company, Chicago, manufacturers of theatre projectors, announces the new Wenzel Ace 16mm Sound Projector which is said to incorporate many features found also in the best of theatre sound projectors. Designed for long life and perfect performance the new projector is the result of efforts to bring out a thoroughly modern, low-priced projector comparable to 16mm sound projectors in the higher price brackets.

Simplicity of operation, precision workmanship and practical design are among interesting features of the "Ace." Carefully planned pivoting of all roller brackets, lens mount, and film gate make the straight-threading an extremely simple operation and allows the user to actually see that the film is properly placed in position. Using the very latest of amplifier design and a theatre type speaker, the machine has an output of twenty watts undistorted, with a peak of thirty watts. The amplifier has an input for photo-cell, microphone and phonograph. An added accessory, furnished at no extra cost, is a professional type of microphone that can be used for lecturing while showing silent films. Microphone, amplifier and speaker can be used as a public address system while the projector is not being used for the showing of film. All controls are conveniently mounted on one panel on the operating side of the projector. The "Ace" comes compactly arranged in two handsome cases finished in enamel.

Victor Announces Price Reductions

Victor Animatograph Corporation, Davenport, Iowa, have effected material list price reductions on three 16mm sound projector models.

Model 25AC, 10 watt undistorted output, with ten-inch Speaker, formerly \$455.00 is now \$415.00.

Model 24B, 15 watt undistorted output, formerly \$595.00 is now \$520.00.

Model 38, 30 watt undistorted output, with two twelve-inch P. M. Speakers, formerly \$660.00 is now \$595.00.

With the new Model 33 "All-in-one" Animatophone listing at \$295.00 complete, Victor has a very complete and attractively priced line of 16mm sound projectors.

Ampro Adopts Fair Trade Agreement

Actuated by the desire to stabilize retail prices of Ampro products, the Ampro Corporation of Chicago, manufacturers of 16mm projection equipment, on and after June 11th, is placing into effect Fair Trade Agreements with all its dealers operating in those states legalizing resale price agreements under Fair Trade Acts. The agreement, which incorporates a schedule of maximum discounts permissible from retail list prices, applies to all classifications of sales except those made to the Government of the United States.

SEES ALL—PLAYS ALL UNIVERSAL 16 MM SOUND PROJECTOR

1+1=2



New All-Purpose Model

Now, for the first time, an ALL-PURPOSE 16 MM Sound Projector is offered to you. Completely flexible for the varied demands of classroom and auditorium



Adjustable as easily and as quickly as your radio to tone quality for small group work but with plenty of built-in reserve power for large audiences. Clear, steady image projected to any desired size. No complicated threading. Easy on film. Requires no trained operator. Handsome modern case design. Can also be used for silent films. A Universal comes to you complete, ready to operate. No extras to buy. May be purchased on the Universal Budget Plan. See your dealer or write for further details to

Universal Sound Projector

Division of
SENTRY SAFETY CONTROL CORP.

1921 Oxford St., Phila., Pa.

Show Room — 1600 Broadway, N. Y. C.

THE FILM ESTIMATES

Adventures of Marco Polo (Cooner, Gurie, Rathbone) (UA) Another "colossal" in sepia. Big, long, lavish array of thrilling adventures, by turns interesting, amusing and absurd, faintly historical, with several fine roles. But ponderous, laboriously exotic, dramatically loose and overdone. 5-24-38

(A) Spectacular (Y) Doubtful (C) No
Beloved Brat (B. Granville, D. Costello) (War) Somewhat illogical but finely acted, emotional social study of little heroine. Unhappy in rich home, neglected by busy parents, she becomes defiant problem child with tragic consequences and corrective school sentence. Understanding headmistress saves day. 5-10-38

(A) Rather good (Y) Mature (C) Too mature
Charm of La Boheme (German, English titles) (Intern. Cinemat) Vienna-made version of famous opera of consumptive Mimi, loving and loved by opera-tenor hero, in modern settings. Some obstreperous acting but mostly appealing and effective. Fine roles by Kiepura and Eggerth. Sound reproduction very good. 5-10-38

(A) Very good of kind (Y) (C) Hardly
Cocoanut Grove (Fred MacMurray, Harriet Hilliard) (Para) Unceasing "swing" music throughout as penniless band makes desirous trek by trailer to Hollywood for coveted audition in famed night club, where rival band adds complications. Success achieved in final frenzied climax. 5-10-38

(A) (Y) Good of kind (C) If it interests
Crime School (H. Bogart, Gale Page) (First Nat'l) Crime-breeding slum life lands five boys in reform school where abuse and cruelty promise further development into hardened criminals, till understanding hero takes over, brings changes, achieves regeneration. Extravagant and overdrawn in spots. Weak climax. 6-1-38

(A) Good of kind (Y) Strong but good (C) No
Divorce of Lady X (Merle Oberon & English Cast) (U.A.) Snave, elaborate, sophisticated farce in technicolor about debutante heiress' unconventional doings in hero's rooms, with amusing complications. Mistaken identities carry to end. Meritorious effort, but too long, slow-moving and artificial for high praise. 6-7-38

(A) Good (Y) (C) Not for them
Dawn Over Ireland (all-Irish cast) (Wm. Alexander) Much human interest and charm of countryside in tale of Irish rebellion, but film inferior artistically and technically. Clumsy narrative, stilted dialog, faulty direction and amateurish acting detract seriously. 6-1-38

(A) Disappointing (Y) Doubtful interest (C) No
Four Men and a Prayer (Richard Green, L. Young) (Fox) Starts with notable sequence of fine English family life. Military father, falsely discharged and murdered by ruthless munitions maker. Four loyal sons, and ubiquitous heroine, after hectic adventures, violent and ghastly bloodshed achieve vengeance. Quality thriller. 5-17-38

(A) and (Y) Fine of kind (C) Too strong
Goodbye Broadway (Alice Brady, Chas. Winninger) (Univ.) Implausible and involved comedy of mix-ups, occasionally amusing, concerning ownership of smalltown hotel bought by old-time vaudeville couple and which wily realtor tries to acquire. After many vicissitudes, they finally turn the tables on him for happy ending. 5-17-38

(A) Mediocre (Y) Rather amus. (C) Little int.
He Couldn't Say No (Frank McHugh) (Warner) Inconsequential farce with McHugh as factory clerk who submits to engagement maneuvered by mother and daughter, until his purchase of a statue starts a lot of excitement with gangsters, resulting in his winning senator's daughter and saving senator from blackmail. 5-17-38

(A) Hardly (Y) Perhaps (C) Hardly
He Loved an Actress (Ben Lyon, Lupe Velez, Wallace Ford) (Grand Nat'l) Poor musical comedy with feeble dialog, jerky action, stale situations about pair of penniless picture producers hoaxed by chorus girl posing as South American heiress. Largely a waste of time. 6-1-38

(A) (Y) (C) Mediocre
Hold That Kiss (M. O'Sullivan, D. O'Keefe) (MGM) Misleading title for unpretentious, pleasant little comedy of family life. Amusing complications in heroine's romance with hero, when they mistake each other for socialites. Mickey Rooney as smart-aleck brother contributes little. St. Bernard dog much. 6-1-38

(A) Fairly good (Y) Amusing (C) Perhaps
Holiday (Hepburn, C. Grant) (Columbia) Fine second filming of the play. Splendid acting, dialog and direction, handsomely mounted. Engrossing story of conflict between engaging hero who wants a holiday, materialistic fiancée, and her idealistic rebel sister who understands her. Much appealing, spirited comedy. 6-1-38

(A) Very good (Y) Good (C) No interest

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

International Crime (Rod LaRocque, Astrid Allwyn) (Grand Nat'l) Supposedly thrilling stuff about two sinister villains run down by radio columnist who is detective on the side. But mostly monologic by LaRocque and others reading microphone scripts. Crude comedy helps little. Mostly harmless but inane. 6-1-38

(A) Poor (Y) Perhaps (C) Hardly
Island in the Sky (Gloria Stuart, M. Whalen, Paul Kelly) (Fox) In night club atop New York skyscraper, news of murder upsets honeymoon plans of detective hero and his Secretary heroine. He accepts quick, easy solution, but she, with gangster help, unearths real facts. Rather original. 5-24-38

(A) Fair (Y) Doubtful (C) No
Kentucky Moonshine (Tony Martin, Marjorie Weaver) (Fox) Wild, hilarious farce with Ritz Brothers in frenzied rampage throughout, posing as hill-billies in hope of getting place on hero's radio program. Will amuse those who like their delirious antics, and prove exceedingly tiresome to others. 5-17-38

(A) Depends on taste (Y) and (C) Prob. amus.
Lady in the Morgue (Preston Foster, Patricia Ellis) (Univ) Crime Club detective mystery well written, directed and acted. Tense story of concealed identity, crisply told, with ample comedy, agreeably intricate, fast enough to seem possible. Grewsome situations more suggested than shown. 5-24-38

(A) Good of kind (Y) Perhaps (C) No
Let's Make a Night of It (June Clyde, Buddy Rogers) (Univ.) Amateurish story, naive acting, clogged with swing and crude singing. Unutterably bad taste in central situation. Waiter-hero brazenly intrudes self on Riviera cafe customers, makes love to daughter, and on to great success in London night club. 5-17-38

(A) Stupid (Y) No (C) No
Lonely White Sail (Russian, English titles) (Amkino) More "Czar against good common people" stuff, clumsy and crude, but more verve and faster tempo than usual. Search, chase and escape of popular hero, Potemkin mutineer. Engaging children enliven picture. Russian culture again shows at disadvantage. 5-17-38

(A) Fair (Y) (C) Little interest or value
Lone Wolf in Paris (Lederer, Frances Drake) (Columbia) Smooth story, even suspense, steady interest, simple plot. Reformed crook resumes his light-fingered ways to save crown jewels and mythical kingdom for his newly-met friend, the princess. Excitement ample but not excessive. Agreeable little thriller. 5-17-38

(A) Fair (Y) Good (C) Good of kind
Making the Headlines (Jack Holt, Beverly Roberts, Craig Reynolds) (Col) Too prominent city policeman "promoted" to Captain in dead suburb, where theft and murder in deserted mansion put him and newshound pal back in headlines. Holt growls and scowls as usual. Very ordinary thriller and not over-exciting. 5-10-38

(A) Mediocre (Y) (C) Perhaps
Mr. Moto's Gamble (Peter Lorre, Keye Luke) (Fox) Lorre, professor of crime detection turns attention outside classroom to solve ringside murder. Sinister thugs, two prize-fights, endless jaw-socking, and back-alley English. Feeble plot, and characters still feebler, including Lorre's. 5-17-38

(A) Crude (Y) No (C) No
Night Spot (Allan Lane, Joan Woodbury) (RKO) Another mediocre murder yarn, with a night club singer innocently involved in gang shooting and finally learning that she has been working for a criminal. Song, dance and music as usual, and perhaps better than the story. 5-24-38

(A) Mediocre (Y) No (C) No
One Wild Night (Lyle Talbot, June Lang) (Fox) Aptly titled. Wildly farcical mystery film with ridiculously burlesqued police characters and generally delirious proceedings more appropriate to comedy short. Rather original solution to kidnapping of three provides some interest, but whole frantic and absurd. 6-1-38

(A) Mediocre (Y) Perhaps (C) No
Robin Hood (E. Flynn, DeHaviland, Rains) (Warner) Masterpiece of historical film-making, expertly set, cast, acted and directed. Ideal technicolor subject. Consistent, unified selection from myriad legends available sets story convincingly in time of Richard I. Violence not overdone. All should see it. 5-17-38

(A) Excellent (Y) Excellent (C) Excellent

Saint in New York (Louis Hayward) (RKO) Hayward good choice for suave adventurer, "the Saint," a modern Robinhood character, hired to free New York of gangsters after police have failed. How he does it strains credence but furnishes absorbing, lively and tense melodrama. 6-7-38

(A) Good of kind (Y) Exciting (C) No
Sinners in Paradise (John Boles, Madge Evans) (Univ) Rather artificial combination of hectic melodrama and comedy. Wrecked trans-pacific airliner lands assorted passengers on tropical island. Killings, violence and romance ensue before return to mainland is achieved. Exciting but hardly convincing. 5-10-38

(A) Hardly (Y) Not the best (C) No
Son of the Sheik (Rudolph Valentino) (Artcinema) The old silent film, with effective titles, and good musical background added. Comedy antiquated, kissing endless, fighting artificial, but dramatic values still good. Valentino in dual role, better as son than father. A curiosity surprisingly good after the years. 6-7-38

(A) Perhaps (Y) Perhaps (C) No
Start Cheering (Durante, Connolly, Starrett) (Col) Travesty of co-ed and frat life in crazy college with slapstick faculty. Straining jazz, big-apple dancing, raucous singing and clumsy football stuff. Durante is feature, same antics as always. Mixture of funny, silly and absurd. 5-10-38

(A) Stupid (Y) (C) Doubtful value
State Police (John King, Constance Moore) (Univ) Cheap gangster thriller, offered as "what public wants," laid supposedly among Pennsylvania State Police, with rascally son of police Colonel as hero. Coal mining racketeers, bootleggers, hijackers, hideouts, shootings, knockouts, and crude romance. 5-24-38

(A) Mediocre (Y) No (C) No
Stolen Heaven (Olympe Bradna, Lewis Stone, Gene Raymond) (Para) Queer but delightful mixture of fine music deftly integrated into merry crook story, with strong human values despite distressing main situation. Bradna and Stone notable. Wagner, Strauss, Grieg, Liszt, Moskowski, fine antidote for "swing." 5-24-38

(A) Excellent (Y) Excellent (C) Probably good
The Girl Was Young (Nova Pilbeam and English cast) (G-B) Suspenseful little crime melodrama about Scotland Yard Chief's daughter, in love with innocent hero, helping him escape false charge of murder. Interesting English humble life character, law-court and police ways, atone for improbabilities. 6-1-38

(A) and (Y) Fairly good (C) Hardly
There's Always a Woman (Joan Blondell, Melvyn Douglas) (Col) Hilarious farce-mystery, with clever dialog and two deft roles. Married couple wrangles amusingly. His detective agency fails, she carries on and blunders to success. Fun over non-greuous murders. One regrettable heavy-drinking sequence by stars. 5-10-38

(A) Fine of kind (Y) (C) Amusing but doubtful
Three Comrades (Margaret Sullavan, Taylor, Tone, Young) (MGM) In grim setting of social chaos in post-war Germany, three disillusioned pals find life struggle glorified by love of charming heroine who marries one. Staunch loyalty, deep devotion, heroic happiness and tears, heart-breaking tragedy beautifully done. 6-7-38

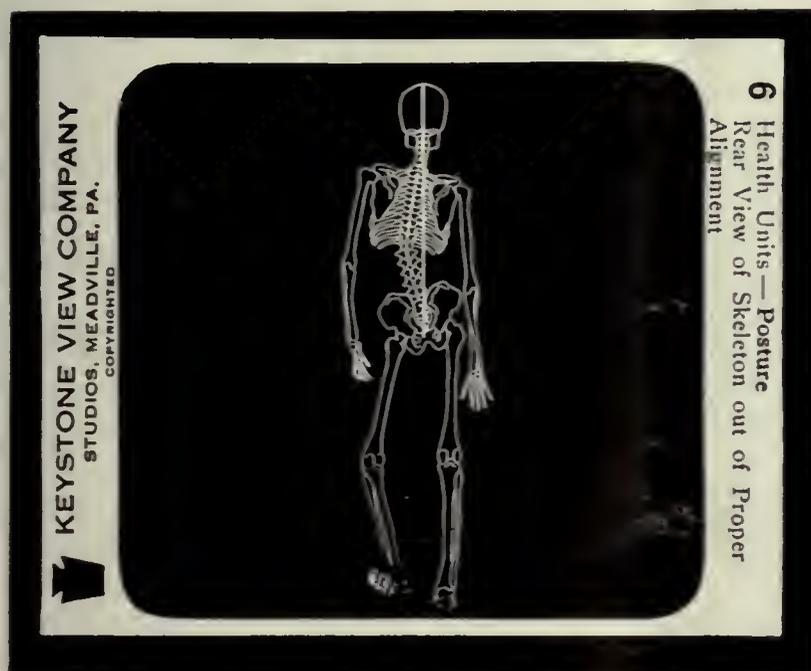
(A) Excellent (Y) Mature (C) Beyond them
Thunderstorm (Russian, English titles) (Amk) Village life "under the Tsar," bedraggled, besotted, benighted. Dismal tale of crude, earthy love-making by primitive humans without trace of charm. Unrelieved by comedy or sympathy. Poor photography and sound. Russia should keep it home. 5-10-38

(A) Poor (Y) No (C) No
To the Victor (Will Fyffe, John Loden) (G-B) Masterpiece of realism—real men, real dogs, real dramatic conflict—from Ollivant classic, "Bob, Son of Battle." Authentic shepherd life in Scottish highlands, tensely human, with human and canine roles equally fine. Scotch accent very thick at times. 6-7-38

(A) (Y) Excellent (C) Mature but good
Vivacious Lady (Ginger Rogers, James Stewart) (RKO) Lively hilarious stuff about young professor's effort to tell his hide-bound, college-president father of his marriage to cabaret girl. Features are a raw travesty of "college," heavy drunkenness, and lovemaking in public. Clever but ethically off. 5-24-38

(A) Very good of kind (Y) (C) Unwholesome

New Keystone Units In Health For High School Classes



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The Skeletal and
Muscular System

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A leading teacher of health writes, "These are the most effective aids to the high school teacher of health that I have yet seen."

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MEADVILLE, PENNA.

HERE THEY ARE

A Trade Directory
for the Visual Field

FILMS

- Akin and Bagshaw, Inc. (6)
1425 Williams St., Denver, Colo.
- Audio-Film Libraries (5)
661 Bloomfield Ave. Bloomfield, N. J.
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City
- Cine Classic Library (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 190)
- Eastin 16 mm. Pictures (6)
Davenport, Ia.
(See advertisement on page 198)
- Eastman Kodak Co. (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures System, Inc. (6)
330 W. 42nd St., New York City
- Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
- Films, Inc. (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
- William J. Ganz Co. (3, 6)
19 E. 47th St., New York City
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc. (6)
35 W. 45th St., New York City
(See advertisement on page 197)
- Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton's Travelettes (1, 4)
7901 Santa Monica Blvd., Hollywood,
Cal.
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- J. H. Hoffberg Co., Inc. (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 198)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 198)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 198)
- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Visual Instruction Supply Corp. (6)
1757 Broadway, Brooklyn, N. Y.
(See advertisement on page 199)
- Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
(See advertisement on page 194)

MOTION PICTURE MACHINES and SUPPLIES

- The Ampro Corporation (6)
2839 N. Western Ave., Chicago
(See advertisement on page 191)
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co. (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 199)
- Eastman Kodak Co. (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- DeVry Corporation (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 174)
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 195)
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 198)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)
- Neumade Products Corp. (3, 6)
429 W. 42nd St., New York City
- RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 178)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 201)
- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 197)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Informative Classroom Picture Ass'n.
48 N. Division Ave., Grand Rapids,
Mich.

SCREENS

- Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 199)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Institutional Cinema Service, Inc.
130 W. 46th St., New York City
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

- Conrad Slide and Projection Co.
709 E. Eighth St., Superior, Wis.
- Eastman Educational Slides
Johnson Co. Bank Bldg.,
Iowa City, Ia.
- Edited Pictures System, Inc.
330 W. 42nd St., New York City
- Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 198)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 203)
- E. Leitz, Inc.
730 Fifth Ave., New York City
(See advertisement on page 196)
- Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 198)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 177)
- Teaching Aids Service
Jamaica Plain, Mass.
(Slide-making Material)
(See advertisement on page 198)
- Visual Education Service
131 Clarendon St., Boston, Mass.
- Visual Sciences
Suffern, New York
(See advertisement on page 198)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

- DeVry Corporation
1111 Armitage St., Chicago
(See advertisement on page 174)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 203)

STEREOPTICONS and OPAQUE PROJECTORS

- Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 173)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 203)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 177)
- Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 193)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

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- (1) indicates firm supplies 35 mm. silent.
- (2) indicates firm supplies 35 mm. sound.
- (3) indicates firm supplies 35 mm. sound and silent.
- (4) indicates firm supplies 16 mm. silent.
- (5) indicates firm supplies 16 mm. sound-on-film.
- (6) indicates firm supplies 16 mm. sound and silent.

Continuous insertions under one heading, \$1.50 per issue; additional listings under other headings, 75c each.

EDUCATIONAL SCREEN

Magazine Devoted Exclusively
to the Visual Idea in Education

SEPTEMBER, 1938

Teachers Library
VOLUME XVII, NUMBER 7
WHOLE NUMBER 164

IN THIS ISSUE

*Motion Pictures
—Not for Theatres*

*Film Production
in the Schools*

*Improving Illustrative
Material in the Textbooks*

*The Experimental Use of
Visual Aids in Teaching
Beginning Reading*

*A Close-up and
a Long View*

*Using the Movies as a
Research Library*

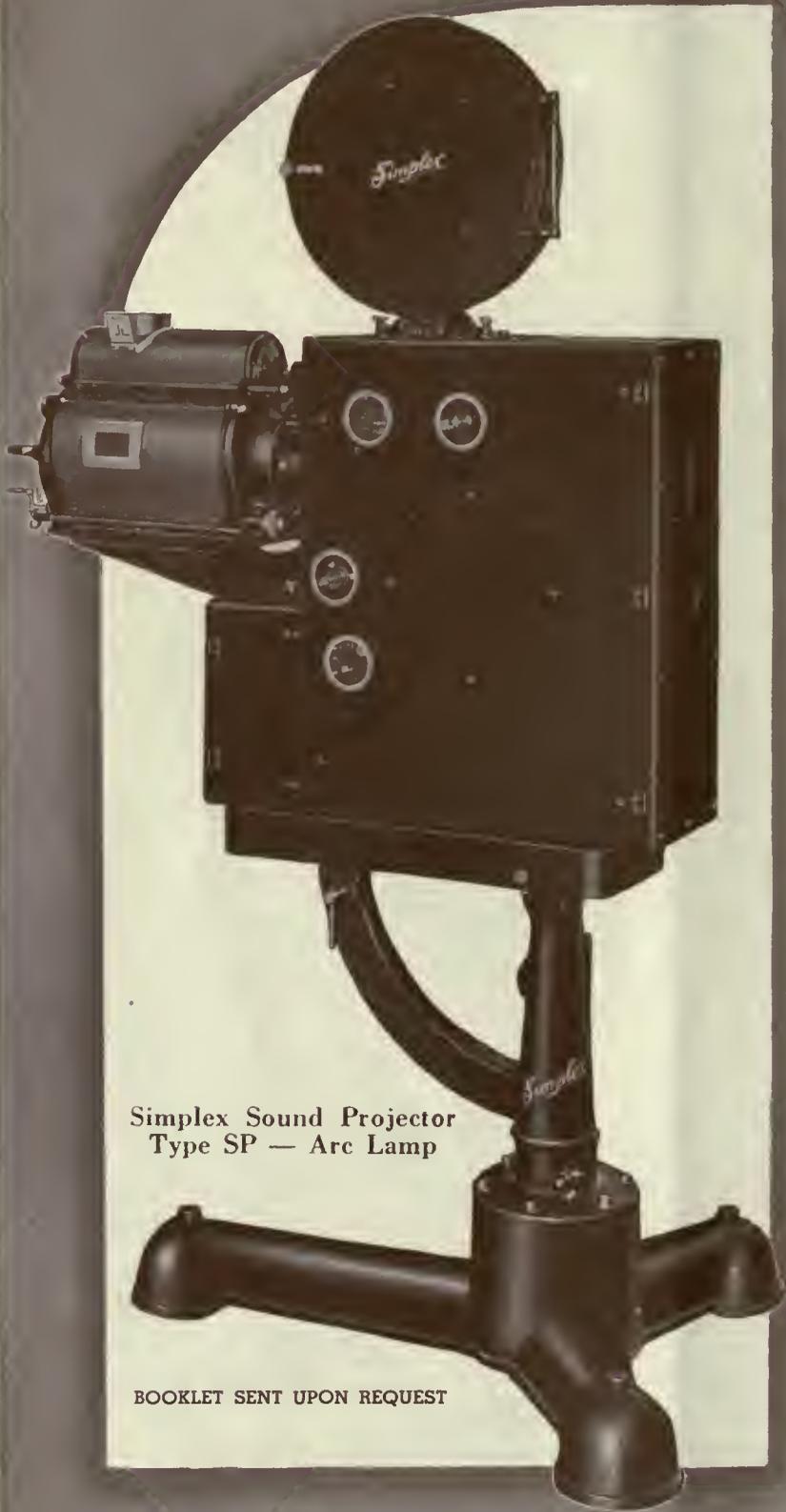


Singing Boys
Painting by Franz Hals
(Courtesy of Colonial Art Company)

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Simplex Sound Projector
Type SP — Arc Lamp

BOOKLET SENT UPON REQUEST

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SOUND PROJECTORS
TYPE SP

We realize that the purchase of motion picture equipment requires long and serious consideration, and that in many instances decisions cannot be quickly made. We, therefore, ask you to write to us or any branch of the National Theatre Supply Company for full information regarding SIMPLEX SOUND PROJECTORS TYPE SP or any of the other products of this Company. Our wide experience enables us to understand the needs for schools, colleges, churches, hospitals, private and public institutions, etc., and where there is no technical adviser to guide in selection of equipment our complete line of 35 mm. SIMPLEX PROJECTORS places us in a position to impartially advise regarding the kind of equipment best suited to meet the specific requirements of any proposed installation. SIMPLEX SOUND PROJECTORS TYPE SP are an absolute assurance that in the field for which they are intended the quality of results is exactly the same as that secured with SIMPLEX PROJECTORS in thousands of leading theatres throughout the world.

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NEW YORK, N.Y.

The EDUCATIONAL SCREEN

SEPTEMBER, 1938

VOLUME XVII

NUMBER SEVEN

Contents

Motion Pictures—Not for Theatres.	
Arthur Edwin Krows.....	211
Film Production in the Schools. Hardy R. Finch.....	216
Improving Illustrative Material in Textbooks.	
S. B. Zisman.....	218
The Experimental Use of Visual Aids in Teaching	
Beginning Reading. Alex Jardine.....	220
A Close-up and a Long View. Edgar Dale.....	222
Using the Movies as a Research Library.	
Mary R. Hodge and Lillian McNulty.....	223
Film Estimates	224
Construction Principles—In Hand-Made Lantern Slides	
By Ann Gale.....	225
News and Notes	
Conducted by Josephine Hoffman.....	226
Current Film Releases.....	230
School Department	
Conducted by Wilber Emmert.....	232
Stimulating Class Use of "The Educational Screen".....	239
Among the Producers.....	240
Here They Are! A Trade Directory for the Visual Field....	244

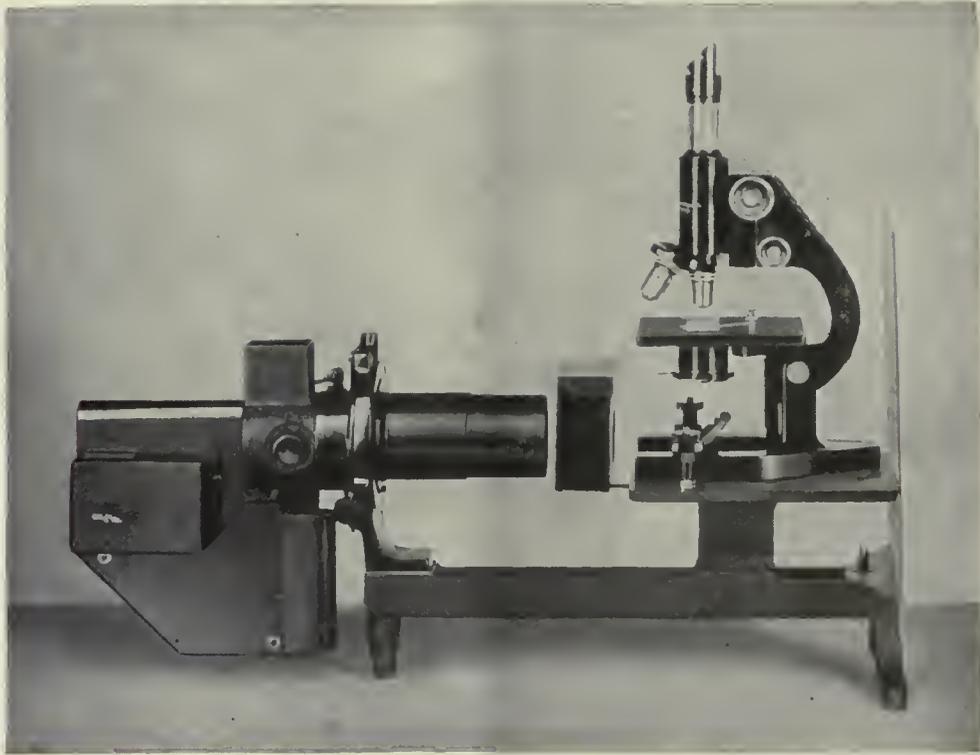
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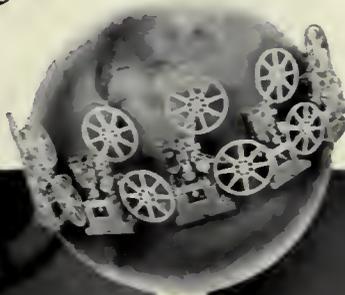
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EDITORIAL

WITH this issue THE EDUCATIONAL SCREEN enters its eighteenth school-year of continuous publication devoted wholly to a single aspect of education—the use of visual material in teaching. Total monthly issues now number 164, carrying 6442 pages, representing a larger printed record of thought and activity in the visual field than all other periodical publication combined, including the five other magazines serving the field at different periods but no longer existing today.

Had we nursed any delusions of greatness in the achievement, such as it is, our critics would long since have dispelled them. Both quantitatively and qualitatively we have fallen short of what the field deserved. Repetitiousness in our pages has been frightful. True enough, but it is also true that we had necessarily to print what we could induce the field to supply, and most of the best the field has written is also there. Probably we have been as fully aware as our critics of our shortcomings in content and format. We even know of some that no critic has mentioned. Yet whatever improvement has been attained through the years has been largely due to fine, constructive criticism from many quarters, high and low, and we confidently hope it will continue through the next 18 years. Gradual correction of these weaknesses, as fast as resources permit, is what makes our job interesting. When one of our least constructive critics informs us that “others could have done a better job,” we admit it cheerfully. But we reflect that while “others could have” nobody did! Which makes us no less glad to be still here.

A considerable fraction of these 6442 pages carried advertisements, but we would point out that this advertising has a definite worth and influence for the field as well as for the advertisers. In a real sense it is a part of the visual movement's literature. Much of the advertising argument and discussion has been well calculated to rouse teacher interest in visual teaching. No statistics are available, but we suspect that many teachers have been moved to start the work, or augment activities already started, by some trenchant bit of able advertising. Many a piece of well written “ad copy” has been decidedly more of a stimulant to action than much of the so-called “literature” of the field.

And action is what we want. The primary need of visual instruction now is more action and less dictum. Nothing is more sterile than reiteration of theory and proof on a case long since proved. Practically all research on the value of visual aids—since 1922 when Weber did the first Doctor's thesis on the subject—has shown the same uniformly positive results. Percentages have differed, and will differ indefinitely, but conclusions remain the same. Visual teaching is better teaching. The great function of research would now seem to be formative, not inspirational. Here again statistics would be interesting as to how many teachers were moved to make their start by the pronouncement of research, and how many by direct knowledge of actualities in visually equipped classrooms. The teachers who

know beyond the peradventure of a doubt that visual aids are valuable are those who have used them in their classrooms, not those who have merely read the dicta of research. Let any teacher, with the necessary modicum of enterprise, select and use a few pictures with his class, with no guide to method save common sense, let him note the faces of his pupils, check their reactions and learning attitudes for a brief period, and he will need no research to tell him there are potent values there. Once the start is made, however clumsily, and enthusiasm born, it becomes the great task of research to modify and improve both method and material indefinitely.

During the present year THE EDUCATIONAL SCREEN will go after more of this provocative material. We want brief, concrete accounts of detailed workings with visual materials, in all subjects, on any topic in the subject, and in individual classrooms rather than in whole school systems. We have been trying to do this continuously for at least ten years but hope of success seems brighter now. Not only have interest and activity grown wider and stronger, but there are new and important forces at work in the field. With genuine co-operation among The American Council on Education, its subordinate groups, the reinvigorated Department of Visual Instruction of the National Education Association and its three new Committees recently appointed, and with such assistance as can logically be had from commercial firms in the field, it should be possible to unearth valuable material from a multitude of live teachers now silent on their doings. Such articles in quantity, written by the doers *in mediis rebus* instead of by the thinkers *ex cathedra*, will add a galvanic element to a literature that needs galvanizing. There should result a flow of stimulating current perceptible and ultimately beneficial to even the most somnolent classrooms.

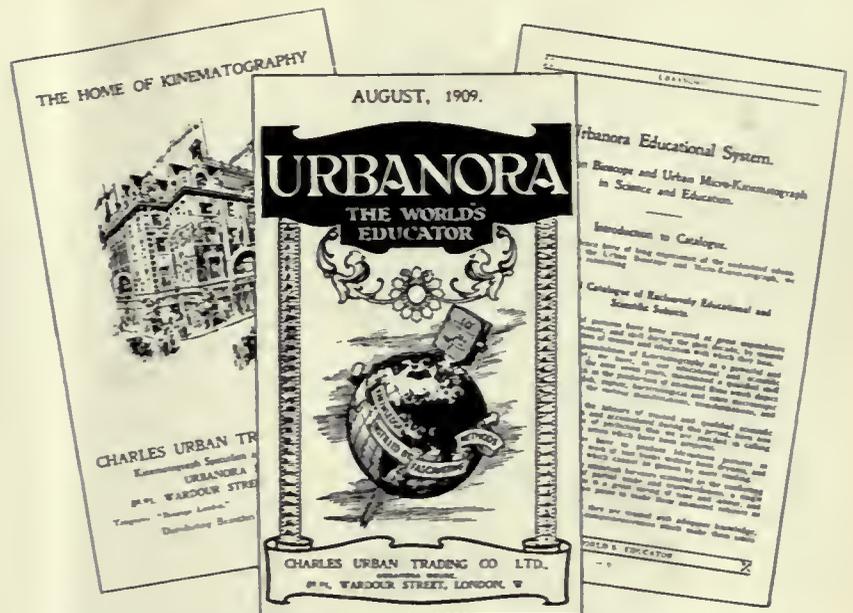
ONE of the most distinctive and valuable contributions yet made to our literature begins in this issue, “Motion Pictures—Not for Theatre.” In later issues we shall have more to say regarding this significant work and its author. N. L. G.

Note: In this issue appear four of the papers which were delivered at the June meeting of the Department of Visual Instruction of the National Education Association in New York City—by Hardy Finch, Samuel B. Zisman, Alex Jardine and Edgar Dale. The remaining material will be reprinted in the October issue, together with a report from the newly elected president of the Department, Miss Rita Hochheimer, Director of Visual Instruction in the New York City Schools.

Other officers elected were: First Vice-President, J. E. Hansen; Second Vice-President, Marian Evans; Executive Committee—Edgar Dale, Charles F. Hoban, Jr., E. Winifred Crawford, Etta Schneider, Grace Fisher Ramsey, Nelson L. Greene.

Chapter 1 The State of Nature

The opening installment of a 210,000-word history of non-theatrical enterprises told connectedly for the first time and covering twenty-five years of educational, industrial and social service films in America.



From the second edition of what was probably the world's first published educational film catalogue. The first edition was about 1903.

Motion Pictures – Not For Theaters

IF OTHER histories show better examples of heroism and martyrdom than are here presented, this strange story of pioneering will still be worth the telling as a revelation of human persistency in battling great odds. It has an especial claim for attention, too, in that apparently this particular story never has been told before—save in a magazine sketch which was really an advance synopsis of these pages, published in *New Outlook* in 1935, and in another of the same sort printed by the EDUCATIONAL SCREEN in 1936.

To label motion pictures as being "not for theatres" surely is a roundabout way of designating films exhibited in churches, schools, clubs, factories and so on; but motion pictures, like the personally reproduced drama, clearly belong to the theatre first of all—and their use elsewhere may be specified, it seems, only by acknowledging that in strict sense they are out of place, or, in all events, in a less important place. Of course, there are pedagogical pictures, religious pictures, propaganda pictures and others in more convenient groupings; but, when it comes to a name which embraces all to be seen outside the playhouses, the best that human ingenuity has been able to devise is "non-theatrical."

That is speaking merely of the name. It is not my wish to enter upon a controversy as to whether theatrical pictures should or should not come first. But, because some reader may object to my statement that they do take precedence—saying, perhaps, that it is like pretending that books are first for vacationists and last for scholars—I submit that in the amusement theatre the medium of the motion picture receives its fullest exercise, whereas, in non-theatrical use, some of the most potent powers of the film are

By ARTHUR EDWIN KROWS
Editor of "The Spur," New York City

deliberately and no doubt properly suppressed.

Subordination of non-theatrical films to the theatrical sort is unquestionably a strong reason for their long obscurity. More active reasons probably have been their modest financing, haphazard production and still more uncertain distribution. And yet it is surprising that a quarter century of non-theatrical activity, as recorded in what follows, could have transpired with so little popular knowledge about it. That this particular quarter-century has been occupied with matters overwhelmingly more important than non-theatrical films seems small excuse for such complete indifference.

THE START OF THE CENTURY

IN the beginning—to follow the always admirable plan of the Book of Genesis—there were just motion pictures. There weren't church, school or industrial pictures, although that statement will bring immediate challenge. Someone will recall those ten negatives of scenes in the municipal schools of France, shown at the Paris Exposition of Instruction in 1900, and declare that there were school pictures; someone else will remember that in 1897 Richard Hollaman, of the Eden Musée in New York, supervised the three-reel production of "The Passion Play" (purporting it to be a record of Oberammergau when it actually was made on the roof of Grand Central Palace, which he also managed, and thereupon justify a claim for films in the church field; a third objector will confound me

on the age of industrials with Edison's picture of Dr. Colton's tooth extraction with laughing gas in 1893. But what I am getting at is that, as long ago as 1904 (or 1905 let us say to be quite safe) motion pictures were all theatrical—all good to look at for the sheer pleasure of seeing a magical invention; and nobody thought, for more than a few minutes at a time, about narrow classifications. After all, that invention was then extremely young. Even the use of subtitles had barely begun.

In 1896, the year of the initial public showing of Thomas Armat's first practical "Vitascope" projector at Koster & Bial's Music Hall in New York City, the motion picture emerged from its earliest status as a scientific toy and, for a good fourteen years thereafter, audiences were hugely satisfied just to see the pictures move. That brings one to the year 1910, which is a very good place to start examining the first signs of the branching of the tree. Although by that time it was estimated that there were already upwards of nine thousand film theatres in the United States, almost any film which was made still sufficed to thrill spectators of all ages and conditions. So, the only reasonable way to consider non-theatricals, during the entire first decade of the present century, is to view the field broadly, never forgetting the public state of mind which as yet could see no essential difference between "The Great Train Robbery" and "A Trip to the Moon." With our superior knowledge of what has transpired since, we may look back and say that that was a classroom picture, and that an employee training film, or that designed expressly for a church to show at Christian Endeavor meeting; but nobody could be quite certain of it then. There were no precedents.



"Non-theatricals" can never repay their debt to Charles Urban. A portrait made in 1916.

You have my assurance of that. And what good is my assurance? Well, I was there. And because I *was* there, a close witness—although at that time I probably had no more sense of the historical importance of events than did most of my associates who were themselves too much occupied as actors on the busy scenes—this narrative will now and then and, I hope, pardonably, slip into autobiographical passages which may supply first-hand information.

Excluding the Zoetrope or "wheel of life," which in a fairly late copy was one of my childhood toys and which is now a revered ancestor of the screen drama, my first clear recollection of a motion picture is dated about 1898. However, a revival in Paramount's "Screen Souvenirs" in 1933 assigns it to 1904; but that later date probably belongs to a known American imitation of Lumière's French original. The place was Keith's vaudeville theatre in 14th Street, New York City; and the picture showed a negress washing a baby. Also represented was a marching military band (accompanied marvelously by the orchestra), and a mock prize fight in which one pug struck the other so forcibly that he exploded.

I wonder if this item could have been the same as the burlesque bout listed on the first movie program of Koster & Bial April 23, 1896. The dismembered body falling into the ring, miraculously came together again, and the touchy fellow continued fighting from where he left off. It may seem that only a love of quaintness would lead me to remember that; yet, I recall that these curious bits of celluloid won quite as much excited attention as those blackface comedians, McIntyre and Heath, who, in person, were on the same "continuous" bill.

In 1911 (or 1912), circumstances made me one of the pioneer critics of the film. It was on the staff of the old New York *Dramatic Mirror*, following the lead of that veteran of the industry, Frank E. Woods. For that publication he lately—May 30, 1908—had founded what is believed to have been the first regular motion picture department on any paper.

About six years thereafter, he was to achieve a larger fame as the scenarist of "The Birth of a Nation." Half my working week was devoted to seeing new films in advance of public release and writing digests tailed with a few words of opinion. At least one of the three days—that devoted to screenings of the "Independent" output—obliged me to review some 24,000 feet. It may be mentioned, incidentally, that the young fellow whose desk adjoined mine and whose work, still earlier begun, was of much the same sort, was Frederick James Smith, little dreaming of his later celebrity as writer and editor of motion picture magazines, while Robert Emmet Welsh, brought in a little later to command the rewrite desk, was destined, years afterward, to become general manager of Universal City.

STORIES AND SPLITS

THE smart length of a feature film was two reels. Only a short time previously it had been one. Indeed, single reel "features" continued in production until the end of 1913. Many more offerings were classed as "splits," meaning individual reels, each holding two or more separate subjects. Of course, in the very, very beginning—when any subject whatever was only about fifty feet long—all reels were split reels; but I am speaking now of the time when the American film industry had really gained momentum. At first the features were almost invariably stories—dramas, that is. In the splits occurred most of the "educational" items; and this arrangement persisted well into the World War period. Gaumont, for instance, was releasing animated cartoons and travelogues as split reels as late as the fall of 1916. For that matter, many split reels are to be seen today; but "split" in those early years, was a particular term, implying that one of the items on the "spool" was a story picture.

The "Selig Split" for the second week in February, 1912—to give an idea of what a split really was—offered a short drama. "The Little Match Seller" and, on the same reel with it, "The Taos Indians of New Mexico at Home." The Imp (Independent Motion Picture) "Saturday Split" of about the same date, included "The Tea Industry in the United States." Kalem had an item called "Flowers for the 400"; Eclipse advertised "Pottery Making," and Eclair, in September of the same year, announced a split reel of story and color, "making your theatre the advanced school for public learning." Siegmund Lubin, head of the Philadelphia-Betzwood film company bearing his name, was an enthusiast for subjects of this sort. To his particular interest in natural science we owe some of the earliest camera studies of the crab, the oyster and the sardine—oddities like that. Many of these subjects were released in series: "Sight Seeing Trips to the Principal Cities of the World" and "Trips to the Homes of Famous People."

To be sure, there were longer subjects

of this so-called "educational" character. Two of those which commanded respectful attention, along with the splits mentioned, were "Modern Fire Fighting" and pictures of a French battleship review edited to illustrate the differences in Gallic and American naval training. Of course, these are the merest random instances. In point of footage, the output of what would now be called educational material was possibly more extended then than it is now.

In August, 1910, Frank Woods, writing under his soubriquet, "The Spectator," in the New York *Dramatic Mirror*, estimated that out of a total of 140 releases in that one month, thirteen per cent. were scenic and industrial subjects. Earlier that year, George Kleine of Chicago, had issued a catalogue of so-called "educationals" then available, running to 336 closely printed pages and listing more than one thousand items.

EARLY "EDUCATIONAL" CATALOGUES

THE nature and implications of this catalogue in that period make it worth more than a passing attention. It was addressed to "Universities, Colleges, Scientific and Literary Institutions and Traveling Lecturers." Strangely enough, churches were not named in that super-scription, although the pages proper actually included a religious group. Introduced with a brief panegyric of school films written by Professor Frederick K. Starr of the University of Chicago, and copyrighted by the Chicago producers Kleine, Selig and George K. Spoor, together with a couple of anonymous sub-introductions calling attention to the advantages of the screen as a teaching instrument, it launched into the list proper. The listing was confined, however, to subjects licensed by the Motion Picture Patents Company. The Patents Company had been organized in 1908, and Kleine, Selig and Spoor were even then veteran producers, having embarked upon their film careers in 1896, the birth year of the Armat Vitascope.

Each item in the catalogue, with a very few exceptions, was accompanied by a code word to be used in ordering, a system then in vogue even for theatrical subjects. A scene-by-scene description was almost invariably given, many of the scenes doubtless being earlier fifty-foot productions now spliced together. The footage was specified in every instance, giving an average subject length of from 300 to 500 feet, from which it is clearly to be inferred that even the more recent material had been originally in the splits. The most impressive early group comprised sixty films on surgery, pictures chiefly of tumor operations by Dr. Doyen—although no film producer, Dr. Doyen or anybody else, is named anywhere. Credits were not in fashion then. I identify Dr. Doyen's work from the 1915 edition of the Kleine catalogue wherein some of these same films are offered again with reference to their maker.

The classification of subjects in the older list started off bravely, but soon

broke down as though the arranger gave up trying; and "How Glue is Made," for instance, occurred desperately between "Northern Venice" and "Jerusalem." However, an index to the volume grouped the contents all over again and much more reasonably.

In addition to the surgical set there were examples of microscopic photography, animal subjects, a few items on physics, a great deal on travel, some topicals such as views of McKinley's funeral and short scenes from the Boer and Spanish-American Wars, and quite a number of pictures which, for one reason or another—chiefly a fancied relevance to history courses—were drawn into that line. One may reconstruct the general reasoning which names "Napoleon and the Sentry" (200 ft.), "The Legend of Midas" (654 ft.), and "The Salvation Army Lass" (926 ft.), the last-named attractively described as a "beautiful story of the battle between Good and Evil"; but it is hardly in keeping with standard pedagogy to present "A Bullfight in Mexico," which shows "three bulls killed before your eyes and five or six horses disemboweled and killed"; and it surely is straining a point to expect any elementary school to order "The Distillation of Spirits" and two other choice items from France, "Cigar-Butt Pickers of Paris" (361 ft.), and "The Garbage of Paris" (407 ft.).

Army maneuvers occurred aplenty — from Egypt, England, Germany, Russia, France and the United States. But, without moralizing on that, I find room for more interesting immediate speculation in the travel subjects, scattered in blocks throughout the catalogue, as though the arranger did not want the reader to suspect the disproportionate number of such films which he had. There was an especially heavy supply of items on remote parts of the world—those sections which were popularly supposed by the stay-at-homes with their parlor stereoscopes to be richest in picturesqueness, charm and romance.

American scenes furnished more films than I had suspected; but it quickly became apparent that coöperation of the railroads was chiefly responsible for that. Scenes in Yellowstone Park, the Canadian Rockies, the Grand Canyon of the Colorado—that sort of thing. In other words, virtually nothing off the main line. But simple choice could not have altered that situation, for those were days when there was difficulty in obtaining proper camera equipment and raw film, and in finding dependable laboratory service away from the cities of the middle Atlantic seaboard.

Kleine's catalogue has been called the first of its kind ever to be published; but I have held in my hands one which not only is earlier, but which refers to more truly educational films and the items of which are far better classified. The copy which I examined was dated August, 1909; and it was described as "the second and enlarged edition." Its pages num-

bered 320. It was prefaced, moreover, by the same panegyric of school films written by Professor Starr and copyrighted by Kleine, Selig and Spoor, and which is now revealed as having been printed first in the *Chicago Tribune* of February 7, 1909.

It was issued by the Charles Urban Trading Company, Ltd., of London; and it happened that many of the subjects therein described, were to be obtained also in America from Kleine, who released them under the brand name "Urban-Eclipse." The stout little English book is entitled *Urbanora*. A note inside explains that "Urbanora" is "a registered and protected name only used in connection with educational and scientific subjects published by the Charles Urban Trading Company, Ltd." The reader is further told that, "all genuine Urbanora Films bear the facsimile signature of Charles Urban on the title announcement."

Subjects listed are nicely grouped, nature study predominating, and much of that made, apparently, by photographing the jungle beasts of the Bostock & Wombwell Circus. Travel is well covered, particularly so for the countries of the Old World; and there are interesting current-event items—views of airplanes, visiting fleets, excursions of royalty, and so on — along with subjects of reconstructed history. Medical films are impressive in titles and number; and there is an admirable section devoted to industries—railroads and fisheries, notably. Most surprising, perhaps, are the presentations of microscopic life produced with "the Urban Micro-Kinematograph," and examples of "time-lapse" photography showing growing plants and one extraordinary picture of the rising and falling tides in compressed action. But the introduction explains all this by references to "the Charles Urban Trading Company's Scientific Expert, Mr. F. P. Smith," and elsewhere, to the qualified



George Kleine, theatrical magnate urged films in churches and schools.

staff maintained "in our educational and scientific departments during the past seven years." The very first Urban catalogue, of theatrical films, which I have seen, is dated 1903.

Attention should be called also to an undated pamphlet issued quite certainly not later than 1907 by the Charles Urban Trading Company, Ltd., entitled *The Cinematograph in Science, Education and Matters of State*, and written by Charles Urban, F.Z.S. In this text it is stated that the Company has spent "the past five years" in equipping a qualified staff to provide animated films depicting various manifestations, transformations and phenomena of nature.

FOR LITERARY COURSES

As to fictional material in American films of the period, that drew principally and without scruple upon the rich treasury of bygone literature. With no especial regard for anything but the salient outlines of a rapidly moving, strongly visual story, there was taken into the open hopper of that early factory system everything from Homer's *Iliad* and *Odyssey* to Hawthorne's *House of the Seven Gables*. The concerns which delved deepest into a musty past were, perhaps, the Lubin Film Company of Betzwood, outlying Philadelphia, and the later Thanhauser Company of New Rochelle, outlying New York—not to forget most of those ambitious new companies such as the Éclair, across from Manhattan in New Jersey, atop the Palisades.

Shakespeare's plays were done over and over again, and generally in pretty shabby fashion—for to use just the bare skeleton of story in Shakespeare is to do without his immortal poetry and imagery. Charles Dickens was a favorite recourse, and so was Victor Hugo. A familiar item was the episode of the Bishop and the Candlesticks from *Les Misérables*. This always has had a fascination for persons of the theatre. In 1926, when George Abbott was conducting his initial experiments in the new art of talking pictures, one of his most interesting demonstrations was with the Bishop and the Candlesticks.

Of dramatized European literature, possibly the most striking examples were provided by the Great Northern Film Company — *Nordisk* — of Copenhagen. This concern, which opened its American office in New York about 1908, is sometimes credited with having introduced multiple reel subjects to the United States. In its tiny projection room I recall seeing an impressive version of Tolstoy's "The Living Corpse," in a length which I seem to remember curiously as three reels. The reluctance to have multiple reel subjects was only because the ordinary film theatre had but one projection machine and could not change from reel to reel without a wait between.

Until about 1912, the year in which the Authors' League of America was formed, ready-made plots were still too easily obtainable to warrant such serious writ-

ing for the screen. D'Annunzio's "Cabiria" and Hauptmann's "Atlantis," both composed expressly for filming, were still to come. At the same time, there were some highly promising efforts in that direction. Pathé's conventional farces, featuring the clever Max Linder, on the life of the Parisian bachelor, were at least expressly written for him. In this country some amusing skits, rooted in actual life, were being produced to exploit John Bunny and to provide parts of varying avoirdupois for Flora Finch and Kate Prince in his support. Some dramas of contemporaneous business were made by the Edison Company in the Bronx.

Above all, the Vitagraph Company of America, in Flatbush, incorporated in 1900, was sponsoring, in addition to the John Bunny pictures, those memorable comedies of human frailty, the vehicles of Mr. and Mrs. Sydney Drew. Many of those were composed by William Basil Courtney, now an associate editor and feature writer of *Collier's*. The George Ade "Fables in Slang" and the O. Henry stories came later—the former made by Essanay in 1917, and the latter beginning the same year, by Vitagraph.

Out on the Pacific Coast, on the newly settled Universal lot, there was another struggle for self-expression by Lois Weber and her husband, Phillips Smalley, both players from the stage, and Miss Weber once favorably known as a concert pianist. She wrote and directed the offerings in which they appeared under the trade mark of Rex Films, standing almost alone at that particular time, in the constructive, radical effort to show upon the screen the spiritual values in serious drama.

They kept up a remarkable pace at this sort of thing until about the summer of 1914, when they joined the Bosworth Company and started releasing through the lately organized Paramount. Had Miss Weber been given the same opportunity a few years later, when the public was readier to understand, she probably would now be occupying a larger niche in the Hollywood hall of fame.

CAMERA MAGIC

WHEN one realizes that the new century was playing with a new toy it is not surprising that the mechanical features of that toy engaged most of the attention. That is undoubtedly why there were so many pictures featuring tricks of the camera. Children's playthings coming to life, hammers driving nails without any apparent human agency, ghosts and visions, were veritable commonplaces in a steady stream along with those examples of early time-lapse photography in which flowers were seen to bud, bloom and fade in a few seconds. William Fox has recalled out of this time for the biography written for him by Upton Sinclair, that one of the first impressive films he ever saw was of a pair of shoes lacing themselves. Then, of course, there was a troop of photoplays in which actors played

double parts simultaneously.

The English pioneer, Robert W. Paul, and Georges Méliès of France, manager and proprietor of the Théâtre Houdin, are said to have been responsible in the main for the trick devices, with which this array of screen magic was produced, although most of it was merely an application of long familiar tricks of the still camera. Don't you remember, in the optician's windows, those photographs of the man holding his own head on his knee? One Sunday afternoon, about 1903, I should say, I saw one of the early Méliès efforts at the old Eden Musée on 23rd Street in New York. It presented two grotesque bicyclists in silhouette, who apparently rode up the sides of the building and ventured skyward for a turn around the ring of Saturn. I remember, too, about 1913, the incredible adventures of the celebrated French character Fantomas—especially one in which he suddenly escaped his pursuers by turning into a strip of paper, rolling up and blowing away.

This was the sort of thing which a few years earlier had so intrigued J. Stuart Blackton, one of the founders of Vitagraph, and had led to his own startling contributions of the aforesaid animated toys and hammers. He it was who produced the famous "Princess Nicotine." The best trick picture of the whole period, however, as far as American audiences were concerned, was held to be "The Dream of the Rarebit Fiend," based on the newspaper comic strip by Winsor McCay and photographed, directed and produced by Edwin S. Porter—although I myself, didn't like it nearly as well as some other imaginative shadow adventures of the day, the titles of which unhappily have left me.

Then there were those pioneer souls who, in addition to Blackton, were experimenting with animated drawings, the oldest moving pictures of all—the same, indeed, as those which children used to fit so happily to the inside curve of the Zoetrops. My recollections of these very early experiments have only one extended story in animated drawings to mention; and I'm not at all sure of the date of that. It was a cartoon presentation of Edwin Thayer's celebrated *Casey at the Bat*—one version with which De Wolf Hopper apparently had nothing to do. My outstanding impression of it was that the backgrounds wavered fearfully, caused, no doubt, by the fact that every individual picture had to be drawn in full, there being then no known economies of time and effort such as are to be found everywhere today on the animator's table.

That was an animated story. But I remember, too, what is of more historic importance, one of the "Humorous Phases of Funny Faces," produced by J. Stuart Blackton and released by Vitagraph in 1906. This was accompanied by several similar items; and I suppose that the one which I particularly recall was really representative. It showed a silk-hatted swell rolling his eyes at a pretty girl while he puffed with great

satisfaction on a large cigar. But the smoke blew over in the girl's face, and her flattered expression changed to one of disgust. This effort was possibly the first American animated cartoon in the sense which we now understand.

In late years I have seen, draped around the inside of a case in the Conservatoire des Arts et Métiers at Paris, the actual broad film upon which Émile Reynaud had painted a little fantasy about Pierrot, Harlequin and Colombine. That marvel—in colors, too—was exhibited to an admiring French public in 1892.

Strongly resembling the Blackton work, just mentioned, were specimens of the later sketches of Hy Mayer, the international caricaturist. He, from 1904 to 1914, did an entire page of "Impressions of the Passing Show" every Sunday for the *New York Times*, and about 1912, was providing weekly film releases for Universal. Mayer claims to have been "first to draw under the motion picture camera for the screen." Blackton might qualify that statement, for he gave "chalk talks" before the early Vitagraph cameras, even, it seems, for one of the first ten pictures made by Edison for public showing on the Vitascope. However, Mayer's claim means literally what it says. He actually drew pen sketches while the camera photographed in closeup what he did while he was doing it, a *tour de force* which an average audience would scarcely appreciate. Of course, he was not the first animation artist; and, of course, he did not say that he was.

Nevertheless, and despite an expressed contempt for artists who wasted precious talent making thousands of drawings to imitate a single, simple movement, Mayer did use camera tricks to mystify the spectators—tricks such as having his drawing appear to create itself after his hand and pen had visibly started it, or by "jumping" or "dissolving in" whole sections drawn while the camera was not looking. Yet, those results obviously were not animated cartoons in the generally accepted, highly developed sense of today.

A medal for pioneer animation should go to an artist who possibly has forgotten his first real effort in that direction. I mean George McManus; and his contribution in question was produced for Universal in 1912 or 1913, shortly after he had left the staff of the *New York World* and joined that of the *New York American*. His then current newspaper comic strip, "The Newlyweds—Their Baby," had merely paved the way for his coming success, "Bringing Up Father." For Universal Film Manufacturing Company he made this one extraordinary reel, a veritable exploration trip into strange medium. Starting on the screen with a dot, he caused it to develop into more astonishing things than the famous hat of Tabarin. There was no story and a continuity merely of line; but it registered a mind of great imagination trying to find the potentialities of a new opportunity. In 1916 McManus's cartoons were released through Pathé.

One of the earliest animators was the celebrated newspaper artist, Winsor McCay, who died in 1934. With Blackton to guide him, he introduced his beloved cartoon character "Little Nemo," to the films in January, 1911, the work requiring 4,000 separate drawings. This was doubtless what lent point to the expressed contempt of Hy Mayer. However, work never discouraged McCay; and he went on in that same year to produce what became one of the great favorites of the time, "How a Mosquito Operates."

FILMS IN COLOR

THEN there were pictures in color. I already have mentioned those of *Éclair*; but the most familiar were those of Gaumont and Pathé Frères, all of France. The color was synthetic, using aniline dyes such as had long been favored for lantern slides, but here applied through stencils which had been hand-cut under magnifying glasses, by prodigious, almost incredible labor—separate stencils for each color and frame. While the resultant imitation of natural hues was not as correct as the physicists might demand, the Pathé examples were exceedingly pleasing. The colors appeared on the more significant dramas and frequently on the dramatized fairy tales; but their lasting use was on the travelogues. Lovely reels of jaunts in foreign lands colored by this method are still on view from time to time in our best theatres.

In 1912 Gaumont, alone, was issuing from four to six hand-colored subjects per month. Gaumont also had a "natural color" method, said by experts even yet to have been very beautiful in its results, but too expensive to produce commercially. In the summer of 1913 it was announced that this process had been purchased (and retired for experiment and research), by the Eastman Kodak Company.

The process called "Kinemacolor," invented by Albert Smith of London—who is not to be confused with A. E. Smith, president of Vitagraph—was shown to a greatly interested English public in 1908, and, excepting a trade showing at Allentown, Pennsylvania, in December, 1910, first released to an attentive American audience at New York, in May, 1911. The head of the concern presenting it then was Charles Urban.

In looking over my notes on that second "first night," I am disposed to moralize on the fact that on the 17th of the preceding month, William Friese-Greene, the ill-starred English inventor of so many early devices in motion picture production and projection, was scheduled to appear at the opening of the new Highway Theatre in Brooklyn, to deliver a short lecture on the film industry, and to exhibit some of his inventions, including photography in natural colors. This last-named invention employed the principle patented by Kinemacolor in 1906 but demonstrated by Friese-Greene before the Royal Photographic Society of Great Britain in 1900.

But Kinemacolor, although it was a sensation while it lasted, was to have only a passing triumph. The process of Prizma was soon to overtake it. In February, 1917, only six years distant from Kinemacolor's American *début*, Dr. H. T. Kalmus, of the Massachusetts Institute of Technology, showed the American Institute of Mining Engineers a form of the new process which was to rule next in succession under the name Technicolor.

NON-THEATRICAL EFFECTS

I MENTION the Kinemacolor situation at some length because of the especial influence it exerted then on non-theatrical development. Kinemacolor film, being actually black and white, required in projection a compensating mechanism of revolving red and green filters, to supply the color. This, however, was not difficult to provide. There was a greater obstacle in the fact that the film had to be run at twice the normal speed to give the effect of color superimposition; and only a few theatres were equipped to do that. This seriously handicapped the company's promotion.

Its officers inclined strongly, therefore, as time went on, toward "educational" items which might be shown with portable equipment, independently of theatres on a "road show" basis. In the autumn of 1912 their pictures of the Panama Canal were shown to President Taft and members of the National Geographic Society at Washington and, at the end of December, these same films, supplemented with others of the Balkan War, constituted a program for the public at Carnegie Lyceum in New York.

Almost coincidentally with the Washing-

ton event, the Kinemacolor Company wooed the theatres again by announcing the regular release of a "fashion weekly" which, in the autumn of 1913, presented even the popular designs of Poiret; but this still failed to convert the exhibitors. So, within a month after the start of the fashion project, Kinemacolor frankly announced that it would make especial efforts to produce "educational" films. It was an interesting declaration in more ways than one, for Charles Urban, head of the parent company in England, was the same who headed that Charles Urban Trading Company of London, which had issued that pioneer educational film catalogue. Out of his experience he was probably better qualified to inaugurate a real educational film program than anyone else then alive.

It must be borne in mind carefully that "educational" was only a name whereby the exhibitors of the time referred to a particular kind of theatrical attraction, just as they would have said "comedy" or "drama." Probably not one showman of that day had any serious thought of an "educational" subject being shown profitably in a school until after it had completely exhausted its theatrical usefulness. I am confident that this was the real view of Kinemacolor officials when they declared that they were going to concentrate on production of films of this type. But it happened that, in their peculiar situation, they might have used the stricter definition, for the lyceum circuits, and other especial places of presentation where Kinemacolor found its warmest welcome, were distinctly away from theatres, and just one step from schools.

(To be continued)

APPROXIMATELY two years ago the Editor of THE EDUCATIONAL SCREEN discovered by chance the existence of this surprising narrative which was then incomplete. Its author was the Editor of a national magazine published in New York, who had been close to non-theatrical film endeavors virtually from their beginning.

With pioneers in the field—many of whose names are today unknown to newer leaders in visual education—dying off unhonored and unsung, the author felt it incumbent on him to record the facts which he had intimately known, and therefore began this history. Now, at last, the entire work is ready and will be published as rapidly as possible in these pages.

At the author's request we make no present comment on his record of motion picture service or his various widely-used books on the theatre. He prefers that this account stand by itself. However, as his personal story is necessarily interwoven in the events he describes, his identity will become more clearly established as the successive installments appear.

NELSON L. GREENE

Film Production in the Schools

A survey of the growing activity in film production by schools, with specific mention of many examples.

By HARDY R. FINCH

Head of the English Department
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TODAY OVER two hundred schools throughout the United States are engaged in the production of films. The number of schools engaged in this activity is increasing, and before many more years have passed, practically every school in the country will be making or will have made its own film offering.

The schools now engaged in this work represent all gradations of experience. Some of them are just beginning their first picture and are interested in obtaining the "ways and means" of making good pictures. Others have produced a number of films, have acquired considerable experience, and are quite professional in their procedures. One school in Milwaukee, Wisconsin, has produced one hundred films.

School-made films have been produced by a variety of individuals and groups. Some of them have been made by persons and groups from the community in which the school is located. Parents interested in the work of the school have given their services in the actual filming of sequences. Such an activity which involves the co-operation of the parents with the school serves to bring the parents and the school more closely together.

Local amateur or professional cameramen, interested in stimulating interest in their hobby or profession, have aided schools in motion picture production. Several schools have hired cameramen to film their activities.

School principals, superintendents, and supervisors have taken many of the films in the schools. Frequently, the school official has movie-making as a hobby and proceeds to make use of it in connection with his work. One very desirable outcome of this is the new view which the supervisor may obtain from his filming experience. He may discover that his school does offer many activities for the individual or that his school needs certain improvements in other ways. In spite of his care in making "shots" he may still obtain very valuable suggestions from them. For example, the picture of a school cafeteria during lunch time revealed that too many students arrived at the same time. On seeing this in his film, a supervisor changed the timing of his dismissal bells so that the situation was remedied.

Teachers have been very active in film work. Many of them have done the camera work; some of them have written the scenarios and made the plans; others have directed the acting. Teachers who have taken part in school film production claim that as an extra-curricular activity or as a class room procedure it is well worth the time and energy spent by them.

One of the most important phases of the making of school films is student participation. In a number of the films the students appeared in the sequences, the filming, planning, and all other details of the production being executed by adults. In some, students did part of the producing as well as the acting. In others the students belonging to a camera or photo-play club did almost all of the work, a teacher or sponsor offering advice when necessary and guiding the group in the right direction. Students engaged in this type of undertaking have developed skill in writing scenarios, planning film sequences, directing fellow students, using the camera, lighting indoor scenes, making titles, editing and projecting. In some cases they have developed a high degree of skill in these techniques.

The students, whether they play a major or a minor part in the making of films, are greatly interested in this activity. A few weeks ago, I happened to observe an incident that showed the intensity of student interest quite clearly. On visiting a room in a Connecticut high school I became interested in the actions of two boys. At regular intervals one boy would sit in a chair while the other focused four lights upon him. The lights were moved toward the subject, away from him, above him and below him and the process repeated until both of the boys seemed to reach an agreement. The period of experimentation lasted about fifty minutes. No pictures were taken. As the boys were leaving the room, I asked them why they had been doing this. One of them replied, "We were just having a disagreement about lighting, and we have settled it."

Many different types of films have been produced in schools. Some of the dramatic films were developed in English classes. These classes, engaged in the study of literature, discovered particular portions of stories and poems which had good screen possibilities and wrote continuities for their production. Costumes and properties were obtained.

Some classes did special research to ascertain whether the costumes were suited to the setting of the story. The nature of the films required special dramatic coaching and considerable practice.

One English class in Los Angeles, while reading *David Copperfield*, reproduced scenes from the novel, the students acting in the roles of some of their favorite Dickens' characters. In three months, a ninth grade English class in Louisville developed a complete film version of Scott's *Lady of the Lake*. The students did the acting and some of the planning in this film while the teacher operated the camera. The total length of the production was 1600 feet. A school book club in Minnesota has produced a film which contains familiar scenes from classic juvenile books—*Robin Hood*, *Little Women*, and *Heidi*.

Films such as those just mentioned are especially valuable in developing interest in reading. When students take part in a dramatization of something that they have read—a dramatization made permanent by the motion picture camera—they may become vitally interested in the literature thus dramatized. With this interest some of them may find that there are dramatic possibilities in other works of literature as well.

The dramatization of historical subjects is another phase of the dramatic film. In Morristown, New Jersey, students gathered information on the social and military life of George Washington. The noted American had spent some time in their community during the Revolution. With the help of the school's visual aids club they produced a 400-foot film on the subject. Communities that have interesting histories should encourage this activity. Students know the historical background of their town or city better after having participated in such a project.

In the Fieldston School, New York City, a seventh grade group developed a color movie portraying the history of clothing. The children wrote the scenario for the film, designed the costumes, and chose the areas where the scenes were made. The activity was correlated closely with discussions and reading in a social studies class.

Films based on stories written by students have been completed in several schools. One West Virginia high school has two on its list—one called *First Down*, a football drama of the Frank Merriwell type; another *Public Enemy No. 13*, a comedy in which a radical speaker is persecuted. This school is working on *The Phantom Miner*, a mystery of the coal mines, and is planning to start production in the fall.

The romantic comedy is a popular type of film. A good example of this type is *Trouble or Nothing*, produced by the Photoplay Club in Greenwich High School. The scenario, written by students in a creative English class, was revised by members of the production group before the film was taken. Using the school as a locale for some of its action the plot centers about two high school students and their rivalry over a "new girl."

Our World, the product of the John Fremont High School in Los Angeles, not only furnishes romantic comedy, but also teaches a lesson. The mythical Fremont High in the film is changed into one of good behavior, honor, and pride; from one that had a dirty campus, a bad reputation, and a student body that didn't care. The idea for reform is brought about when a guest speaker at the school assembly talks to the students.

An imaginary trip may form the basis of a dramatic film. In the Manual Arts High School, Los Angeles, a group of students helped a teacher plan her summer trip abroad. She had planned to take a cycling trip through France and Germany. When the students became very enthusiastic over the plans, she suggested that they make a faked trip on bicycles with local scenery and school costuming. On the faked trip, a group of American students arrived in France, purchased bicycles, toured through rural areas. Then the group went to Paris, saw famous art works, visited Madame Curie's laboratories, visited cathedrals, watched peasants at work in Southern France, celebrated the Fourth of July, then boarded a boat at Marseilles. This film was of great value to the students, the teacher in charge reported, for they were studying a unit on France and its culture at the time.

In a Montclair, New Jersey, junior high school an unusual dramatic film has been produced. The film, taken by the senior high school dramatic club, gives the story of a boy from a small town who goes to college, and specializes in engineering. When he returns home from college, he finds his town excited because a company is about to select the community as a site for a large industrial plant. The young engineer presents the problem to the town council with the result that he is employed to plan the city.

The non-dramatic films comprise most of the school filming accomplishments at the present time. The most frequently used type of non-dramatic film is the "school-news-reel," which pictures the activities of the school. Most of the newsreels are similar in plan to the one produced by the Julian Union High School in California. The Julian movie, which was made to be shown at the school's graduation exercises, began with views from the communities from which students come. These were followed by views of the school—the physical plant, the arrival of students by bus, students at lunch, and scenes from interesting classes. The next portion of the film showed some of the school activities—three plays produced during the year and an operetta. Another section of the film was devoted to sports—football, basketball, baseball, tennis, track, boxing, etc. Still another presented "shots" of faculty members and members of the Board of Education. Films of the newsreel type are used most generally for publicity purposes. Sometimes they are used for guidance purposes also.

The counselor for boys in a large New York State junior high school explains very clearly the two-fold purpose of a 1500 foot film produced in his school. He writes: "We produced the film with two purposes in view: (1) As an orientation project for pupils prior to their entrance into the junior high school. It is shown in the elementary schools of the

city prior to programming the incoming pupils for the following year. It shows the many opportunities and the activities open to them in a modern junior high school. (2) To familiarize parents and the adult taxpayers with modern trends and methods in education today. We find that most adults have neither the time nor the opportunity to visit our schools while they are in session and their conception of education is merely a reflection of the type of school they attended several decades ago. Our experience with the film has been that the average adult is astounded and it is a great revelation for him to see how the schools today have expanded their curriculums to fit the needs and varying abilities of their children."

Some films of the newsreel type are made solely for guidance purposes. The director of guidance in Brookline, Massachusetts, has produced one entitled *A Visit to Brookline High School*. It comprises the visit of two eighth grade pupils to the high school and follows them from the time of entrance at the front door to the principal's office, the dean of girls, registrar, director of guidance, and several classes.

Several school productions show the work of a particular department, club, or class. A film designed to acquaint people with the services of a college home economics department has been made at State Teachers College, Indiana, Penna. A junior high school in New Brunswick, New Jersey, has made a film which shows how the home economics classes relate their activities to everyday living. A junior high school in Reading, Penna., reports that it has completed a movie showing the activities of its practical arts department. The science department of a high school in West Allis, Wisconsin, has taken two thousand feet of film on its class activities.

In Evansville, Indiana, a film showing the services of the school dental clinics has been completed. A school health service in Cattaraugus County, New York, is making a film depicting county health activities. The plans for the picture have been worked out cooperatively by students in five participating schools, each school taking one phase of health work. A school drum corps at Saratoga Springs, New York, has produced a film which shows the training of its members.

Some very interesting pictures of individual class activities have been produced. The Long Beach, California, schools have made two films on art. One shows an art class drawing the human figure. The other shows a high school girl painting a mural. The Manual Arts High School in Los Angeles has made a film showing a teaching unit of China. In the production the students visited Chinatown in Los Angeles, ate at a Chinese restaurant, looked at Chinese art, costumed and produced a small Chinese play. As helps in teacher training, the individual class activity films should be extremely valuable.

A considerable number of teaching films have been produced in the schools. One very valuable type is the safety film. In Lynn, Massachusetts, a bicycle safety film has been made. It is quite typical of what is being done in this field in various parts of the country. The film's scenario is divided into three parts: the first shows careless bicycle riders; the second shows what happened to a boy who was careless and the policeman's efforts to educate him in desirable safety habits; the third shows a bicycle club on an excursion. The idea behind the production was to stress the pleasure that children can have with a bicycle if they know how to operate it properly. In Cuyahoga Falls, Ohio, a film teaching students to be careful in school and in street traffic has been completed. Titles of safety films listed by other schools include: *A Safe Fourth*, *Electrical Safety*, *Fire Prevention and Control*, *Parking Regulations*, *Spinning Spokes*, and *Safety in the Home*.

Several films on health have been reported. Three schools have used posture as a subject with students giving examples of good and poor posture. One school has such film topics as *Care of Hair*, *Care of the Nails*, *Do You Walk or Do You Hobble?*, *Just a Cold*, *Do You Know Your Heart?*, and *First Aid*.

A Cleveland high school has produced a teaching film that is certainly worth repeating in other schools. Its production acquaints the student with the facilities of the school library and shows him how to use them effectively. This same school has also made a film for commercial classes—on typewriting technique. Truly, the teaching films have been made on practically every conceivable subject.

Another interesting development in school film production is the making of films for outside organizations. After a school production group has completed a successful motion picture, its members are sometimes invited to do one for an outside group. Two such films have been reported to me; doubtless there are others. One film shows the activities of a Red Cross chapter in a community; the other, taken to promote a community chest campaign, shows how a hospital fills a community need. Due to their great community interest,

such films are excellent means of showing the community what a school group can do.

In conclusion, I ask you to look forward with me to the educational benefits we may expect from school participation in film production. We may reasonably expect—

1. A broader acquaintance of the student with the film medium, its possibilities and limitations.
2. More possibilities for student dramatic expression.
3. Greater opportunities for student writing for a new medium—the screen.
4. More student experience in planning, organizing, and directing an activity.
5. More effective teaching films to suit special classroom needs.
6. A better understanding of the school by the school officials, teachers, and pupils.
7. A closer union of the school and the community.

Improving Illustrative Material in Textbooks

Constructive analysis and criticism of current practice in the use of textbook illustrations.

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"The Text For Today . . ."

THE FIRST STEP in improving illustrative materials in textbooks is to improve the textbooks themselves. This means not only an improvement in the visual appearance and presentation of the book—cover, typography, format, page layout, margination, etc.—but also an improvement in the structural organization of the writing—the internal logic of the book. This is a matter of the author's thinking and conditions to a great extent the character, quality and handling of illustrations, page arrangement, typography and format in the design of the book.

It is also a matter of the theory of learning. Ernst Reichl, the book designer, once pointed to the Talmud as a prototype for the textbook: "Students of the Talmud are instructed to remember not only the meaning of a passage but also the page and line on which it occurs. All Talmuds are printed alike." That is, each line was found in the same place and on the same page, no matter what the edition. The theory was that the "optical memory recalls the black and white impression of the printed matter on the screen of the mind and reads it off as from the book itself." The purpose of this organization was to aid learning through memory—learning was by rote.

Our own early textbook followed the same principle of learning. I recall a teacher in French in high school who dazzled us by his knowledge of the Chardenal we used as text. He would rarely, if ever, look at his book but made all his references from memory: "Such-and-such a rule," he would announce, "you will find on page so-and-so." We thought he was quite wonderful, but I doubt that we were learning French by this method.

The text today is much less this biblical use of chapter and verse. Our world is too complex and the need for democratic learning too strong for such authoritarian method. Our textbooks need to be rich sources for stimulating information, intelligent guides for personal activities, coherent interpretations for our individual and collective experiences.

Its Materials

A modern textbook having these characteristics will be built out of photographic and graphic materials as well as verbal

language. The problem is not to use illustrations as after-thoughts, as advertising embellishment, as prettifying devices that serve only to make a book more salable. We have too much of that kind of illustration, where a frontispiece and a few scattered photos or drawings are included to "doll up" a dull text or relieve the weight of continuous reading matter. While we may be grateful for them on occasion, these are not visual aids of the kind that are needed. The malpractice has carried so far that publishers are beginning to boast of "38 visual aids" as a selling point when they mean perhaps 38 arbitrarily chosen photographs.

Function of the Illustration

My experience in architecture has taught me that a clear understanding of function is the first requisite to getting good results in design. When the basic function is understood it is next important to have a clear understanding of how materials are to be used functionally. It would therefore be well to note what illustrations are and how and for what they are to be used.

Illustrations should be clearly understood as a visual form of communication, neither superior nor inferior to verbal communication, but as organically related to the story or the information presented as a sentence should be to a paragraph or a chapter to the entire book.

To use illustrations functionally the following two principles should guide the selection and placing of illustrations:

1. *Illustrations should be functional in subject content*, illuminating or emphasizing the text or serving as an organic part of the text. It would be of benefit to look at some of the old illustrated primers and spelling books and especially the *Orbis Pictus* of Comenius, to see some good, even if naive, examples of this principle in application.
2. *Illustrations should be functional in visual arrangement*, providing continuity and unity in reading. A happy marriage of text and illustration requires not only compatibility but healthy visual contact.

Types of Illustrations

Before reviewing some of the possibilities in improving illustrative materials we might clarify the basic uses of the illustration. We have referred to illustrations as being a visual

form of communication. The form should be used, however, whenever visual imagery can advantageously serve in those circumstances where verbal language cannot be wholly effective. Illustrations should be the means of making more concrete whatever may be difficult or elusive in comprehension because of abstraction or vagueness.

The intrinsic quality of illustrative material depends a great deal on the illustrator and his own qualities. We may specify four traits: The first of these is *care*, which means a meticulous concern for details, for getting the kind of material and the appropriate technique. It means a relentless pursuit for a significant idea. The second trait is *imagination*, which means a flexibility and playfulness in thinking, an ability to visualize. The third trait is a *sense of humor*, which means a quick, sympathetic response to the foibles of man, an eye to the ridiculousness or incongruity of a situation, a wit that reveals things unexpected. The last trait, and hardly separate from the others, is *love*, that is, a deep emotional feeling for the job and a desire for the perfect result. When illustration has to be judged critically it might be well to consider how much care, imagination, humor and love has gone into the work.

The quality of illustration may be judged by the extent to which it follows functionally the basic uses which are to help visualize people, environment, quantities and processes. The general types may then be indicated as follows:

1. Illustrations of human interest

Illustrations may be used to relate subject material to people, to portray and to make real to the student the characteristics of human beings in the situations of the text—their appearance, dress, actions, poses, attitudes, surroundings, etc. A vast amount of our learning revolves about human beings in their personal and social circumstances and relationships: The illustration can serve to visualize the human aspects of the text. The photo-document is perhaps our best means for this type of illustration.

2. Illustrations of environment

Illustrations may be used to relate subject material to place, to locate people and activities, to give dimensions and spatial relationships. Place and space are important facts of evidence in almost any study (and perhaps too often neglected). Maps, plans and charts are the typical means for this kind of illustration.

3. Illustrations of quantity

Illustrations may be used to help grasp and understand figures and statistics: Modern learning is statistically-minded. The illustrative technique is primarily one of *arrangement* of quantity facts. The means are chiefly charts, graphs and tables.

4. Illustrations of processes

Illustrations may be used to simplify complex processes and organizations. A great many of our problems—machines of production, governmental organizations, industrial processes, to name but a few subjects—are so complicated that we need to visualize them in blue prints, charts, and diagrams, or illustrate them step by step to make them clear and easier to study.

Possibilities For Improvement

A special word is needed concerning photographs. *Photographs are essentially documentary in nature.* They are especially powerful as social documents: They have the force of reality, of actuality. Their use is not for esthetic decoration. They should be selected and used with as much care as verbal evidence.

The possibilities for improving illustrations and their use are infinite. Improvement will depend on three factors: The person writing the text, the publisher producing the text, and the designer illustrating the text. The most desirable situation

is when these three factors are in close and harmonious co-ordination. The most ideal arrangement would be to build a text with the active cooperation of all three from the very beginning of the idea of the text through to the finished product: author working with illustrator and publisher while the manuscript is being prepared, illustrator working with author and publisher while the book is being designed, publisher working with author and illustrator while the book is being produced. The new textbook must be a collaborative effort, with a nice balance at play among the three important factors. Such a situation is not impossible of attainment. A book is now being done with active collaboration of author, publisher and illustrator.

I am indebted to Robert Disraeli, the photographer, for an idea in book illustration that needs to be adopted. When photographs are used in a text the present practice is to try to collect from a number of sources whatever photos may be available. Sometimes it is possible to get good illustrations, but more often the right photo for a particular illustrative situation is not available. It would be almost too much to expect it to be. Disraeli suggests that a photographer could be engaged much as a graphic artist is engaged on the basis of an entire book. Where the right photo is not available the photographer would make it for the direct purposes of that particular text. I look forward to an experiment of this kind; I am sure the results will be worth the effort.

It is rather unsatisfactory to speak of other possibilities in improving illustrations without having specific problems to work out before you and with you. But I can mention a few ideas that may help in cases where the nature of the text might warrant use of the ideas.

One present practice in book making is to group a number of photographs together at certain intervals throughout a book. This is done partly for economy in binding since the sheets of photographs can be wrapped around signatures of the text, instead of "tipping-in" individual pages of photographs. This method can be extended and better organized to provide a kind of visual review or preview for the verbal text. Better still, the photographs can be more functionally organized in the form of chapters to provide continuity of text. Ruch's book on "Psychology and Life" is an interesting demonstration of this idea.

Another possibility is the use of illustrations as running comment for a text. The illustrations would fall consistently on a reserved portion of the page in the same way marginal notes and footnotes are used. Careful selection or making of illustrations in the control of scale and proportion may permit a continuity of illustration, the effect being like that of a motion picture film.

Still another possibility, which I believe will find increasing adoption, is the use of visual material as "text" and verbal material as "illustration." This is done in "Land of the Free" where MacLeish uses his poetry to intensify the effect of the photographs. This possibility will be in the nature of what I have termed "visual textbooks," already superbly exemplified by the *Building America* series.

Finally there is the possibility of color. We have lived too long in a black and white world. The reality is that color exists everywhere and in all things; we need color reality in our illustrations. The use of color photography will be the next major advance in illustrating textbooks. I have just learned that some fourth grade readers containing color photography will soon be published. The improvement in technique and quality in color photography indicates that we shall be able to expect more and more photos in illustrative work.

Whatever ideas in illustrations may be followed, the basic problem is more unified effort. What is needed most is a finer and more honest integration of the talents and capabilities of author, publisher, and illustrator.

The Experimental Use of Visual Aids in Teaching Beginning Reading

By ALEX JARDINE

Director of Audio-Visual Education
Evansville, Indiana, Public Schools

*A detailed report of a reading experiment
in 1B classes showing the valuable contribution
of slides in the learning process.*

AMERICAN SCHOOLS from the beginning have been "Reading" schools. Reading was the first and most important of the "three R's." Since the schools of colonial times there have been two general techniques employed for teaching this most important fundamental. The first is often referred to as the "synthetic" method and is still employed to a considerable extent by many teachers. Text materials are composed of paragraphs, paragraphs of sentences, sentences of words, and words of letters. Early educators, therefore, concluded that by beginning with the alphabet; then through a system of phonetics to words, and on to sentences and paragraphs the pupil should logically learn to read. As a matter of fact children did learn to read by this method and although teacher and pupil often encountered difficulty, it was assumed that since learning should be a difficult process there was nothing wrong with the "synthetic" technique.

As teaching became more scientific and educators became more concerned with the "whys" and "wherefores" of their profession, reading naturally became one area open for investigation and research. Since reading was basic to nearly all other academic acquisitions, considerable research was and still is being carried on at all levels in that area. Soon the idea was advanced that the "synthetic" method failed because it was too mechanical. Reading, it was contended, should be learned through an "analytical" method. As early as the 1890's this new school of reading instruction was to be found in this country. Exponents of the idea were of the opinion that sentences rather than letters or words were the natural thought units. By a variety of methods such as writing short simple sentences on the blackboard, by displaying flash cards and posters with simple sentences containing words in the child's vocabulary and by having the teacher and pupil repeat these sentences and point out familiar words the child would soon begin to read. Gradually we discover that this latter or "analytical" technique began to supplant the "synthetic" method of teaching reading.

With the growing awareness of the reading problem there developed many scientific studies. Word lists for all levels were devised, objective tests to judge speed and comprehension were constructed, and a pedagogical lingo with such phrases as "reading readiness", "remedial reading," "eye movements", "silent reading", etc., was developed. These studies indicated the superiority of the "whole" over "part" method of learning to read. Further studies then were and still are being conducted to determine what means of presentation are most desirable in teaching children to read. Horn, Gates, McKee, and many other authorities have reported on these studies exhaustively. In these reports frequent reference is made to the use of a wealth of pictures and illustrations to help the child to make the transition from an experience to a printed sentence. However, no reference so far as I know is made to a technique which is largely or wholly based on the use of a visual method for beginning readers. At our winter session I heard one person remark that the "experimental" period had passed in the visual instruction field and that it

was time to get to work putting more effective programs into operation. With that general thesis I am in agreement. However, I believe that teachers more than any other professional group are less likely to take advantage of research. Teachers frequently are familiar with research in education but since their efforts are not immediately checked on it is much easier to do the traditional rather than to try the experimental. This is not true of all but of many teachers. Therefore, so far as visual instruction is concerned it seems advisable to continue experimentation as a means of convincing at least the teachers participating in the experiment of the value of such a technique. The proximity of others to the experiment, also, will result in some conversions to the newer method. Experimental procedure, therefore, offers a good in-service training program.

The following experiment was conducted in Evansville, Indiana, during the first semester of the school year, 1937-38. The purpose of the experiment was to determine whether two groups of children each beginning to read, one group taught by the formal method and the other taught by a so-called visual method would show any appreciable difference in achievement at the end of one semester. Eight 1B teachers were chosen. Four were classified as a control group of teachers and four as an experimental group. A conference with the director of primary education and the assistant superintendent of elementary education aided in choosing two groups of teachers with nearly equal ability.

To determine the comparative abilities of each of the groups of children, all pupils were given the Metropolitan Readiness Test for Kindergarten and Grade 1 at the beginning of the fall semester of 1937. A total of 203 pupils were found to have a readiness score of 60 or above. This score is supposed to indicate a readiness on the part of the pupil to begin reading. To quote from the Manual of Directions for this test, "Ordinarily children who score below 60 points and who are six years of age or older at the time of the test are unable to progress in first grade school work with a normal curriculum at the usual rate. . ." However, only 180 of these pupils remained with their groups throughout the semester. Of this number, 87 were in the control group while 93 were in the experimental group.

Teachers in the control group were asked to teach beginning reading using the formal method of presentation. They were to use the pre-primer and primer as basic texts with the addition of any supplementary materials which they might need except such materials which might be classified as visual aids. They were permitted to use such illustrations as appeared in the texts, and also might use flash cards and posters already in the room. Teachers of the experimental group were asked to teach reading without the formal use of the pre-primer, primer, or any other text. These teachers were to use a visual technique which I shall describe in detail a little later. All of the teachers met in conference twice before the experiment began. During these conferences they discussed questions relating to their problem. One of the teachers in the experimental group had used the visual method before and served as chair-

man of that group to aid in perfecting plans. All of the teachers involved visited that teacher's classroom to see how she taught.

The formal method used by the control group is so familiar that it does not need much description. The usual methods of preliminary instruction were followed and when the children were ready to begin the pre-primer, it was brought in. The classes were divided into smaller groups on the basis of ability and the teacher spent time with each of the groups. The classes formed in the usual semi-circle with the teacher in the center and each child with a copy of the text in his hands. However, much of the work of the classroom was built on an activity basis so that the whole program was not too formal.

In the experimental group the teachers were asked to teach reading without the formal use of pre-primers, or other supplementary texts. To begin with, these teachers made tentative plans as to what they were going to do during the semester. They were to enjoy a certain freedom which the control group did not have. They might use any type of reading material which grew out of their class activity. These reading lessons were transferred to slides by the teacher. Often the slides were illustrated and the text was either in manuscript writing or typewritten below. Obviously, this method involved a great amount of preparation on the part of the experimental teachers. These teachers were constantly planning and knew definitely what each "next step" was to be. However, it should be noted that since it was an experiment the control group was, also, alert to the problem and was striving for a good performance. They, too, were planning definitely each step in their teaching.

The printed matter used on slides was graded. At the start only simple sentences involving words already familiar to the children were used. The procedure was something like this. Two teachers taught their entire class as one reading group. Two others divided their classes into two groups on the basis of performance on the Readiness Test. The children were seated on the floor at a suitable distance from the screen, with the slower children at the front of the group. This enabled the teacher to keep a daily mental record of each child's progress as well as to hold the attention of those most easily diverted to other things. The slower children were observed carefully during all reading activities and were given an equal opportunity for participation. Usually they were given an opportunity to start the reading activity, the faster moving children carrying on when the slower ones stopped.

The teacher introduced the story by using illustrated slides. These slides were used again as the children read the story. The entire story was read by the children, the teacher having pointed out new words before the children attempted to read.

The screen was then removed so that the reading matter could be flashed on the blackboard. This gave an opportunity for drill on new words and a review for those previously learned. With the familiar words the slower children could nearly always participate with success and with a great deal of pride.

The method of presentation varied, beginning with very simple activities and growing more complex toward the end of the semester. As an example of the simpler procedure we might find the teacher writing a new word on the blackboard to one side of the reading matter which had been flashed there. A child would then be chosen to go to the board, to point to the word in the story, to encircle it, and to say it. Sometimes the word was named by the teacher rather than written and the procedure was then repeated as before. However, the child would not draw the circle until the class signified that he had chosen the correct word. If he had pointed to an incorrect word another child would be chosen.

Often a child would be asked to go to the board and name and encircle as many words as he knew. Whenever, he missed a word or could not name any more words another child would go to the board. This gave the slow-learning child the

necessary review and allowed even the slowest learning child an opportunity for some degree of success. The circles would then be erased in much the same manner they were put on. A child would say a word, and if correct erase the circle, continuing until all circles were erased.

Sometimes the stories were dramatized, the children reading their parts from the screen. Often a guessing game was played. One child would be chosen as the leader. He then would choose a sentence and say, "I am thinking of a sentence." The children would then read sentences until they read the one he was thinking of. The one guessing correctly became the new leader.

Slides illustrating numbers from one to ten were used. Songs were reproduced on slides and used during the music period. These were sometimes illustrated with simple ink sketches. Slides illustrating color and words were flashed on the screen. Incidental reading developed in Nature Study and Safety Units was reproduced on slides and read from time to time. This material was usually simply illustrated. In every one of these procedures every pair of eyes was focussed on a common center. As words were pointed out and identified each child was conscious of the exact word. Where the textbook was employed it was difficult for the teacher to determine exactly what word each child was reading. It should be mentioned that in the visual method it was not necessary to darken the room. This made it possible for children not in the reading group to go ahead with other work.

The ingenuity of the teacher was the only limit for new methods of presentation in the visual technique. As the children progressed with their reading the problem of keeping adequate materials prepared presented itself. Whenever the child expressed a desire to read from a book the teacher directed him to the library of books especially chosen for his level. These libraries were to be found in all rooms, control and experimental alike. Children in the experimental groups were not given formal instruction in these books. They had already been taught that reading was from left to right. They were shown how to hold a book and how to keep their place. Whenever new or difficult words arose they were encouraged to ask help of the teacher.

At the end of the semester Form A of the Primary I Battery Metropolitan Achievement Test was given to all children who had begun the semester with a Readiness score of 60 or above and were still with their group.

An analysis was then made of these data. A distribution table of readiness scores on the basis of age for control and experimental groups was set up. Most of the children in both groups were between six and six years, five months in age. Thirteen per cent of the control group was accelerated slightly as opposed to fourteen per cent of the experimental group. Thirty-two per cent of the control group was retarded from normal as opposed to twenty-six per cent of the experimental group. Fifty-five per cent of the control group was at the normal age while sixty per cent of the experimental group was at the normal age. These data favored the experimental group slightly.

The mean performance of the control group on the Readiness Test was 80.38 and on the experimental group was 79.09. The average Readiness score was, therefore, slightly higher for the control group.

Distribution tables of achievement scores for both control and experimental groups were set up. The quartile and median scores for both distributions were determined. For the control group they were: $Q^1=1.68$, $M=1.55$, $Q_3=1.18$. For the experimental group they were: $Q^1=1.76$, $M=1.63$, $G_3=1.43$. In other words *the average improvement of the experimental over the control group at both the upper quartile and median was approximately one month*. Most interesting, however, was the difference in achievement at the lower quartile. There, *the*

experimental group made an average of two and one-half months improvement over the control group.

Only four teachers used this experimental technique last year. Next year there will be many more trying it. The experiment has, therefore, been successful in that teachers in both the control and experimental groups plus many others not directly involved have studied the visual method closely. As a result the teaching of reading has improved and should continue to show improvement for some time.

A Closeup and a Long View

Pertinent observations on past achievements in the visual field, with suggestions as to where we should go from here.

By EDGAR DALE

Ohio State University, Columbus

A HIGH SCHOOL teacher of science came to see me a few weeks ago. He said that he was interested in going into visual instruction. "Had he already done something in this field," I inquired, No he hadn't. And why not? The usual excuses were presented. But why did he wish to go into visual instruction? Well, he thought that there was a field opening up here and he wanted to get in on the band wagon.

What would you say in response to questions about the future of our field? I didn't like the metaphor of a band-wagon, which means to me a great deal of noise and little substance. But we are challenged by the increasing interest in this field. And I'm wondering whether there is the solid substance in our field that we really desire. Are we going to be able to deliver the bill of goods that is expected? Let's survey the field briefly and see what we have to offer.

The basic contribution which any field or area or technique ought to have is to the promotion of a philosophy of education. We can hide behind the instrument, like some scientists do, and say that we have no responsibility for its use. But this is childish as scientists also are realizing. We are not sufficiently clear in our objectives. We don't see sufficiently well how these instruments can be used to promote democracy or the method of intelligence. Indeed, there has been too much emphasis on doing what we are now doing but in less time. Unfortunately many current educational practices are not worth doing better. They are not worth doing at all. We have had too much of memorizing in our classrooms, too much of reciting, too much of purposeless activity. We have had too little problem solving, too little of functional materials, too little of the drive of interest and purpose on the part of the learner. We must, therefore, discover how we can use the visual materials intelligently to promote a democratic brand of education. We mustn't use visual instruction to fix up an old worn out educational machine. We mustn't be educational repair men, putting in a new spark plug here, cleaning out the carbon there, changing the oil. Maybe it will make the educational machine work a little better for a little while. But the fundamental task which we are likely to forget in such a program is that of designing a much better educational machine than we now have—not patching up the old one. There is real danger then in the words of Thoreau, of "improved means toward unimproved ends."

A second important factor in any movement that keeps it solid and avoids fadism is that of research. Are we depending upon faith for our guide or do we have some basic research to back us up? Dr. Charles Hoban, Jr. has reported almost fifty research studies in this field. Obviously some of them leave much to be desired since they were pioneering in a new field of study. But certainly these studies do give us basis

This experiment in reading with visual aids suggests that considerable improvement may be expected when this method replaces the more formal procedure. It indicates that the greatest improvement may be made with the slower children. It involves a great amount of work on the part of the teacher but permits an adaptation of reading matter on the child's level to the work of the classroom and is not restricted to the formal stereotyped matter found in the usual text.

for certain of our claims about the value of these instruments. But what about their value in developing the kind of education in which we are interested? Do excursions, for example, develop wide interests in reading and in getting new experience on a self-initiated basis? Do films or slides or museums affect attitudes? Of what value are these materials in developing interest in and techniques of problem solving, of making tenable hypothesis, of developing better thinking, of drawing good inferences? How valuable are films in developing new methods of attack on problems, better methods of work—general outcomes widely useful instead of accretions in specific, narrow subject matter field? Can they be used to promote thoughtful discussion? The research in this field is meager. We must help to increase it sharply.

A third necessity if we take the long view of our work is that of trained leadership. Have we done all we could to develop this leadership. I believe that we can do much better. I emphasize the fact that extremely able people are working alone in the field of photography, the making of slides, the production of motion pictures, experimental work in the school journey. We don't find or know these people. About one-half of the people giving courses in visual instruction this summer do not belong to our Department. This doesn't worry me so much as the fact that we are missing an opportunity to utilize their leadership in helping build a sound educational program.

How can this be done? A number of states and regions have during the past year held institutes and clinics. This is an excellent way of discovering talent that has been hiding heretofore. This coming year we plan to have five major institutes in various regions of Ohio and a series of county institutes. This means that we shall shortly be able to work out cooperatively in Ohio a plan for using the talent that has been uncovered and developed. We must learn how to pool our resources—to work together.

Fourth, we must work more closely with curriculum revision programs. And we can't wait till they ask us. We must make known the contributions of visual materials in curriculum revision. We aren't unwelcome in these studies. But the curriculum specialists just don't know that there are films and slides and school journeys that are excellent in guidance, in teacher training, in science, in health, and the like. They are really glad to have these things brought to their attention. In this connection, we must work increasingly with teacher-training institutions. There has been a sharp increase in the number of courses given in summer sessions. But certainly many of those teaching these courses have had very little basic training in this field.

We must cooperate with other educational associations work-

ing in the field. We have just had here in New York City a joint session with the Department of Secondary Education. We must meet with the social studies teachers, the National Council of Teachers of English, the Society for Curriculum Study. An excellent opportunity for cooperation is being presented by the American Council on Education. The National Film Library program is a project worthy of our best attention.

We must do some serious thinking on this problem of the advertising film. The advertisers are becoming more subtle. They are realizing that the best advertising is the more subtle advertising. Shortly they will be offering us documentary films which will be well photographed, have excellent sound commentary, and the propaganda won't be easily visible to the naked eye but it will be there, nevertheless. Remember one fact. If the use of the advertising film means that reputable producers of educational films can't stay in business, then the use of the advertising film is a dangerous activity for schools to engage in. And frequently the use of these films indicates a bias on the part of the user. Ask yourself whether you would be just as willing to use a film dealing with the CIO and the unionization of steel as you now are to use a film produced by the U.S. steel. Are we, then, presenting the facts from all points of view when we use advertising films?

The Department of Visual Instruction faces a number of problems as an association. Our membership today is about 550. I see no reason why it should not reach 1,000 in a year or two. If this occurs we must think seriously about a permanent secretary and treasurer. An annual shift in the address of the department is not conducive to stability. But annual dues of \$2.00 a year are not sufficient to support a permanent secretary. We must, therefore, either increase our dues or wait till our membership is much larger before we take this step.

The increased services which we hope to bring to our members should make membership much more attractive. Three committees appointed this spring have made tentative reports on their activities. These committees deal with clearing house functions, teacher-training, and editorial problems. The chairmen of these respective committees are: Mr. Wilber Emmert of Indiana, Pennsylvania, Mr. Paul Reed of Rochester, and Miss Etta Schneider of Teachers College, Columbia Uni-

versity. Through these committees it should be possible to effect a much greater coordination between various groups working in this field. I try hard to keep in touch with developments and chronicle some of them through the *News Letter*. But once or twice a month, I receive notice of some especially fruitful venture in our field which is not at all well-known throughout the country. A year-book which attempted to pull together many of these data would be a welcome publication.

I am wondering, too, if it would not be possible for us to have an annual meeting perhaps during the summer time when we could spend a leisurely week together in viewing new materials of instruction, in exchanging experiences, in planning our work much more intelligently. Our winter and summer meetings are far too brief for such a purpose. Many worthy projects could not be called to your attention in the five or six hours which we have devoted here to our programs. We might carry out a program similar to those of the Progressive Education Workshops. I see no reason why such a program could not be supported in part by a good sized registration fee. Aren't there 250 people who would pay a three-dollar registration fee for a week's program of work? This sum of money would go far in developing a fine national program. Please remember in this connection that when there is a need for a function, it will be carried forward by some one. Aren't we the logical ones to do it?

Finally may I say that during the past year your executive committee has tried to do things democratically. We have had two polls of the membership on policies and on elections. These have been expensive of time and money but I think that they are worth it. We should do more of it, not less. One suggestion for further democratizing our organization has been that of electing regional or state vice-presidents. Perhaps we might carry forward such a theme, allotting such a vice-presidency to those states which have achieved a certain minimum of memberships in proportion to the total number of teachers in that state. Finally may I say that I have enjoyed this year's work. The cooperation from the membership has been splendid. I have deeply appreciated the opportunity that you gave me during this year.

Using the Movies as a Research Library

By MARY R. HODGE, English
and LILLIAN McNULTY, Social Studies
Barret Junior High School, Louisville, Kentucky

WHEN so many moving pictures of historical and literary value began to be produced, we decided to take advantage of this means of visual education and use these pictures in teaching English and social studies, letting them supplement our class work in much the same manner that reference books do. We were not long in discovering that the interest and enthusiasm of the students improved and grew immeasurably the instant a movie was mentioned, and we had no difficulty in getting them to see the picture and make the lesson tie-up.

Their eager response delighted us, and, in order that our influence might extend to more classes than we taught, we organized the Movie Club, opening it to all pupils who wished to join. We have never had fewer than 75 members, and they have always been anxious

to get a historical, literary, and geographical background for all worthwhile pictures.

The major purpose of the club is to use the moving pictures that have any cultural background, any historical theme, or the portrayal of any literary masterpieces or characters to supplement the regular school subjects and thus benefit by the research work and the art developed by the studios. So much of our teaching of history and geography has been dull; interest has been killed in our great masterpieces of literature too often; art and music have too long remained a luxury for the few. The motion picture industry has showed us the way to popularize all these subjects, and it is a certainty that the youth of America have made the seeing of motion pictures the greatest leisure time activity

(Continued on page 236)

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Algiers (Chas. Boyer, Hedy Lamarr) (U.A.) Colorful, exotic thriller beautifully photographed, centering around glamorous criminal. Draggy action weakens suspense, but fascinating settings, interesting central situation, logical climax make engrossing whole. Outstanding role by Calleia as police officer. 8-9-38
(A) Very fine of kind (Y) Mature thriller (C) No

Alexander's Ragtime Band (Power, Faye, Ameche) (Fox) Very entertaining musical, smoothly directed and acted. Cavalcade of Berlin's songs, reviewing history of jazz from 1912 to present, effectively woven into progress of plausible, interest-holding story about career of band and dramatic romance of principals. 8-16-38
(A) Very good of kind (Y) Enter. (C) Little int.

Always Goodbye (Stanwyck, H. Marshall, B. Barnes) (Fox) "Gallant Lady" of 1933, with details altered, but largely of same human appeal and interest. Story is of fine heroine who must carry on for self and baby when auto crash deprives her of her husband-to-be. Well-acted, but Cesar Romero overdoes. 7-12-38
(A) Very good of kind (Y) Too mature (C) No

Arson Racket Squad (Bob Livingston, Jack LaRue) (Republic) Largely melodramatic mess, designed for mere sensationalism. Incredible action in plot about fireman-hero's pretense of joining arson mob to get evidence against its leader. Padded with newsreel fire shots. 6-28-38
(A) Stupid (Y) Worthless (C) No

A Trip to Paris (Jed Prouty, Spring Byington) (Fox) Worthwhile addition to Jones Family series. Lively, amusing action, realistic characters in unpretentious little domestic comedy. Family has whirl in Paris and gets entangled with spy ring through son's romance. Good fun for the family. 7-12-38
(A) Amusing (Y) Good (C) Prob. Amusing

Bar 20 Justice (Bill Boyd) (Para) Another Hopalong Cassidy story, with hero tracking down villainous head of gang stealing ore from mine. Usual perfunctory stuff climaxed by violent fist-and-gun-play. Not the best of the series. "Windy" nearly steals the picture. 8-16-38
(A) Mediocre (Y) and (C) Perhaps

Blind Alibi (Richard Dix, Whitney Bourne) (RKO) Crime melodrama with routine situations, but achieves above average interest by appeal of intelligent "seeing eye" dog that aids supposedly blind hero in his work of securing sister's indiscreet letters, hidden in art museum, before blackmailers recover them. 8-9-38
(A) Depends on taste (Y) Fairly good (C) Mature

Blockade (H. Fonda, M. Carroll) (U. A.) Forceful, stirring anti-war film with fine peace message. Gripping, exciting drama of espionage in Spanish Civil War interwoven with typical but earnestly acted love story. Contrasts peaceful, pastoral life before war with tragic plight of non-combatants in modern warfare. 7-5-38
(A) Outstanding (Y) Good (C) Too strong

Blonde Cheat (Joan Fontaine) (RKO) Cheap title for far-fetched, elementary, but fairly amusing little comedy. Wealthy father considers daughter's choice for husband lacking in business acumen, hires actress-heroine to break up match. She succeeds, after many complications—and of course wins her for herself. 8-23-38
(A) Perhaps (Y) Passable (C) No int.

Boo!oo (Foreign cast) (Para) Trite concoction of Sumatra jungle thrills, some striking animal shots and much hokum and faking. Absurd long-distance romance woven into thin plot. Grisly scenes of hero and poisoned darts, beautiful girl thrown to man-eating white tiger, etc. 8-2-38
(A) Mediocre (Y) No (C) No

Boy Meets Girl (O'Brien, Cagney, Bellamy) (Warner) Fast, delirious burlesque of Hollywood people and methods, built solely for loud laughs, its humor broad and rowdy, subtlety discarded. Central situation built around approaching and ultimate motherhood of studio waitress—aptly acted by Marie Wilson. 8-23-38
(Y) Amusing of kind (Y) Better not (C) No

Bulldog Drummond in Africa (John Howard, Heather Angel, H. B. Warner) (Para) Makes rather entertaining start, then builds up the usual thrill-horror stuff, with a kidnapping, a plane blown to bits, and lurid climax of villain mangled by his own lion—a fate intended for his victims. E. E. Clive amusing. 8-16-38
(A) Hardly (Y) Perhaps (C) No

Call of the Yukon (R. Arlen, B. Roberts) (Republic) Exciting, tense, fast outdoor melodrama in Alaska, based on a Curwood story. Superb scenery. Chief appeal are animal actors, the romance of collie and wild wolf-dog paralleling that of writer-heroine and trapper. Some scenes perhaps too violent for children. 6-14-38
(A) Unusual (Y) Good (C) Strong

Carefree (Astaire, Rogers) (RKO) The popular pair together again with music, notable dancing, and whimsical romance. More plot and dialog than usual. Astaire is psychoanalyst, Ginger his patient, and "cure" leads to amusingly absurd situations. Fred's acting good. 8-30-38
(A) Good of kind (Y) Amusing (C) Perhaps

City Streets (Leo Carrillo, Edith Fellows) (Columbia) Sentimental tear-jerker laid in New York's lower East Side with Carrillo as grocer and devoted foster-father of crippled orphan. Much hokum and terribly overdone melodrama, with human values obscured by artificial action carried to absurd lengths. 8-9-38
(A) Poor (Y) Hardly (C) Too sad

Convicted (Chas. Quigley, Rita Hayworth) (Columbia) More gangster-murder stuff. Cabaret dancer, trying to save brother falsely convicted of murder, gets in power of arch-villain, the real murderer. Cheap people in artificial situations built for thrill without logic. 8-30-38
(A) Mediocre (Y) and (C) Unwholesome

Country Bride (Russian, English titles) (Amkino) Simple, earthy comedy glorifying workers in Russian wheat fields. Plot concerns contest of two men for heroine's hand and ensuing lovers' quarrel, caused by plotting rival who is eventually exposed. Good character portrayals, effective photography, but bad sound. 6-14-38
(A) Fairly amusing (Y) Passable (C) No int.

Cowboy from Brooklyn (Dick Powell, Pat O'Brien, Priscilla Lane) (Warner) Silly western farce about city hero with absurd animal-phobias, transformed by hypnotism into record-breaking rodeo champion! Great fun if you laugh easily. Only real actors can make elementary roles convincing enough to be funny. 7-19-38
(A) Mostly stupid (Y) (C) Probably funny

Crime Ring (Allan Lane, Frances Mercer) (RKO) Lively, fast-moving melodrama woven partly of fact, largely of fiction. Possibly of some value in revealing tricks of the fortune-telling racket by which it fattens on the gullible, but otherwise merely a routine, highly imaginative thriller. Violence not overdone. 8-30-38
(A) Hardly (Y) Not the best (C) No

Crowd Roars, The (Taylor, O'Sullivan, F. Morgan) (MGM) Fast-moving, sure-fire melodrama and hokum. Replete with fight-ring scenes as hero, lured by "big money" rises to championship. Gangster-gambler element brings tense, exciting climax, and hero's decision to quit game. Wholesome romantic situation. 8-16-38
(A) Depends on taste (Y) Perhaps (C) No

Extortion (Scott Colton, Mary Russell) (Columbia) Ordinary, mildly suspenseful murder mystery, with college campus as setting, an unpopular proctor as victim, and the usual half dozen or more suspects. A planted clue points to hero, editor of college paper, who avoids arrest by trapping real killer. 7-26-38
(A) Mediocre (Y) Perhaps (C) No

Fast Company (Melvyn Douglas, Florence Rice) (MGM) Another hilarious mystery farce with highly amusing, sophisticated husband-and-wife situation, very clever dialog. But things get somewhat involved and melodramatic climax hardly accords with gaily whimsical treatment of whole. 7-19-38
(A) Very good of kind (Y) Sophisticated (C) No

Gangs of New York (Chas. Bickford, Ann Dvorak) (Republic) The usual tough characters and violent action in preposterous plot based on twin resemblance enabling federal agent to pose undetected as vicious gang head among latter's own henchmen, long enough to get desired racketeering evidence. 7-12-38
(A) Hardly (Y) No value (C) No

Gateway (Don Ameche, Arleen Whelan) (Fox) Weak, unconvincing story with Ellis Island as chief locale. Problems of immigrants told along with rambling romance of Irish girl and American hero, who unwittingly causes her unfavorable publicity with unhappy results until stupid melodramatic climax brings happy ending. 8-9-38
(A) Poor (Y) Poor (C) No

Girl in the Street (Anna Neagle, Tullio Carminati) (GB) Loosely-knit Cinderella story, none too convincingly told. Wealthy, blase hero aids little heroine in climb from slums to stardom, but hides his love. She falls for rotter, but learns all facts in time for happy ending with hero. 6-14-38
(A) Hardly (Y) No value (C) No

Go Chase Yourself (Joe Penner) (RKO) As daffy bank-teller, Joe wins trailer on raffle, crooks kidnap both, and impossibly wild ride down mountain roads ends happily with capture of crooks. Crazy farce for those who like Penner's mush-mouth comedy. 6-21-38
(A) Inane (Y) and (C) Depends on taste

Gold Diggers in Paris (Rudy Vallee, Rosemary Lane) (Warner) Much love-making in song by Rudy (his acting a bit better) buried in deafening jazz, desperate slapstick, crazy action. Bankrupt "swing" band gets to Paris by mistake, but finally accepted as "great" music! Elaborate low comedy. 6-28-38
(A) Depends on taste (Y) Perhaps (C) No

Having a Wonderful Time (Ginger Rogers, Fairbanks, Jr.) (RKO) Noisy, largely overdone picture of youth in summer vacation camp. Humorous aspects dwarfed by wisecrack dialog, elementary comedy and crude sex emphasis. Even inherently decent central romance takes on unpleasant aspect before ending is achieved. 7-5-38
(A) Hardly (Y) Undesirable (C) No

Held for Ransom (Blanche Mehaffey, Grant Withers) (Grand Nat'l) A super-daring detective-heroine lone-handed tracks down gang of crooks but does get a little official help to save self. Futile hero and his kidnapped uncle. Preposterous stuff, confusing the first half of film, weakly acted. 6-21-38
(A) Poor (Y) Waste of time (C) No

Hunted Men (Lloyd Nolan, Lynn Overman) (Para) More gang stuff, but lightened by some human interest and comedy. Respectable humble family's home made hide-out by killer hero. Maudlin worship of the rat by the two children. So he softens, repents, and accepts death by police guns. 6-7-38
(A) Hardly (Y) No (C) No

I'll Give a Million (Warner Baxter, Marjorie Weaver) (Fox) Lively film with refreshingly different plot. Millionaire hero, disillusioned by parasitical companions, turns tramp and finds happiness with circus-performer heroine. His disguise leads to hilarious mix-ups finally straightened out in weak, burlesque climax. 7-26-38
(A) Fair (Y) Amusing (C) Prob. Amusing

I Married a Spy (Neil Hamilton, Brigitte Horney) (Grand Nat'l) More or less routine spy formula in British-made film, uneven in interest and acting, with action at times confused and incoherent. German-born heroine forced into French espionage becomes victim of German revenge plot leading to execution. 7-26-38
(A) Hardly (Y) Doubtful int. (C) No

Josette (Simone Simon, Ameche, R. Young) (Fox) Frothy, gay romantic comedy of mistaken identity, two brothers taking heroine for gold-digging cafe singer after father's money. Amusing dialog, engaging performances (especially by Young), effective songs by Simone, Joan Davis' usual slapstick. Drunken sequence. 7-5-38
(A) Amusing (Y) Mature (C) No

Kidnapped (Warner Baxter, F. Bartholomew) (Fox) Stevenson's classic of Scottish rebellion under English rule, lamentably altered. Episodic tale of high, suspenseful adventure interwoven with love story. Less vigorous than book, but superb backgrounds and photography, expert characterizations in minor roles. 6-21-38
(A) Good but disappoints (Y) Good (C) Mature

(Continued on page 229)

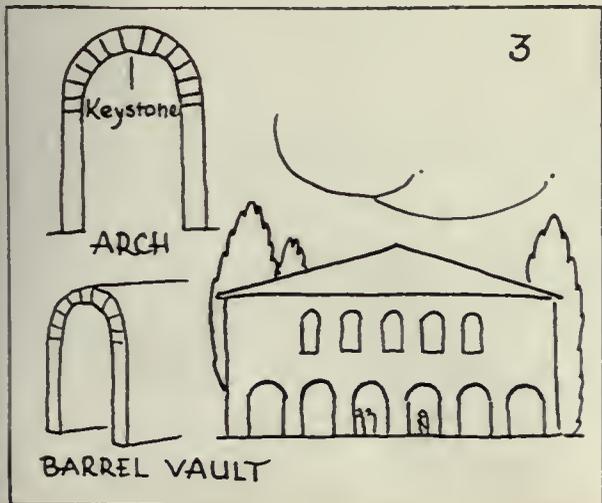
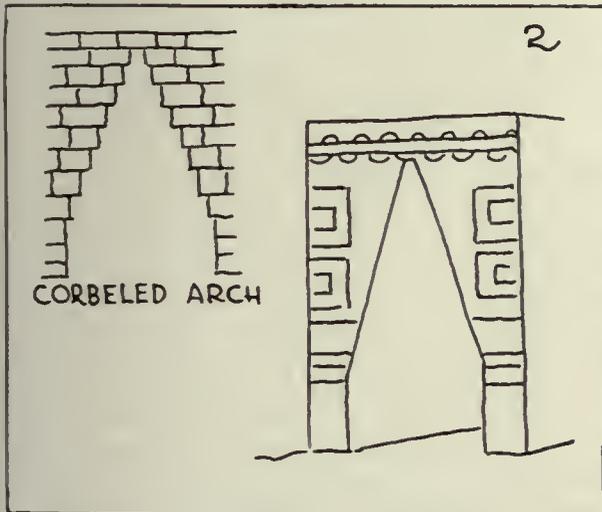
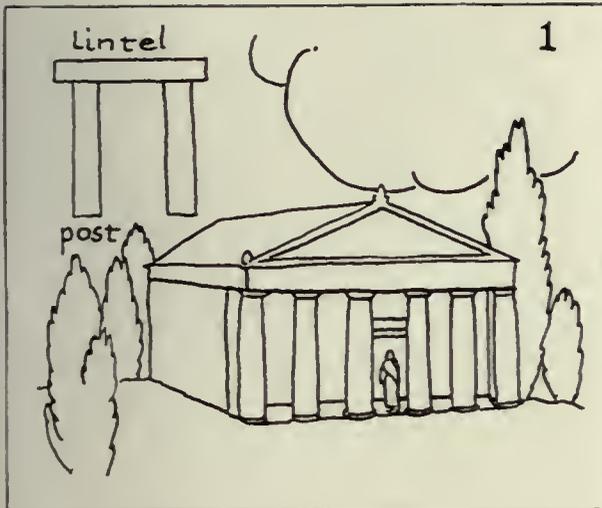
Construction Principles -- In Hand-made Lantern Slides

By ANN GALE

IN junior high school or high school general art courses, slides may be used to show the few construction principles developed through ages of building. These slides might be used in general history classes or in advanced groups in sixth grade studies of older civilization.

1. The lintel and post construction is the oldest and most primitive type of building. The Greeks brought it to a high state of perfection in their temples.

2. The corbeled arch appeared in the pre-Greek or Minoan civilization in Crete and on the mainland of Greece and Asia Minor. The Mayans in Central America also used this arch.



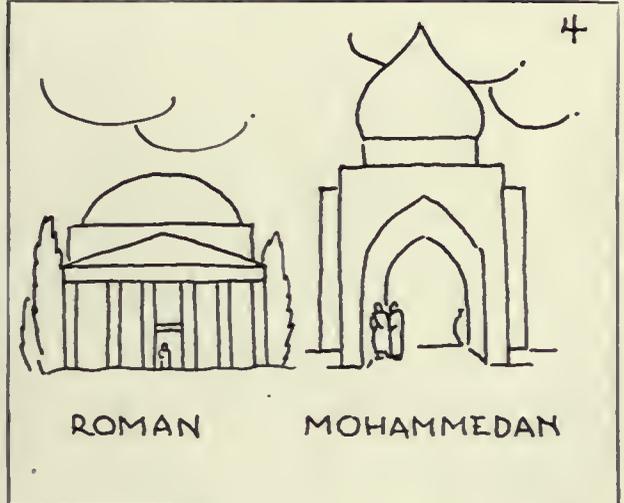
Art Department, Lindbloom High School, Chicago

3. The Babylonians and Romans developed the true Arch. The Romans also used the barrel vault for roofing on some parts of their buildings.

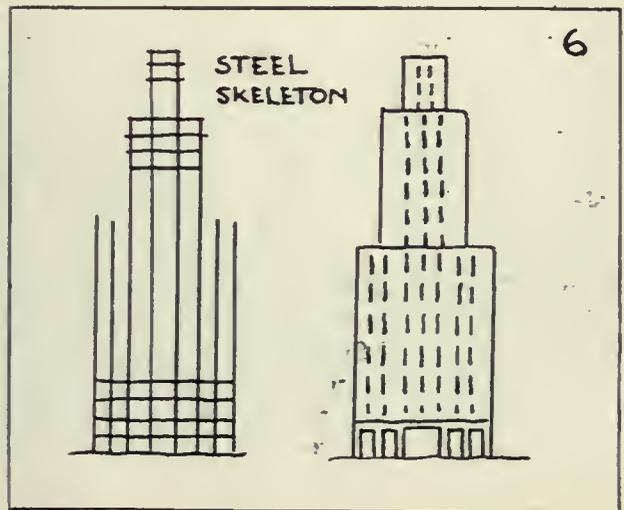
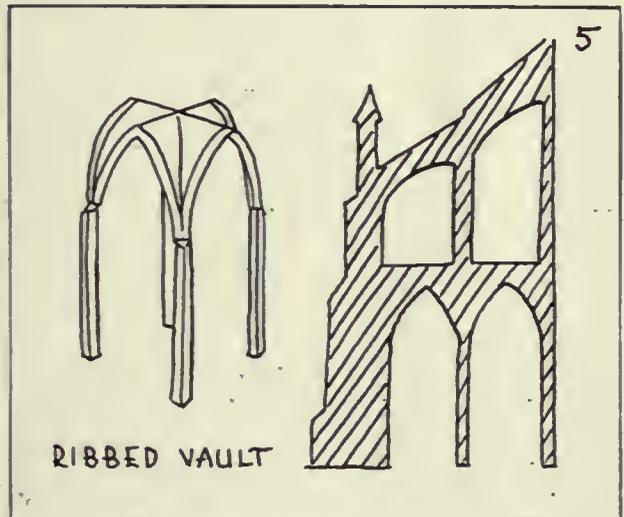
4. The Romans and Mohammedans used the dome for covering some of their buildings. The Mohammedans used a bulbous dome, while the Roman dome is a half sphere.

5. During the Middle Ages the ribbed vault was discovered and used for the ceiling of the glorious churches of that time. The cross section of a church on this slide shows how heavy the lower walls had to be to support the weight of such tall buildings as these churches were.

6. In 1885 William Jenney in a Chicago building used a new kind of post and lintel construction which did not require heavy walls on the lower floors to support a tall building. This new type of construction was the steel skeleton construction.



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.



NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

Association of School Film Libraries

A non-profit educational motion picture corporation, known as the Association of School Film Libraries, Inc., has been established with headquarters in New York City, and with Fanning Hearon, formerly director of the Division of Motion Pictures, U. S. Department of the Interior, as executive director. This corporation, financed by a grant from the General Education Board, a Rockefeller Foundation, is the result of many conferences last year on the problem of non-commercial distribution of educational motion pictures, sponsored by the American Council on Education.

At a meeting in Atlantic City, President George F. Zook of the American Council appointed a committee to make further study of the problem and, in the light of this study, to take appropriate action in relation to the Association. Members of the committee were: J. C. Wardlaw, Director, Division of General Extension, University System of Georgia; Charles F. Hoban, Jr., Director, Motion Picture Project, American Council on Education; Harold C. Bauer, Superintendent, Lakefield, Minnesota Public Schools; Thomas Fansler, Director, Research Department, Division of General Education, New York University; John A. Hollinger, Director, Department of Science and Visualization, Pittsburgh, Pennsylvania, Public Schools; Boyd B. Rakestraw, Assistant Director, Extension Division, University of California; and Paul C. Reed, Supervisor, Visual and Radio Education, Rochester, New York, Public Schools. This committee make up the new Association's board of directors for one year, with Mr. Wardlaw President and Mr. Rakestraw Vice-President.

The purpose of the Association is to act as a clearing house for information on the production and distribution of educational films to schools and colleges, and as a central agent for the cooperative procurement of films for its members. It will gather and relay to members appraisals of films which are available and those which could be made available. Membership will be limited to educational institutions and non-commercial distributors serving the educational field. The Association will not itself rent or produce films, but will be simply an impartial liaison unit between film producers and users. Annual dues are \$25.00.

New York University Courses

Two courses in the visual and auditory fields are being offered in the School of Education, New York University, for the coming year, 1938-39. They are given in the Social Studies Department and form part of an expanded program in this field. Titles are "Visual and Auditory Materials in the Social Studies," and "The Study and Appreciation of American History

through the Motion Picture." Prerequisite for the latter is a survey course in American history. Professor Daniel C. Knowlton will conduct both courses, first and second terms.

Audio Visual Work Introduced to South Dakota

At a State-Wide conference on Visual Education held at Mitchell, South Dakota, August 15th to 26th, it was decided to introduce Visual Aids to the South Dakota Schools this fall. Ray Cash, of the Vermillion Public Schools, conducted the conference, which was held on the campus of Dakota Wesleyan University. As State Visual Aid Director, Mr. Cash has worked untiringly for many years for a program of visual instruction that would be state-wide in scope.

It is planned to have trained Visual Aid Demonstrators cooperate with their respective County Superintendents, and help teachers of the rural and city schools with their Visual Education work. At the conference sample outlines and plans for introducing Audio Visual Education to the schools and people were formulated.

Extension Director A. E. Meade has purchased several new sound films for the University Extension Service library, which also consists of over 100 silent pictures, many sets of glass slides, and film strip. The Extension Service has several sound, silent, opaque, micro and slide projectors on hand which they will rent to organizations and schools.

Publications on Visual Aids

A 14-page safety publication, titled *Sources of Safety Films and Slides*, has been compiled by Safety Education Projects, Research Division of the National Education Association to assist teachers in obtaining copies of films and slides dealing with the various aspects of safety. National, State and Local Sources, and University Departments of Visual Instruction, are listed, with the films distributed by each organization classified as to type, size and charge for use.

A copy of the catalog may be obtained, free of charge, from National Education Association headquarters, 1201 Sixteenth Street, N. W., Washington, D. C.

◆ ◆

The Eye Route, a 22-page catalog devoted to "Visual Aids for Workers' Education," has been issued by the Educational Department of International Ladies' Garment Workers' Union, 3 West 16th Street, New York City (Price, 15c). The pamphlet has been prepared to acquaint such groups with the value of appropriate and helpful pictorial material, listing sources for pictorial books, pamphlets, and magazines, labor posters, maps, charts and exhibits. A chapter is devoted to data on film strips, projectors and screens, and another to movies of social significance.

(Concluded on page 228)



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Forthcoming Report on School Made Movies

At the 28th annual meeting of the National Council of Teachers of English, to be held November 24-26 in the Hotel Statler, St. Louis, Hardy R. Finch of the Greenwich (Conn.) High School, will report on a study of school-made movies. His topic will be "What Schools are Doing and Can or Might Do with School-Made Motion Pictures." Mrs. Helen Rand Miller of Evanston (Ill.) Township High School is chairman of the Council Committee on Standards for Motion Pictures and Newspapers.

Film Cost Compared With Books

Ohio's Department of Education Film Exchange reports it has had films in service seven years, each with an average of twenty bookings per school year or 140 bookings. Each booking has had an average of two showings per booking or 280. At each showing there was an average of 100 pupils present, or a total of 28,000 pupils saw the film. If the film cost \$24.00, the per pupil cost was 8½ hundredths of a mill. And it must be remembered that this is not general public usage.

At the same time the public book libraries report that a book goes out an average of 20 times on its first binding and 40 times on its second binding, or a total of 60 times—which means 60 people read the book before it is thrown away. If the book cost is \$1.50, then the per person cost is 2½c—or a trifle more than two cents and four mills more than the film cost.

DeVry Conference Proceedings Published

Proceedings of the Eighth Session of the National Conference on Visual Education and Film Exhibition, containing 130 pages, (6x9) is just off the press. The entire program of addresses and discussions is faithfully reported therein. "Commercials" as well as instructive films are discussed, and applications to classroom use. Prominent government film experts, producers, educators, and industrial executives give their views, in this latest report, of conditions and innovations in the field of visual instruction. Films of the past three years of Conference showings are listed, and conditions in allied fields are authoritatively recorded.

This interesting document sells at 50c postpaid. Orders should be sent to National Conference on Visual Education, 1111 Armitage Ave., Chicago, Ill.

Bell & Howell N.E.A. Convention Report

"The N.E.A. Goes 'Visual' at 1938 Summer Meeting" is the title of an eight-page summary, by William F. Kruse, of the sessions of the Department of Visual Instruction June 27-29 in New York City, and the general session of the N. E. A. on Visual Instruction. While the complete report was primarily prepared by Bell & Howell as a confidential house bulletin to its distributors, the information has been elicited that educators or distributors desiring this report may get it without cost by writing W. F. Kruse, Manager Film Division, Bell & Howell Company, 1801 Larchmont Avenue, Chicago, Illinois.

Film Estimates

(Continued from page 224)

Ladies in Distress (A. Skipworth, Polly Moran) (Republic) To rid town of racketeers, mayoress calls in former bad boy of town, now "big shot" city gambler, who is then regenerated in general clean-up. Melodramatic incidents quite credible, if not always coherent. Polly Moran's antiquated comedy quite futile. 7-26-38
(A) Mediocre (Y) Perhaps (C) No

Law of the Underworld (C. Morris, Ciannelli, Ann Shirley) (RKO) Sinister, depressing hash of yellow-livered crime with chief gangster as hero. Young couple is robbed of money saved for marriage, then made tools of robbery, finally used in futile effort to win sympathy for contemptible hero. 6-7-38
(A) Poor (Y) (C) Unwholesome

Letter of Introduction (Menjon, A. Leeds, Bergen) (Univ.) Fine, moving, human drama of father-and-daughter relationship, deftly directed, acted and spoken—plus clever, hilarious humor of Bergen and Charlie, naturally woven into plot. Minor flaw is false note introduced at end in father's drinking episode. 8-9-38
(A) Very good (Y) Good (C) Partly good

Lie of Nina Petrovna, The (Isa Miranda, F. Gravet) (French-Eng. Titles) (Lenaner) Stereotyped, emotional story laid in Vienna, about 1900. Tragic romance of young officer and Russian courtesan, who gives up hero in order to save his life in duel with discarded paramour. Outdated, but competently acted, directed. 8-23-38
(A) Passable (Y) Unwholesome (C) No

Little Miss Broadway (Shirley Temple) (Fox) Shirley's singing and dancing given full scope in light, lavish musical comedy plot that takes her from orphanage to theatrical hotel. Appealing, amusing, preposterous by turns. Rhymed dialog and conrtroom turned into vaudeville stage provides hilarious climax. 7-26-38
(A) Light (Y) and (C) Entertaining

Little Miss Thoroughbred (J. Litel, Ann Sheridan) (Warner) Trivial, incredible racetrack story built around new 6-year-old, Janet Chapman, whose appeal gives film a boost. When orphan enters life of hard-boiled gambler, he uses her as mascot until kidnaping trial brings realization and change of attitude. 8-16-38
(A) Passable (Y) Doubtful (C) Too mature

Little Tough Guy (The "Dead End" kids) (Univ) Another vivid, well-acted "crime-among kids" drama. Engaging tough youngsters, with and without reason, commit steadily worse crimes till reform school stops them. Supposed regeneration in last half reel where fun and thrills are over. 8-2-38
(A) Good of kind (Y) Doubtful (C) No

Lord Jeff (M. Rooney, F. Bartholomew) (MGM) Boy psychology at work in heartwarming story of superficial little snob, trained to be the foil of crooks, transformed under influence of English nautical school. Convincing backgrounds, splendid acting by youngsters (Rooney best of his career), fine character values. 7-5-38
(A) Very good (Y) Excellent (C) Excellent

Love Finds Andy Hardy (Mickey Rooney, Lewis Stone) (MGM) Modern young puppy love at its exuberant best (Rooney notable). Lively, human story of wise father and mother (Stone and Fay Holden) handling more or less "problem" children. Quite amusing, but many will doubt "taste" of the young love-making. 8-2-38
(A) Good (Y) Very good (C) Probably good

Marie Antoinette (Shearer, Power, and notable cast) (MGM) Lavish, beautiful and very long picture of French court life under the Louis, centered around Marie Antoinette's glittering career from wedding to guillotine. Heroine's tragic faults much softened, hence final tragedy heavier. Splendidly done. Shearer outstanding. 8-30-38
(A) Excellent (Y) Mature (C) No

Marines Are Here, The (June Travis, Gordon Oliver) (Monogram) Rather engaging, wholesome little story of a marine, a girl and a little boy whom hero consoles on death of father. Scenes showing life of marines—on leave and in action—interspersed with pleasing romance. Satisfactory comedy touches. 6-21-38
(A) Passable (Y) and (C) Fairly good

Men Are Such Fools (Priscilla Lane, Wayne Morris) (Warner) Utterly futile and aimless mess about brainless misunderstandings between impossibly clever heroine and brash hero. Labored efforts to be smart but succeeds in being merely tawdry, with much in bad taste. Total waste of time for all. 8-21-38
(A) and (Y) Stupid (C) No

Mother Carey's Chickens (F. Bainter, Anne Shirley, R. Keeler) (RKO) Expert screening of Kate D. Wiggin's simple, tender little tale of appealing family whose future depends on old mansion they remodel. Delightful blend of homely humor, pathos, pleasing romance. Fine performances, charming costumes. 8-23-38
(A) Very good (Y) Excellent (C) Very good

(Concluded on page 238)

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Current Film Releases

Childrens' Museum Activities Filmed

Proving that the subject of child development is not too difficult a one to be set forth in motion pictures, the Harmon Foundation has just now completed a two-reel 16 millimeter silent film showing what a children's museum does for its boys and girls. Entitled *The Child Explores His World*, it is based on the work of The Brooklyn Children's Museum, the first founded and the largest in the world.

The presentation makes clear how much more a children's museum may be than merely a place where curiosities are displayed. Children are seen taking part in the numerous supplementary activities provided, activities which make the museum appear as a workshop and playroom. How easily such a center of encouragement puts children in touch with the world outside



One Exhibit at the Brooklyn Museum

their experience, and aids their adjustment to it, is set forth. The film demonstrates that providing museum facilities for children is inexpensive, and that such a project may be begun simply.

A children's museum, it is shown, is primarily a way of acquainting city children with the world of nature, since their man-made surroundings allow them no part in the life of things that grow. They learn about nature visually, by regarding exhibits of shells, and minerals, and plants; they learn manually, by handling the numerous specimens made available.

Children study the social sciences as well as the natural sciences. Dioramas—miniature stage settings complete with tiny figures—dramatize history before their eyes. Geography is approached creatively, as children make plaster of paris relief maps, becoming well acquainted with the physical contours of a land and its relationship to others.

Club work focuses the museum activities. The Stamp Club, the Crafts Club, and the young mineralogists' Pick and Hammer Club, shown in the film, allow for further individual work, developing full-fledged hobbies. Opportunities for social adjustment are also provided through clubs. Field trips outside the museum and programs of lectures and educational motion pictures extend the museum work, introduce the child to reality, and prepare him for the adult world.

The museum appears as a positive step toward prevention of juvenile delinquency, and as an aid to later vocational adjustment—for a museum hobby has frequently developed into a life's work.

The Child Explores His World is primarily directed at organizations of community leaders who may be influential in founding museums. It is already being used by adult museums in their stimulative programs and in university classes on visual education. It has been planned for use by clubs, civic organizations, parent-teacher associations, schools, churches, and the like. It is now being distributed through the Harmon Foundation, 140 Nassau Street, New York.

Spanish Language Feature

Lewis Film Service, Wichita, Kansas, announce a new seven-reel 16mm Spanish film, *Picaflor*, a feature story of the people who live along the La Plata River in Argentina, where the film was made. The entire production is in Spanish, with songs and music interspersed throughout the picture. "Picaflor" is the name of a boat which plies the river trade and the nickname of its owner, known along the river for his singing. The plot is concerned with the rivalry between the hero and another boatman for the hand of the new school teacher. The picture should be of interest to language students.

Review of Spain Civil War Film

Spanish Earth, the feature documentary film produced by Ernest Hemingway, noted American novelist, and Joris Ivens, well-known Dutch director, is an authentic picture of life in war-torn Spain of today, portraying vividly the terror and hopelessness of the daily life of the Spanish civilian population, constant targets of the enemy's aerial bombardment. Unsparingly showing the grim tragedy and horrors of war, the picture is an effective anti-war subject.



Ernest Hemingway

Much footage is devoted to the peasants' development of an irrigation project, as good soil is necessary to guarantee food supply for the government defenders. This theme is developed along with scenes of battle, recruiting, drilling and marching of troops, terrifying air attacks on Madrid and its environs, planes falling, and so on.

The film is stirring, compelling propaganda serving the cause of the Spanish Loyalists, and is accompanied by frankly partisan narration by Mr. Hemingway. It has been splendidly photographed and at considerable

(Concluded on page 234)

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SCHOOL DEPARTMENT

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Director Visual Education, State Teachers College, Indiana, Pa.

Visual Aids in Kindergarten Work

By **CAROLINE F. FELL**

Kindergarten Teacher, Chevy Chase, Md.

ONE morning a little boy brought a small toy boat into the Kindergarten; immediately the others became interested in the subject of boats. The conversation period was devoted to telling of experiences on boats, most of the children having ridden on a ferry boat, others having had longer trips. The children became so enthusiastic that the next day many brought pictures of various kinds of boats including sail, motor, ferry, and steam boats. These were mounted by the children, and placed on the bulletin board to use as reference material. A printed card with the word *Boats* was used as a general title, while under each picture was printed the name of the type of boat. In this way the children began to associate the printed word with the subject. So many pictures were brought in it was decided to start a boat book. In the first book

the pictures were pasted in the order in which they were brought by the children. But later it was decided to place the pictures in various sections, as a "steam boat" section, thus requiring more organization by the children. At this time the children were aided in selecting only the best pictures, thus making a start toward standards of selection. This was accomplished during the conversation period when children considered each picture and decided if it was easy to see, if there were too many objects in it, if it was colored, or if the objects were too small.

During the study of boats many new words were introduced, such as: funnel, stern, pilot house, and cabin. To give a better understanding of their meaning pictures were used during the discussion, thus eliminating verbalism and substituting visual concepts.

Next came the planning of an excursion to see a steam boat. A letter was written to a local steamship company for permission to visit on their boats. The letter received, granting the permission, was of great interest to all the children. This being the first big excursion the class had taken, several days were devoted to making plans and talking about the things we especially wanted to see while on the ship. Since it was necessary to travel through the business section of the city to reach the dock it was deemed best to have a police escort. This added to the content of subject matter since it brought in the advantages of having civic workers. Our trip over the boat was more interesting since we had a guide who explained various features and answered any questions. The children were most interested in the life boats, which up until the trip had not been included in any of the discussions; however, after seeing them they became a vital part of all pictures made thereafter by the children. Upon our return we had a discussion of all we had seen including the use and value of life boats.

The various experiences the children had during the excursion were brought forth in their creative arts, especially in painting and dramatization. A large boat was built with the Happy Builder Blocks on which much of the dramatic play took place.

During the weeks of study many stories were used to enrich the content, some of the most valuable being: *The Fog Boat Story* from "The Here and Now Story Book" by L. S. Mitchell; "Fun With Michael" by Dorothy and Marguerite Bryan; "The Story About Ping" by Marjorie Flack and Kurt Wiese; "Little Pear" by Eleanor Lattimore, and "Boats" published by Grosset and Dunlap Inc. Musical experiences were

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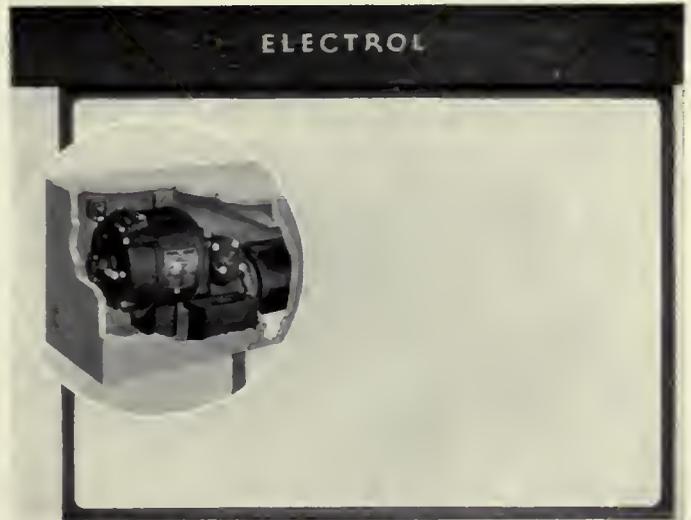
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likewise enriched by singing The Boat Song from "Musical Experiences of Little Children" by Arnold. The children found it very delightful to sing while playing on their boat. Many children had made individual wooden boats and the final act was floating these in a tub of water. Had there been an outdoor pool we would have used it in place of the tub.

In the week following the excursion the film projector was brought into the Kindergarten and a film on transportation was shown. The rate of speed was lowered in order to give the children more time to comprehend the motion picture. In one of the scenes there were many Chinese boats and one child said, "There is a boat like Little Pear rode on."

While another remarked, "There are house boats like that in the story of Ping." Here it seemed advisable to stop the film so the children could better see the picture. The film showed many ways of travel and the children talked freely about what they had seen. Since they asked to see the film again it was shown over the next day.

Current Film Releases

(Concluded from page 230)

personal danger to its producers who were always close to the scene of action.

Spanish Earth (6 reels) is available for school use in 16mm. sound. It may be rented or purchased from Garrison Film Distributors, 1600 Broadway, New York City. J. H.

Gutlohn Adds to Library

Mr. Harry A. Kapit, president of Walter O. Gutlohn Inc., New York City, distributors of 16mm. Sound Films, is now in London where he is making a comprehensive survey of British educational films. While abroad Mr. Kapit will obtain exclusive rights to those films which conform to educational requirements, many of which have already been acclaimed as unusually excellent for both classroom and auditorium use.

The new catalog of Gutlohn pictures (seventh edition) has just been printed. It is the most comprehensive they have ever issued, being larger than the last edition by 20 pages. A copy can be secured free by addressing Walter O. Gutlohn Inc., 35 W. 45th St., New York City.

Music lovers particularly will welcome the release by Walter O. Gutlohn of two important 16mm sound features, *The Life and Loves of Beethoven*, featuring Harry Baur, and *April Romance*, starring Richard Tauber, based on the loves and music of the immortal Franz Schubert.

Park Cine Buys Comedies

The Park Cine Laboratory, New York City, has just completed negotiations for the purchase of negatives and copyrights of approximately one hundred Hal Roach silent comedies in both 8 and 16mm. Featured are: Snub Pollard, Charlie Chase, Jimmy Finlayson, Mabel Normand, Martha Sleeper, Oliver Hardy, Glen Tryon and Clyde Cook in one and two reelers and full length features.

Motion Picture Takes Man Apart

A one-reel 16mm. sound motion picture, entitled *Anatomical Models, Their Production in America and Their Value in Visual Instruction*, has just been released for school use. The film demonstrates the relationship of the parts of the human body and explains the function of the various organs and structures by dissecting and demonstrating an anatomical model on the screen. This demonstration, with the accompanying explanatory narration, was prepared by Dr. Leslie Brainerd Arey, Professor of Anatomy in Northwestern University Medical School.

Sponsored by the Denoyer-Geppert Company, the film has been designed for use in high school and junior college classes, and for showings before section meetings at state and district teacher conventions. It should be of particular interest and value to teachers, students, and workers in the fields of health, biology, physiology and physical education.

The picture not only demonstrates the organization and structure of the human body, but it also shows how anatomical models are designed and constructed.

The film was produced by Atlas Educational Film Company but prints may be secured by writing to the Denoyer-Geppert Company, 5235 Ravenswood Avenue, Chicago.

Red Cross Safety Subject

A new one-reel picture on the subject of safety and entitled *Why Not Live?* has recently been completed for free distribution to colleges and schools by the American Red Cross.

Opening with a sequence of automobile accidents and the help rendered by Red Cross volunteers, the picture goes on to show that the highway is not by any means the only location of death and injury, but that a very large percentage of accidents occurs in the home and on the farm. A vivid passage is also devoted to the dangers of carelessness while swimming and boating and the measures which should be taken for the rescue and resuscitation of drowning persons. The lesson of the picture is the value of precaution, prevention and a knowledge of what to do until the doctor arrives. The film concludes with a brief resume of the other services rendered by the Red Cross in peacetime.

The film may be obtained in 16mm sound or silent, or 35mm sound on safety film stock, by addressing Douglas Griesemer, Director of Public Information, at 19 East 47th Street, New York, N. Y.

Color Films For Children

Several short fairy tale films in color have been produced especially for children by the Julia Ellsworth Ford Foundation, 649 S. Olive Street, Los Angeles, Cal., each subject running ten minutes. All the actors are children, and the stories are based on Mrs. Ford's own books about Snickerky Nick. These 35mm films will be distributed free to hospitals, orphanages, parents' associations and similar groups.

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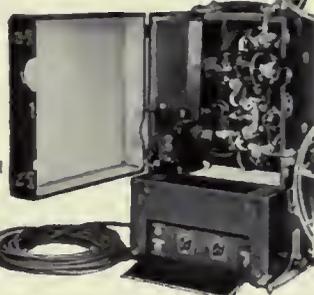
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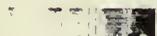
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Using Movies as a Research Library

(Continued from page 223)

of modern life. Combine these facts, and it seems only logical that the results would be gratifying.

I shall give in detail how we developed a few of the movies and harnessed up their great contributions to serve in our classrooms.

Mutiny on the Bounty was an excellent picture for our work. The students showed a keen interest in early British shipping and in the marine laws as passed about 1700. They worked hard to obtain the information about the value of shipping in that day, the difficulty of securing sailors, and the dread of mutiny. They liked the work because it was preparing them to see the picture show.

Geography, as well as history, came to life in the study of this picture. The students traced the 2700 mile-route of the *Bounty* through a part of the world that is little-known, and in so doing, they located numerous places heretofore new to them. Coral reefs, tropical storms, trade winds, calms, and other such terms began to mean something to them.

The wonderful character sketches found in *Mutiny on the Bounty* together with the well-developed plot gave the English teacher excellent material for literary study, story writing, and character building.

Such a study was beneficial in several ways. It vitalized and made valuable several geography, history, and English lessons; it served as an excellent basis for

character study and character building; it gave the students a background of appreciation for a fine picture, and they realized the vast amount of research which was done to produce a picture authentic in so many details.

Midsummer Night's Dream had never meant much to the English classes because it was very difficult for them to follow Shakespeare's flights of imagination into the land of make-believe and fairies one minute and into the world of reality the next. We gave them enough of the plots to make the story clear as portrayed on the screen; we analyzed the characters in part, and we gave them the details necessary for an understanding of the play. We then had reports describing the ways in which the directors secured the desired effects. These students simply "ate up" such information as how the woods were lighted and filmed; how moonbeams were made that fairies (who happened to be flesh and blood actors) could ascend and descend at will; how the fog was made and the heads of people appeared through it; how Bottom's head turned to that of an ass in the twinkling of an eye.

Then we went—100 strong one afternoon—four hundred all told—to see the picture. The results were glorious. Shakespeare's change of scene, his flights of fantasy, his range of character portrayal were thoroughly appreciated when showed with all the amazing resources of competent motion picture production.

The Tale of Two Cities was a superb film for the teaching of the French Revolution and social reforms. It vitalized that classic and made Dickens live as no

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other method could have done. The same was true of *David Copperfield*. No literature lesson on those two books could be dull after the student had seen the pictures. The teaching of necessary facts before the seeing of the picture, the little stories always available on the making of the films, then the seeing of the picture, and the teaching of the classic or the teaching of the French Revolution make a wealth of interest and information for the students.

The Last Days of Pompeii was a living reference book for the customs and dress of early Romans; *The Crusades* furnished history material for that historical movement; *The Three Musketeers* gave a vivid picture of the political situation in France; *Captain Blood* was fine for geography location work, for a study of pirates and slave trade, and showed the literary style of a fine piece of writing; *A Perfect Tribute, So Red the Rose,* and *The Littlest Rebel* gave students much information on the South and the Civil War; *The Message to Garcia* created great interest in the Spanish American War; *Rhodes the Empire Builder* began six weeks of sustained interest in South Africa that eventually spread and tied up with all of Africa and the Ethiopian situation; *Clive of India* and *Lives of a Bengal Lancer* called for geography of Asia and historical happenings between India and England; *Louis Pasteur* was science alive and workable everyday; while *Romeo and Juliet* and many filmed classics are the answer to an English teacher's prayer.

In the realm of music, the same use can be made of good musical pictures, and someday an appreciation for finer music may come to the masses of American people through this medium.

The art, designing, lighting, costume-making, directing, settings, and other specialized fields which reach the peak in many films are always studied in connection with these pictures. The research work that is carried on so that pictures, properties, settings, and props may be authentic are never overlooked.

We know that pictures are not all historically correct, but we and the students find that out as we study, and they learn facts that way sometimes when they do not learn them the positive way.

Moving pictures have become for us a living, moving library, in which research work, reports, locational geography, and dull hours of duller reading have become clothed in vital human drama and presented to the student in the way he enjoys it. It has certainly popularized history, geography, and literature, and these studies are a joy to the boys and girls, not a drag. Movie Producers spend millions of dollars to give us information in pictures, scenes, costumes, customs, and actions that we could never portray adequately ourselves with our limited means, and it would be a pity not to use our opportunity.

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Film Estimates

(Concluded from page 229)

- My Bill** (Kay Francis, Dickie Moore) (Warner) Incessant dialog, overdrawn situations dwarf story's human appeal. Plot springs from incredibly obnoxious behaviour of widowed mother's three eldest, and loyalty of precocious youngest. Former desert her temporarily, but understanding soon brings reunion. 7-26-38
(A) Perhaps (Y) Mature (C) Doubtful
- Numbered Woman** (Sally Blane, Lloyd Hughes) (Monogram) Lively, melodramatic crook story competently acted. Some tense moments accompany heroine's attempts to trap the real thieves in a bond robbery and establish the innocence of her brother, who is finally freed and the gang leaders eliminated in gun-play climax. 6-21-38
(A) Mediocre (Y) Hardly (C) No
- Nurse from Brooklyn** (Sally Eilers, Paul Kelly) (Univ) Fairly engrossing crime melodrama free from mystery but with suspense and action well maintained, and likable stars. Wounded hero, a romantic cop, falls in love with his nurse but she believes him murderer of her brother until he reveals real killer for happy ending. 6-21-38
(A) Depends on taste (Y) Not suitable (C) No
- Penrod's Double Trouble** (Mauch Twins, Gene Lockhart) (Warner) Far-fetched, implausible situation, with Penrod's double again causing exciting complications involving entire community, but nice family relationships, amusing and entertaining child action, make it a worthwhile family film. 8-23-38
(A) Fair (Y) and (C) Good
- Penrod and His Twin Brother** (Mauch Twins) (Warner) Starts as human, wholesome little comedy about boy-hero and pals, then comes sensational mix-up in gang-killing and hectic, preposterous climax of boys capturing gang in waterfront hideout. Lively entertainment of its kind. 6-28-38
(A) Hardly (Y) Prob. entertaining (C) Dblf.
- Port of Seven Seas** (O'Sullivan, F. Morgan, W. Beery) (MGM) Mature, tedious story with Rarseilles waterfront setting. Heroine's betrayal by lover mainspring of plot. Action static, dialog endless with many speech incongruities, but whole made interesting by sincerely acted roles and real character values. 7-12-38
(A) Good of kind (Y) Too mature (C) No
- Pride of the West** (Bill Boyd, George Hayes) (Para) Lively Hopalong Cassidy Western. Hero's friends call, he comes, catches gang, recovers gold stolen from stage coach, rides off again. Usual thrills but less violent and more dramatic and amusing. Romantic element slight. 8-23-38
(A) Hardly (Y) and (C) Good of kind
- Prison Farm** (Lloyd Nolan, Shirley Ross, John Howard) (Para) Sordid, violent stuff about crook-hero dragging innocent heroine to prison with him, getting its thrills and suspense out of brutality, torture and terrific fighting. Keepers as bad as the kept. Tragic end of hero helps ethical values little. 7-19-38
(A) Hardly (Y) (C) Certainly not
- Professor Beware** (Harold Lloyd, Phyllis Welch) (Para) Welcome return of typical Lloyd humor after rather labor-d start. Eventologist racing across country to join archeological expedition, is pursued by heiress in love with him. The "chase" theme with rough and tumble slapstick fight for climax. 8-16-38
(A) and (Y) Enter. (C) Good if not too exciting
- Racket Busters** (Geo. Brent, H. Bogart) (Warner) Violent ganster film with much talk. Hero in unsympathetic role of stubborn truck driver who gets into disfavor with pals when he bows to racketeers but redeems himself by knock-down fight with gang boss and belated cooperation with district attorney. 8-9-38
(A) Hardly (Y) Undesirable (C) No
- Rage of Paris** (The Darrieux, Fairbanks Jr.) (Univ.) Light, merry romantic stuff, deftly acted. Jobless heroine, financed by head waiter, poses as wealthy Parisienne to snare a rich husband. Hero, aware of her identity, steps in to save his pal, falls in love, so she gets him and his money instead. 6-14-38
(A) Good of kind (Y) Doubtful theme (C) No
- Rascals** (Jane Withers, Rochelle Hudson) (Fox) Silly concoction with Jane her usual precocious self managing a modern gypsy caravan of penniless vaudeville performers. Cheap slang for dialog, preposterous action made supposedly funny by grotesqueries of Borrah Minnevit. Stealing made funny. 7-12-38
(A) (Y) and (C) Poor
- Reformatory** (Jack Holt, Bobby Jordan) (Columbia) Vivid little "Crime School" melodrama, often exaggerated but effectively contrasting two methods of handling reform school boys. Largely wholesome save for making young toughness amusing and heroic. Several over-violent fistfights and a grisly downing. 8-30-38
(A) Fair of kind (Y) Perhaps (C) No
- Return of the Scarlet Pimpernel** (Barry Barnes) (U.A.) Quite a pretentious English production relating further adventures of this character in France during Robespierre's reign. Inferior to Leslie Howard's Pimpernel in suspense, vigor, reality and general interest. Some impressive scenes but the whole too theatrical. 8-9-38
(A) Fair (Y) Passable (C) Unsuitable
- Romance of the Limerlost** (Jean Parker, Eric Linden) (Monogram) Unskilled attempt at realistic portrayal of Gene Stratton Porter's sentimental story of humble life. "Swamper" heroine, ambitions to better herself—old-fashioned villain who holds mortgage—accidental killing—clumsy trial scene where hero saves all 6-23-38
(A) Poor (Y) Harmless (C) Hardly
- Romance on the Run** (Donald Woods, Patricia Ellis) (Republic) Lively little mystery. Breezy hero, pal of crooks, runs down theft of necklace in crazy chase over half the country. Dumb assistant, blundering cop, and too ubiquitous heroine complicate his efforts. Largely non-sensical but fairly amusing. 6-14-38
(A) Hardly (Y) and (C) Fairly good
- Sailing Along** (Jessie Matthews, Roland Young) (GB) Whimsical comedy much less funny than was intended. Heroine deserts barge-life for stage career under wealthy, erratic "discoverer of genius." Success, but she goes back to first love. Slight character appeal. Song and dance clog lumbering action. 6-14-38
(A) Mediocre (Y) and (C) Little value
- Shopworn Angel** (M. Sullivan, J. Stewart, W. Pidgeon) (MGM) Sentimental, mature, romantic drama made reasonably convincing by restrained treatment, excellent acting. Stewart appeals as the incredibly innocent doughboy whose simple, idealistic devotion to cheap, blase' chorus girl proves a redeeming influence. 7-12-38
(A) Very good of kind (Y) Mature (C) No
- Sky Giant** (Richard Dix, Chester Morris, Joan Fontaine) (RKO) Aviation drama with love triangle, the two heroes—air pilots and fast friends—rivals over girl. She loves cocky Morris so Dix nobly steps aside. Aerial shots and activities of aeronautical training school afford chief interest. 7-26-38
(A) Fair (Y) Rather good (C) Doubtful int.
- Swiss Miss** (Laurel-Hardy) (MGM) Suspense costume farce in Swiss Alps, with scatterbrain romance and typical Laurel-Hardy horseplay, unevenly funny. Music and singers of no importance. Features are drunken act by Laurel and dizzily exciting sequence on flimsy bridge. 7-5-38
(A) Hardly (Y) Fair (C) Fair
- Texans** (Joan Bennett, R. Scott, Robson) (Para) Post Civil War story, weak, preposterous in spots. But dramatic trek with 10,000 cattle across Texas and the Rio Grande provides stirring, colorful settings as travelers encounter numerous hardships before reaching destination. 8-16-38
(A) and (Y) Fair (C) Too exciting
- The Amazing Dr. Clitterhouse** (Robinson, Trevor) (Warner) Quite original crime thriller, smoothly done. Doctor-hero, for research on criminal reactions, joins gang in burglaries and finally homicide. Wins strange acquittal and gangster-heroine. Intimate shots of burglary methods. Very well acted. 8-2-38
(A) Good of kind (Y) (C) Better not
- The Devil's Party** (McLaglen, Gargan, Paul Kelly) (Univ) Slum kid gang does petty crimes. Grown-up and still pals, they have become policeman, priest, and the hero a rich gambler. Violent complications bring murder, false suspicion, thwarted vengeance, and hero dies heroically. Clumsy and confused. 8-2-38
(A) Feeble (Y) No (C) No
- The Main Event** (Robert Paige, Jacqueline Wells) Artificial thriller, stupidly conceived and acted, preposterous and inane action. Newspaper hero in hectic chase by auto and speedboat after supposed kidnappers of prizefighter who disappears on fight night. Minus-zero in interest and value. 8-2-38
(A) (Y) (C) Stupid
- The Pearls of the Crown** (Lyn Harding, Sacha Guitry, and fine cast) (In French, Italian and English, with titles) (Lenauer) Remarkable kaleidoscope of high spots in three countries' history, from 1500 to present, in relation to seven famous pearls. Beautifully done. 7-19-38
(A) Notable (Y) (C) Too mature
- This Marriage Business** (Victor Moore) (RKO) Domestic comedy of small-town life becoming crook melodrama. City-reporter hero leads simple-souled judge (finely done by Moore) into marriage racket, then the mayoralty, finally saves him from machinations of road-house gang, and wins his daughter. 6-28-38
(A) Hardly (Y) Hardly (C) No
- Three Blind Mice** (Loretta Young, Joel McCrea, David Niven) (Fox) Gay, superficial comedy about heroine who goes campaigning for rich husband. Handsomely set, well enough acted, but cheap in much of action and situation. Totally without character interest or value. 6-21-38
(A) Hardly (Y) Undesirable (C) No
- Torchy Blane in Panama** (Lola Lane, Paul Kelly, Tom Kennedy) Mediocre thriller, as reporter-heroine again outsmarts police and rival news reporters in dizzy chase from New York to Panama after a murderer. Bar in ocean liner background for much of action. Tom Kennedy's usual dumb antics for "comedy." 8-23-38
(A) Feeble (Y) Doubtful int. or value (C) No
- Toy Wife** (The Rainer, Douglas, Young, Barbara O'Neil) (MGM) Elegant portrayal of customs and social ideals of early 19th century New Orleans. Notably set, costumed and acted, but the slow tragedy that the over-temperamental heroine brings on herself and all concerned is rather grim entertainment. 6-28-38
(A) Very good of kind (Y) and (C) Too mature
- Tropic Holiday** (Milland, Raye, Burns, Lamour) (Para) Lavish, colorful Mexican settings for routine slapstick musical comedy, little or no plot, emphasis on song and dance numbers. Martha Raye substitutes bull-fighting for rancorous "singing" and Lamour exchanges her sarong for a serape. 7-12-38
(A) Depends on taste (Y) and (C) Probably amusing.
- We're Going to be Rich** (Gracie Fields, McLaglen) (Fox) Lusty, uproarious British-made film depicting precarious fortunes of music hall singer, brawling husband and little nephew whom she supports. Rough colorful background of drinking, fighting gold-rush days in South Africa. Gracie superb. 8-2-38
(A) Novel (Y) Better not (C) No
- White Banners** (Fay Bainter, Claude Rains) (Warner) Quietly dramatic, very human story of humility and self-sacrifice, told more in words than action, made credible and appealing chiefly by Fay Bainter's eloquent role. An unwed mother, her philosophy of faith and forbearance in adversity is the theme. 6-28-38
(A) Very good (Y) Good but mature (C) No
- Who Killed Gail Preston?** (Don Terry, Rita Hayworth) (Columbia) Mystery baffling enough, but acting and dialog mediocre, comedy simple, romance dull. Unpleasant torch-singer murdered in novel night-club setting. Usual variety of suspects, with killer's identity, adeptly hidden, providing logical solution. 6-7-38
(A) (Y) Mediocre (C) No
- Wives under Suspicion** (W. William, Gail Patrick) (Univ.) Serious domestic drama of merciless district attorney, neglecting wife for job, confronted with same circumstances in own life as man he is trying to convict on murder charge. Directed with restraint, and well acted altho William's role is overdrawn. 6-28-38
(A) Fairly interesting (Y) Unsuitable (C) No
- Woman against Woman** (H. Marshall, V. Bruce, M. Astor) (MGM) Good acting, intelligent dialog, in story of divorce and remarriage. Fine husband divorces selfish, hypocritical wife whose tactics later threaten second, happy marriage. Sudden solution not too convincing but satisfying. One unnecessary bit of crudity. 7-5-38
(A) Fair of kind (Y) Mature (C) No
- Women Are Like That** (Kay Francis, Pat O'Brien) (Warner) Weak, largely incredible and dull story portraying first, marital bliss, then separation when husband gives up advertising job and wife becomes salesman for his agency, then happiness again when husband makes comeback. Excessive talk clogs action. 7-5-38
(A) Mediocre (Y) Hardly (C) No
- Yellow Jack** (Montgomery, Stone, Bruce) (MGM) Inspiring, moving drama of courage and self-sacrifice. Authentic, informative story of Major Reed's fight vs. yellow fever in Cuba after Spanish-American war and the five soldiers who volunteered for his experiments. Convincing roles. Fine ethical values. 6-14-38
(A) Notable (Y) Worthwhile (C) Beyond
- You and Me** (Sylvia Sidney, George Raft) (Para) Pretentious, far-fetched drama. Struggles to be novel, is merely tiresome. Story about parolees aided by kind benefactor is dramatically and psychologically unconvincing. Good acting fails to compensate for fundamental weakness of plot. 6-14-38
(A) Hardly (Y) No value (C) No
- Young Fugitives** (Harry Davenport) (Univ) Clumsy, halting tale of reform of wayward hero and heroine by old G.A.R. soldier, winner of big longevity prize. Ethics and motives jumbled in unconvincing regeneration. Only merit, choice character role by the veteran actor, Davenport, as old soldier. 7-19-38
(A) Feeble (Y) Perhaps (C) No

AMONG THE PRODUCERS *Where the commercial firms announce new products and developments of interest to the field.*

New Visual Aids for U. S. Geography

The Society for Visual Education announces a new series of Picturols for Geography of the United States, comprised of forty sets of thirty pictures each. The entire series has been developed on three themes for each of nine major surface units of the United States. The division into major surface units was made on the basis of a general similarity in natural resources and the utilization of and adaptation to the natural conditions within each unit. The themes about which the pictures are assembled in a Picturol are natural landscapes, people and environments, and cultural results.

Picturols on natural landscapes, one for each division, give understandings through visual imagery about the surface units that comprise the land area of the United States, and to provide accurate and comprehensive visual imagery for the geographic terminology which is commonly used in current news and political discussion about socio-political elements in our social and political structure. Picturols on people and environments are visual studies of basic geographic principles,—the relationships of the activities of a people to their natural environment. These pictures show activities or suggested activities in a natural setting. Picturols on cultural results climax the visual presentation for a given surface unit. They show evidences of cumulative activities which have resulted, in part, at least, from the relationships that have been and are experienced within the natural environment. Also, they present labor-type activities which are outcomes from the relationships which are present in the given area.

A teachers' guide has been made for each Picturol. It is not a descriptive or narrative travelog or informative *petite* encyclopedia. It explains what may be gained from the pictures in the Picturol; provides an analysis which the teacher will find helpful when making preparation for use of the pictures; and, in addition to identifying locational facts, offers remarks and questions which are suggestive of ways to stimulate and encourage a thoughtful study—observation with a known purpose—of each picture.

This series of Picturols is suitable for use with any plan or cycle of regional organization that is followed in Geography of the United States for the higher ele-

mentary and junior high grades.

S.V.E. engaged the services of Miss Grace Booth to direct this series. Miss Booth is a teacher of broad experience and practical attainments. For a number of years she was actively associated with the Cleveland Public Schools, as teacher of Geography and Social Studies in the junior high department. While in this connection, Miss Booth promoted and supervised several school projects, "A Guide Book for Cleveland," being one that received national recognition. For five years her interests were given, in addition to teaching, to the organization and supervision of the "Visual Aids Service" at Collinwood Junior-Senior High School, which afforded her an opportunity to analyze the use of visual aids from every aspect. At the request of the publishers, Miss Booth wrote the Teacher's Handbook for the first edition of "Goode's School Atlas," by Dr. Paul J. Goode, (Rand, McNally & Co.)

New Ampro Arc Projector

The Ampro Corporation, manufacturers of 16mm motion picture projectors, have extended their line with the advent of their new 16mm "Ampro-Arc" Sound-On-Film Projector which has many times the brilliance of the ordinary 750 watt



Ampro-Arc Sound Projector

projector. The new machine provides superior screen brilliance and powerful natural tone quality volume so necessary for the largest of auditoriums.

The complete equipment, designed to operate on 50-60 cycles alternating current, varying from 100-125 volts, consists of the following major components: projector unit with 1600 ft. reel capacity

and automatic rewind, large output amplifier (40 watts undistorted), high intensity arc lamp with automatic carbon feeding, full wave rectifier, stand with swivel attachment for locating picture, two torpedo speakers with tripod stands, cables and other accessories.

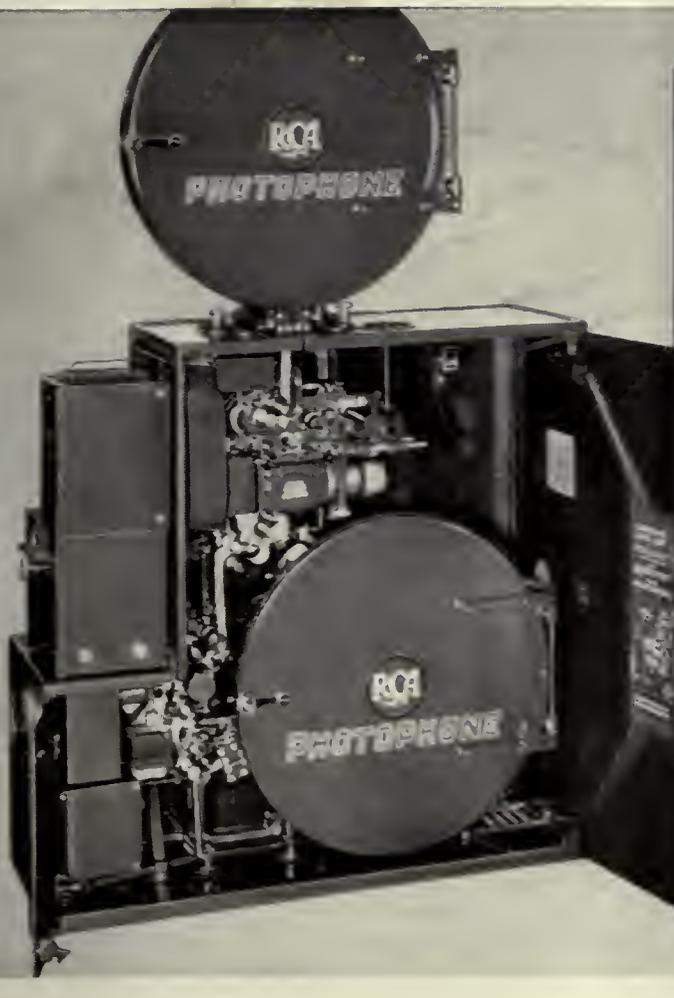
All projector, sound head and amplifier features are the same as those incorporated in the standard model "L". The projector mechanism is driven from the motor by means of a V shaped, one piece molded rubber belt to absorb starting and stopping shocks. All gears in the mechanism housing have helical teeth for smooth and quiet operation. Film movement is effected by means of a triple claw engaging three adjacent sprocket holes simultaneously so that even if two sprocket holes are torn, the film will still be fed through the projector. Shutter is of the rotary type for maximum light efficiency. The lens mount is of the large barrel type and is designed so that various lenses of different focal lengths can be instantly interchanged. The standard projection lens furnished is a 3" F 2.0. The motor is equipped for the showing of both silent and sound film at the proper operating speed. The sound head is easily removable from the projector as a single unit in order to facilitate servicing.

For detailed information, prices or demonstration, write The Ampro Corporation, 2839 North Western Avenue, Chicago, Illinois.

RCA Expands Activity in Educational Field

The size and scope of RCA Victor's activities in the educational field have been increased under the direction of Ellsworth C. Dent. The expanded Educational Department will have three important functions according to an announcement by Henry C. Bonfig, Commercial Vice President. The first will be to determine the requirements of the educational market for radio, recordings and related sound products, by extensive surveys and studies. The second will be to cooperate with the important research organizations and governmental agencies in education. The third will be to coordinate the activities of RCA Victor in the production and sale of special products for the school market.

Mr. Dent has had many years of spe-



"BIG TIME"
Sound Movies
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Make lessons easy to learn!
Give them vibrant life with
this fine new RCA Equipment!

Students remember what they *see!* That's why leading educators all over the land heartily subscribe to teaching with both sight and sound. Lessons take on new life—are absorbing, interesting. And lessons that live are easy to learn!

Your school can offer students the benefits of motion picture sound education with equipment very similar to that used in the nation's leading motion picture theatres. RCA Sound Motion Picture Projector PG-81 illustrated here is one of RCA's complete line of projectors. It is designed to give ample illumina-

tion in average rooms or in large auditoriums. Is equipped with the same RCA Photophone Rotary Stabilizer Sound Head that has evoked enthusiasm from motion picture people throughout the country.

Will be glad to quote you prices to suit your own particular situation. Write for information. No obligation.

RCA presents the Magic Key every Sunday, 2 to 3 P. M., E. D. T. on the NBC Blue Network

Modern schools *stay* modern with RCA tubes in their sound equipment.

**COMMUNITY ENTERTAINMENT
 IN CHURCHES**

In addition to its excellence for school use, an RCA Sound Motion Picture Projector is also ideal for community entertainment in churches, etc.



RCA Victor

cialized and general experience in the educational field. Under his direction, the Educational Department will devote itself to bringing about a more widespread application of recent developments in the radio and sound arts to the problems of education.

Bell & Howell Expands Line

It was learned recently that Bell & Howell Company, pioneer manufacturer of motion picture equipment, has been expanding sales representation on the Exakta line of still cameras manufactured by Ihagee Kamerawerk, Dresden.

Starting more than a year ago with exclusive sales rights in eleven western states (California, Oregon, Washington, Nevada, Idaho, Utah, Arizona, New Mexico, Colorado, Wyoming and Montana) the recent expansion extended the Bell & Howell sales representation of Exakta cameras to five additional states, (North Dakota, South Dakota, Nebraska, Kansas and Oklahoma). These five states will be served from the Chicago office while the eleven original states will continue under the jurisdiction of the Bell & Howell Hollywood Branch. Thus a company known since 1907 as manufacturer and promoter of motion picture equipment



**Kine Exakta Equipped with
Zeiss-Wessar F 2.8 lens**

exclusively appears on the horizon as a new factor in the "candid camera" market. Questioned regarding this epochal activity in the still camera field, a Bell & Howell official stated that the company had been experimenting for some time in the supplemental use of "stills" with motion pictures for both personal and educational purposes.



A new Bell and Howell magazine-loading 16mm camera, the Filmo 141, made its bow to the market July 1st. Unique features incorporated in the new camera include the radically new "projected area" viewfinder, four camera speeds, and a single frame exposure device opening up the interesting field of animation work.

The most radical departure from pre-

vious design is the new type of viewfinder which, it is claimed, brings to the 16mm movie maker greater ease and accuracy in determining his field, for the field area image is immobile, no matter what the angle at which the eye looks into the eyepiece. The front element of the viewfinder is easily and quickly removed to provide for the use of lenses of different focal lengths.

The new Filmo 141 takes Eastman fifty-foot film magazines, and permits quick loading or interchange of film without fogging the film. A color-corrected 1-inch F2.7 Cooke lens is standard equipment and since the camera has the same lens mount as the Filmo 70, all lenses used on the latter cameras are interchangeable with the 141. Two models of the new camera are offered, the 141-A with speeds from 8 to 32 frames per second, and the 141-B with speeds from 16 to 64.

DA-LITE'S Electric Roll Screen

The "Electrol" is the latest development in the DA-LITE line of dependable projection screens. Electrically operated at moderate cost, the new screen is especially adapted to conditions in school rooms, churches, clubs, small theatres, etc. It is a completely assembled unit with compact motor drive. Simply hang up, plug in, and operate from any point desired. A simple turn of the switch lowers the screen to its operative position. By again turning the switch, the motor-driven roller rewinds the screen up into its substantially built case, which protects it from dust and damage when not in use. All stops are automatic. The screen is always under control in raising and lowering and can not become damaged through improper handling. The "Electrol" is available in all standard widths from 8 ft. to 20 ft. and in any height required up to 20 ft. It is supplied in Mat White, and Glass Beaded surfaces for either silent or sound pictures, by Da-Lite Screen Company, Inc., 2723 N. Pulaski Road, Chicago, and its dealers throughout the country.

Central's Bargain Book Ready

Amateur and professional photographers will want a copy of the new Central Bargain Book of Cameras and Supplies, recently published by Central Camera Co., 230 So. Wabash Ave., Chicago. This new 32-page Catalog lists and describes hundreds of cameras, (still and movie) lenses, tripods, exposure meters, enlargers, films, Darkroom Supplies. Central carries in stock, what is said to be the world's most complete, varied supply of cameras and photographic equipment.

A free copy of the catalog will be sent free upon request.

Wattage Increased on Animatophones

Animatophone Sound Quality has been further improved by increased wattage on three Victor Animatophone models, with no increase in price. On Model 26 Universal, volume has been increased to nine watts; 750 Watt lamp and 12-inch Hi-fidelity Speaker are now supplied as standard equipment. Model 25AC (formerly 10 Watt output) is now 18 Watts with 1 speaker, 30 Watts with 2 speakers. Model 38—(formerly 30 watts with 2 speakers) has been stepped up to 30 Watts with 1 speaker, 50 Watts with 2 speakers. A new 15-inch Hi-fidelity P. M. Speaker is now standard equipment.

Bausch & Lomb Viewer

An attractive film slide viewer has been developed by the Bausch & Lomb Optical Co. for the users of miniature cameras, enabling the worker to study his negatives for enlarging possibilities or to exhibit them to the best advantage. The ground glass diffusing screen is approximately two inches square permitting the showing of all popular miniature sizes, in black and white, or colored positives. The three-inch precision lens produces a crisp enlarged image of the film. Well-ventilated housing and use of a standard 15-watt Mazda bulb avoid harm to slides or film.

Change in Leica Camera Names

The universal aspect of photography has now made it desirable to change the model designations of the Leica camera so that they are uniform throughout the world. Instead of being identified by letters—Models A, B, C., etc.—they will be now distinguished by Roman numerals—Models I, II, III, etc. The following table gives the new and old identifications.

Leica Model II—Leica Model D
Leica Model III—Leica Model F
Leica Model IIIb—Leica Model G-1938
The Model IIIa Leica camera (Model G) is replaced by the Model IIIb Leica camera (Model G-1938)—this camera, with Summar lens, has been reduced from \$228.00 to \$213.00.

The Model E Leica camera will not be designated by a Roman numeral but will be known as the Standard Model Leica. The Model FF Leica will be known as the Model 250 Leica.

Publications on the Visual Teaching Field

THE AUDIO-VISUAL HANDBOOK.

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."

180 pp. Illus. Paper binding, \$1.25; Cloth, \$1.75.

PICTURE VALUES IN EDUCATION.

By Joseph J. Weber, Ph. D.

An important contribution to the literature of the visual field. Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph.

156 pp. Illus. Price \$1.00 (67c to subscribers)

MOTION PICTURES IN EDUCATION IN THE UNITED STATES. By Cline M. Koon.

A report on the instructional use and indirect educational influence of motion pictures in this country, divided into nine units covering (1) the educational influence of motion pictures; (2) the motion picture in the service of health and social hygiene; (3) the motion picture in governmental service and patriotism; (4) the use of motion pictures in vocational education; (5) the motion picture in international understanding; (6) motion picture legislation; (7) the technique of making and exhibiting motion pictures; (8) the systematic introduction of motion pictures in teaching; and (9) educational problems of a general nature resulting from the introduction of motion pictures in teaching.

106 pp. Price \$1.00. (With discount to schools)

THE EDUCATIONAL TALKING PICTURE

By Frederick L. Devereux.

Presenting preliminary solutions of some of the more important problems encountered in adapting the talking picture to the service of education. The first six chapters deal with the development of fundamental bases of production, with the experimentation which has been conducted, and with suggested problems for future research. The remaining chapters are devoted to the practical problems involved in utilizing the film effectively in educational programs. 220 pp. Price \$2.00 Illus.

(With discount to schools)

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 round out the volume. 175 pp. Price \$2.00 Illus.

(With discount to schools)

COMPARATIVE EFFECTIVENESS OF SOME VISUAL AIDS IN SEVENTH GRADE INSTRUCTION. By Joseph J. Weber, Ph. D.

The first published work of authoritative research in the visual field, foundational to all research work following it. Not only valuable to research workers, but an essential reference work for all libraries.

131 pp. Price \$1.00 (67c to subscribers of E. S.)

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(The Blue Book of Non-Theatrical Films)

Be sure to get the new 14th EDITION of the famous annual film directory. . . . The largest and most complete listing of films available to the school field. . . . Lists more than 4500 films, classified under 147 different subject groups. . . . Shows whether 16 mm or 35 mm, silent or sound, title, number of reels, synopsis of contents, sources distributing the films (254 distributors listed) and range of prices charged. PRICE ONLY 75c (EDUCATIONAL SCREEN subscribers pay only 25c)

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for the Visual Field

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- Audio-Film Libraries (5)
661 Bloomfield Ave. Bloomfield, N. J.
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City
- Castle Films (6)
RCA Bldg., New York City
(See advertisement on page 227)
- Cine Classic Library (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 239)
- Eastin 16 mm. Pictures (6)
707 Putnam Bldg., Davenport, Ia.
Burns Bldg., Colorado Springs, Colo.
- Eastman Kodak Co. (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures' System, Inc. (6)
330 W. 42nd St., New York City
- Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
- Films, Inc. (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
(See advertisement on page 205)
- William J. Ganz Co. (3, 6)
19 E. 47th St., New York City
- Garrison Films, Inc. (3, 6)
1600 Broadway, New York City
(See advertisement on page 239)
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc. (6)
35 W. 45th St., New York City
(See advertisement on page 237)
- Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton's Travelettes (1, 4)
7901 Santa Monica Blvd., Hollywood,
Cal.
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- International Geographic Pictures (5)
52 Vanderbilt Ave., New York City
(See advertisement on page 228)
- J. H. Hoffberg Co., Inc. (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 231)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 237)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 228)
- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Pictures Co. Inc. (2)
Rockefeller Center, New York City
(See advertisement on page 234)

- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago

MOTION PICTURE MACHINES and SUPPLIES

- The Ampro Corporation (6)
2839 N. Western Ave., Chicago
(See advertisement on page 209)
- Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co. (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 228)
- Eastman Kodak Co. (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc. (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- DeVry Corporation (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 206)
- Howard Hill Motion Picture Service (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 235)
- Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 231)
- Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City
- International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)
- Neumade Products Corp. (3, 6)
429 W. 42nd St., New York City
- RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 241)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 232)
- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 229)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Informative Classroom Picture Ass'n.
48 N. Division Ave., Grand Rapids,
Mich.

SCREENS

- Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 233)

- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Institutional Cinema Service, Inc.
130 W. 46th St., New York City
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

- Conrad Slide and Projection Co.
709 E. Eighth St., Superior, Wis.
- Eastman Educational Slides
Johnson Co. Bank Bldg.,
Iowa City, Ia.
- Edited Pictures System, Inc.
330 W. 42nd St., New York City
- Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 231)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 236)
- Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 228)
- Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
- Visual Education Service
131 Clarendon St., Boston, Mass.
- Visual Sciences
Suffern, New York
(See advertisement on page 228)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

- DeVry Corporation
1111 Armitage St., Chicago
(See advertisement on page 206)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 236)

STEREOPTICONS and OPAQUE PROJECTORS

- Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 208)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Keystone Manufacturing Co.
Boston Mass.
(See advertisement on page 239)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 236)
- Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 233)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

- (1) indicates firm supplies 35 mm. silent.
- (2) indicates firm supplies 35 mm. sound.
- (3) indicates firm supplies 35 mm. sound and silent.
- (4) indicates firm supplies 16 mm. silent.
- (5) indicates firm supplies 16 mm. sound-on-film.
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EDUCATIONAL SCREEN

Magazine Devoted Exclusively
the Visual Idea in Education

OCTOBER, 1938

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VOLUME XVII, NUMBER 8
WHOLE NUMBER 165



Pine
Cove

Painting by Frankl
(Courtesy of Colonial Art Company)

IN THIS ISSUE

Motion Pictures—Not for Theatres

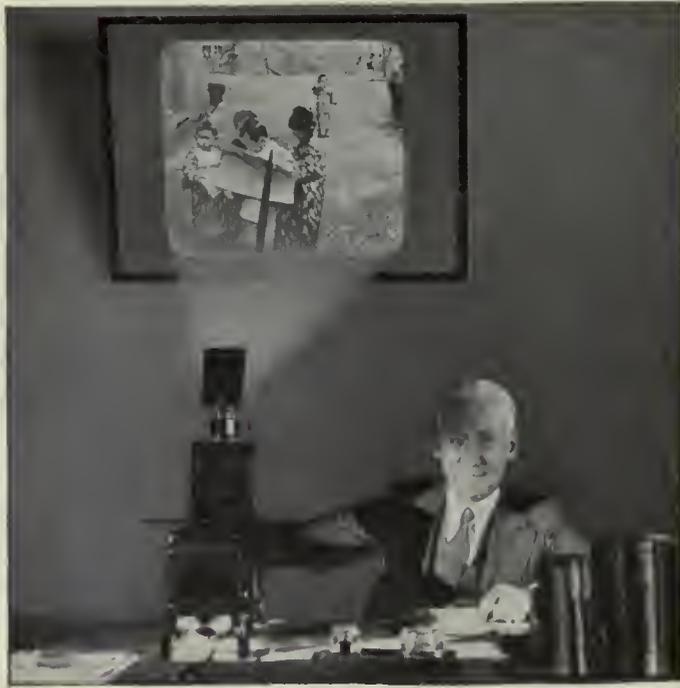
*What I Want from the Producer
of Educational Films*

Preparing Sound Film Strips

*Some Uses of the Microprojector
in Physics and Chemistry*

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B & L Accessories, complement the usefulness and adaptability of a Balopticon, and at small cost add to its value as a teaching tool. They make possible not only greater convenience but also permit the handling of a

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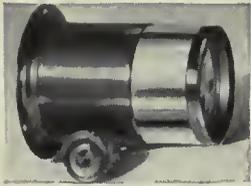
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THE B & L FILM PROJECTOR ATTACHMENT converts lantern slide Balopticon into still film projector.



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FOR YOUR GLASSES INSIST ON B & L ORTHOGON LENSES AND B & L FRAMES...

The EDUCATIONAL SCREEN

OCTOBER, 1938

VOLUME XVII

NUMBER EIGHT

Contents

Motion Pictures—Not for Theatres.	
Arthur Edwin Krows.....	249
Preparing Sound Film Strips. Charles R. Thomas.....	254
What I Want from the Producer of Educational Films.	
Donald C. Doane.....	257
Some Uses of the Microprojector in Physics and Chemistry. Theodore Sargent	259
News and Notes	
Conducted by Josephine Hoffman.....	261
Film Estimates	262
Among the Magazines and Books.....	263
School Department	
Conducted by Wilber Emmert.....	266
Current Film Releases.....	270
Among the Producers.....	276
Here They Are! A Trade Directory for the Visual Field....	280

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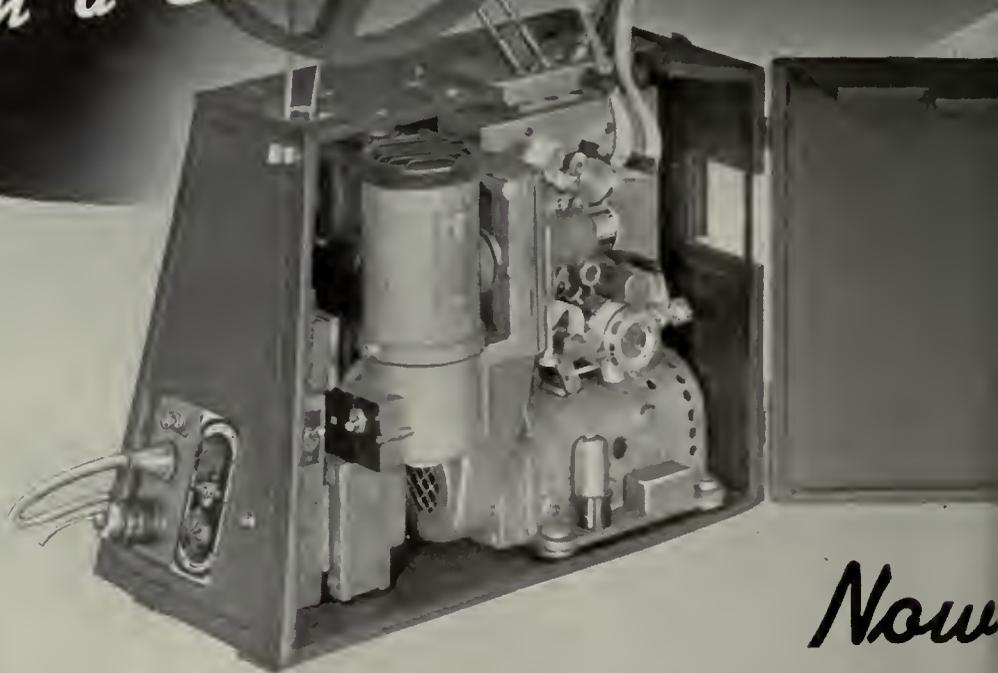
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Motion Pictures — Not for Theatres

By ARTHUR EDWIN KROWS
Editor of "The Spur," New York City

THERE was still another consideration to keep Kinemacolor out of the theatres. Thrust suddenly upon the London market in 1908, its patent claims, granted in 1906, were promptly challenged; and, although in October, 1912, Charles Urban was preparing a studio near Waterloo, in England, to engage in production on an extended scale—and at the same time his American allies were operating another new plant among the pioneer production establishments of Hollywood—the British Patent Office ultimately decided that the process was insufficiently defined in the application for rights, and so virtually threw it open to the free use of anyone who wanted to take it.

The Hollywood studio was closed in June, 1913, although another Eastern studio, in addition to one at Whitestone, Long Island, was opened in October of the same year at Lowville, N. Y. Here, in lovely Lewis County, in the western foothills of the Adirondacks, American Kinemacolor vainly hoped to produce "educationals" in a big way.

There were many other evidences of the processes later to become so important in the production of non-theatrical films—slow-motion, microscopic cinematography, undersea views and views from the sky, and more. Because I do not detail them now does not mean either that I am unaware of their existence or that I intend to ignore them. The purpose in this introductory section is merely to remark that, while the non-theatrical field had no official, separate recognition at the start of the century, the promise and the materials were already there. When we come to that place in the chronological narrative where a concerted move in the direction of non-theatricals is clearly to be seen, we may look upon some of these other important beginnings in the light of their subsequent meanings and so reach a fairer evaluation.

OBSTACLES

THIS record began with an express explanation that films for theatres comes first in any broad picture consideration. Perhaps they do. The public pays for them handsomely; and, their sponsors being accordingly rich and powerful, the playhouse films take precedence whether they deserve to or not. Theatrical pictures were in the vanguard also during this rapidly shifting period at the start of the twentieth century in America. There was no place then for a non-theatrical field. Not only did an eager, growing

audience have to be supplied, but theatres had to be erected; studios were still to be built; systems of distribution awaited organization; and there was too much basic activity for those concerned to pause for dreamers such as non-theatrical specialists would have been considered.

For the dreamers to break in took not only their progressive ideas but a high form of courage and an ability to go down fighting. Even to touch a camera was fraught with danger. Every gadget on it bristled with patent notices and warnings against unauthorized use, while license to operate, as likely as not, would presently be outlawed by a new patent interpretation in the courts. And, as the time for ultimate decision came nearer, the bitterness of the conflict was intensified.

In December, 1908, leading producers pooled the essential devices which they controlled, under the name of the Motion Picture Patents Company. This was after about a dozen years during which they individually had tried to defend their alleged rights by injunctions and prosecutions. Their position was consolidated by the formation of an allied attempt at monopoly, the General Film Company, which bought and operated most of the important film exchanges in the United States and Canada. The immediate result in the camp of the unlicensed producers and distributors was that they also organized on a scale large enough to give battle. In 1913 they had two powerful groups actively fighting the "trust"—Universal Film Manufacturing Company and the Mutual Film Company, each presently to become a corporation as the advantage of that form became evident.

The war was bitter indeed; but it soon became clear, to audiences not interested in the controversy, that the Independents, striving desperately to gain the favor of the public arbitrarily claimed by their rivals—luring away their best players, writers and directors, and developing new genius in their own ranks—were offering better entertainment. So about 1916, the Patents group and the old General Film departed this life to all intents and

Part Two of the first detailed and complete history of non-theatrical films in America recalls events of nearly thirty years ago when such pictures were first officially recognized as belonging to a distinct, independent field with separate problems.

purposes, leaving the field to the upstart rebels. The judicial order to dissolve was first issued in 1915; the Supreme Court decision against the Patents Company and in favor of the Independents, came in April, 1917.

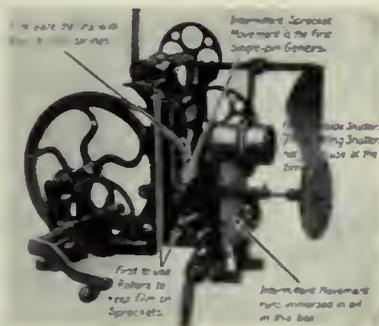
It is easy to see why Universal, for instance, was a likely place in which to find innovations such as the thoughtful dramas of Lois Weber and the experimental cartoon of George McManus. Every time the Independents could find a new line of endeavor, a fresh trail to blaze, they were that much freer of in-

junctions and suits for infringement. Not that they didn't infringe. As alleged outlaws they sometimes found merit in living up to their reputations. They frequently used the patented methods of the vested powers without so much as by-your-leave, and left those presumed masters of the situation to wonder how they did it.

There was the late Dave Horsley's celebrated "mystery box" (or "wonder box," as some preferred to call it), the camera

with which he produced literally miles of unlicensed films, and with which he set himself up, in October, 1911, as one of the earliest film producers in Hollywood. The sudden development of Hollywood so largely by the Independent companies was probably at first less because of advantages of sunshine than because it put so many miles between them and prosecution by the Eastern powers. It must be remembered, however, that it was a Patents Company, Selig director, Francis Boggs, who filmed the first dramatic scene in Los Angeles, about 1907. Horsley had been put to some trouble by the tightening claims of the Patents Company that cameras such as his were violations, and his situation was neither new nor unique. In the beginning the Independents had thought themselves secure in using the Gaumont camera which was supposed to be non-infringing but, in January, 1911, the higher courts had decided adversely.

But Horsley had not been caught then, and he did not purpose to be caught now. As he preferred not to pay royalties on



An Early Portable Projector
Devised by Francis B. Cannock at the old Eden Musée about 1908 and called the Edengraph. From it he and Edwin S. Porter developed the Simplex used today in theatres.

his camera, much less damages, he enclosed it in a huge, curious housing which was in turn shielded from official inspection by day and night guards. I remember the weird speculations over the "wonder box" very well, indeed; and, in later years I became intimately acquainted with Walter T. Pritchard, the cameraman who operated it. To note a contradiction, Walter Pritchard, from 1929 to 1933, was in charge of some of the most highly protected talking picture cameras in the world—those of the Bell Telephone Laboratories in New York.

NEWSREELS AND MAGAZINES

THE second considerable source of what we now think of as non-theatrical material, was the newsreel. The earliest newsreel in this country is said to have been photographed by J. Stuart Blackton for William A. Brady and Proctor's Theatre in New York in 1898. The earliest newsreel regularly issued was "Pathé's Weekly," released first in Paris as a novelty at a theatre called the "Pathé Journal" about 1906, and brought to New York in 1910 at the instance of Jacques A. Berst, American manager for Pathé Frères. Bert Hoagland was its first American editor. In January, 1914, when William P. Helm, Jr., former city editor of the Newark *Star*, was appointed to command it, this release was admitted to an especial arrangement with the Associated Press.

Before the newsreel, dependence for "educationals" has been almost altogether on the splits; but this release was all news, and was so advertised. Timeliness was made a particular aim. To differentiate this clearly, "Pathé's Weekly" presently was renamed "The Pathé News." It is scarcely necessary to add that under that same title (although with the *accent aigu* long since abolished), it still flourishes. Long may it live! The policy of issuing it twice a week was not begun until June, 1913; and in June, 1914, it met its growing and cutthroat competition with a daily release.

Cutthroat competition had promptly become a common experience in films as in most other new industries. No sooner did Pathé prove the profit in this venture than other companies hastened to collect by the same route. With fewer facilities, however, they were obliged to proceed more cautiously. Pathé Frères was possibly the largest motion picture concern in the world. It had studios in France, Russia and Spain. In the spring of this same year, 1914, it opened additional plants in Germany and the United States. Unlike its competitors, it could afford to support a newsreel of wide appeal which required merely a change of title from the "Pathé Gazette" of Paris, to become the "Pathé News" of England and America, the "Pathé Giornale" of Italy and to be known by some other designations in Russia and Germany. Moreover, it was easier, from the standpoint of sheer mileage to encompass from Paris the leading cities of Europe than link them from New York.

Nevertheless, the American companies

were to learn presently to do even that, and to span also the distances between New York and the other cities across the wide spaces of North America. In 1912 the Edison Company of New York sent what is said to have been the first newsreel expedition of its kind, into the high Sierras to photograph the Forest Rangers fighting timber fires. Harry Gaut was the cameraman; and he was accompanied, while in Madera County, California, by Forest Ranger Paul Redington, later to become chief of the Bureau of Biological Survey of the United States Department of Agriculture.

Vitagraph made a compromise start in the summer of 1911 by issuing a monthly release of topical subjects. Then the dauntless Col. Selig, of Chicago, opined that the persons who knew most about news were newspapermen; and he allied himself with an ever ambitious



J. Stuart Blackton

In 1897, with William T. Rock and A. E. Smith, he founded the Vitagraph Company of America. There he proved many possibilities of the motion picture camera, including cartoon animation.

publisher to issue the "Hearst-Selig News Pictorial." This lasted until December, 1915. Then Hearst transferred his interest to New York and, in January, 1916, began a fresh but brief alliance in the "Hearst-Vitagraph News." Another short association, a year later, was the "Hearst-Pathé News," and, later still, came the Hearst "International Newsreel." Selig consoled himself by tying in with the Chicago *Tribune* to release "The World's Greatest News Film," whether it was or not. There were, of course, other newsreels, including the "Mutual Weekly" and the "Universal Animated Weekly" which was started in 1912; but other histories, with more interest in the theatrical phase of motion pictures, may be consulted for details about those.

There had been previous, successful efforts to present news events on the screen, one as early as 1896, when Robert Paul showed the Derby at the Alhambra Theatre in London, twenty-four

hours after the race had been run at Epsom Downs. And then, of course, there was the notorious hoax by A. E. Smith of Vitagraph, photographing some models and calling the result "The Battle of Manila Bay." They tell stories today about contemporaneous audiences being completely hoodwinked by this; but I do not believe that they could have been—really. I saw the subject some years later, privately, as a curiosity. It was brazenly crude—even for then.

The newsreel as an institution clicked into instant popularity—so much so that some of the theatrical men tried to eliminate it. It had an exceedingly short life as compared with the endurance of other offerings, and an extraordinary number of prints had to be made to serve all the theatres requiring it simultaneously. But at the first omission the public protest became an ugly growl of warning. The exhibitors heard and so did the producers—and the public still has its newsreels.

FIELD PHOTOGRAPHERS

A NEWSREEL organization obviously required the stationing of cameramen over the country at strategic points. Competent operators were therefore so placed. Pathé, with international centers, could control such workers. But, obviously again, news did not always "break" in supposed vantage areas; and it would have been grossly impractical to try to maintain salaried photographers everywhere. This was especially true in the United States, where laboratory centers were few and far between. Consequently, the newsreel organizations, like newspaper services, opened a market to free-lance contributors, offering to pay for just what footage of theirs was used.

What these volunteer cameramen sent in was not always news. However, the material frequently was interesting in other directions, even if it did not meet the definition of timeliness. Oddities, human interest subjects, revelations of how-things-are-done—all these were needed for the "educational" half of the old split, especially now that the short story portion was being lifted out of such cramped quarters for an easier release on its own merits. The initial success of the split had proved there was a public for such things—it was continued actually into 1916—and, the unit now being more generally understood to mean a full reel, the "educational" hodge-podge became that length, too, and was dignified with the generic title of "screen magazine."

Hence the "Pathé News" and the "Gaumont News" were followed speedily by the "Pathé Argus-Pictorial" and later the "Pathé Review," and "Reel Life," the "Gaumont Film Magazine." Gaumont represented the conservative or Mutual camp of the two Independent factions. Of course the extreme Independents had to have theirs, too, so to the great indignation of the old guard, the "Universal Animated Weekly" and a companion "magazine"—Jack Cohn the first editor—came into existence. "Kino-grams," founded by Charles Urban and

George McLeod Baynes, did not appear until after the World War, while the "M.G.M. News" was much, much later.

This rapidly expanding market for free lance photographers, the settling Patents situation, the greater provision of more dependable, properly-perforated film stock and the increasing availability of worthwhile equipment at reasonable prices, had much to do, as one may readily imagine, with the encouragement and rise of small, local producers. Soon the mysteries of the profession ceased to be the exclusive possession of the cities of the Eastern seaboard, spreading generally over the national map through the efforts of the new practitioners.

The market for the newsreel and magazine contributors had a saturation point. Two dollars a foot for usable negative became the average top price; and such large quantities of material poured into the newsreel headquarters for examination that the buyers became "choosey" and individual purchases were small. The independent local cameraman, who no doubt had envisioned a rosy future and who perhaps was trying to pay for his camera and other equipment out of non-existent profits, began to look around for other sources of income.

What better than to persuade the local factory people to make a picture? There the proud manufacturer, thinking of his prosperity as due wholly to his own efforts and in no way to the changing economic conditions of the country, readily agreed. Thus impetus was given to the production of industrial films. In a chapter, contributed to Charles Davy's *Footnotes to the Film*, John Grierson has characterized such subjects, in a memorable phrase, as "Sponsored in pride and produced in contempt."

THE FIRST INDUSTRIALS

I SPEAK of the industrial division as already started. The early Patents companies had tried to force that phase at the very outset, being anxious to develop as many potential lines of profit as possible, but they did not carry it much beyond the studio vicinities. The directors of the old Edison Company, for example, had been obliged in their scant spare time, to make commercial pictures for outsiders willing to pay for them. I have been reminded of this by the late Ben Turbett, then a member of the Edison production staff. He personally made a number of factory subjects of that sort between theatrical releases.

Nor was this cooperative spirit peculiar to America. In the early Urban catalogue one may read of a film showing the arts of editing, printing and publishing as practiced by the *Tatler* and the *Scotsman*, of another illustrating "The Tweed Industry of the Isle of Harris," and of others which imply tradesmen willing to pay in one way or another for screen publicity. And, in America, the habit was not exclusively that of the Patents companies. Witness, as one of a host of Independent industrials, Carl Laemmle's IMP film of 1911 on the cotton industry.

One may not positively accuse the large production companies of taking money from industrial clients for making such films and also from theatrical exhibitors for showing them; but the suspicion that they "worked both ends against the middle" seems confirmed in noticing events as the years go on. In 1910 the Edison Company was not so much to be impugned for producing a film on the dangers of impure milk, entitled "The Man Who Learned" and endorsed by health leaders in Washington, Milwaukee and San Francisco. Nor was it to be censured for issuing a few months later, "The Red Cross Seal," approved by the American Red Cross and the National Association for the Prevention and Cure of Tuberculosis. But "King Cotton" (advertised as having forty scenes), emerging into the light under the Edison trade mark that same year and tracing cotton goods manufacture from boll to bedsheet (a formula which was to become standard for factory pictures for many years thereafter), smacks strongly of commercial propaganda.

In 1914 to 1915 the mask is surely off, for then Edison announces a study of the silk industry made at the plants of Skinner's Silks and Satins and the Corticelli Thread Company; and an Edison film, called "The Making of a Shoe," is shown by the United Shoe Machinery Company at the Panama-Pacific Exposition.

Let it be thought that Edison stood alone in such American ventures, behold the Lubin Company's 1910 study entitled "Marble Quarrying," and its "Tobacco Industry" in October, 1911; Selig's "Industries of California," a "1,000 foot educational item of rare value," dealing with pigeons, alligators and ostriches, that the exhibitor could order, in accordance with the Patents custom of the time, by the code word "Animals"; Kalem's 1915 collaboration with the *Ladies' World* to produce a two-reeler on impure foods quaintly entitled "Poison"; Essanay's 1915 ten-reel film on watch-making for the Elgin Company; Kinemacolor's open bids for commercial pictures to be made by that process in 1911, accepted by several railroads and cereal companies and by the National Cash Register Company, whose \$30,000 contract called for a view of its main plant from a balloon!

But what will the purists say upon hearing that in 1909 or so, that promising young director, David Wark Griffith, produced for Biograph "The Story of Coal," "The Story of Wheat" and so forth—subjects which dear, loyal Frank Woods glossed over by calling them "film editorials"!

Of course, one is not to assume that the pressure to make sponsored subjects came all from the motion picture men. There were plenty of eager would-be clients to propose the doing and, no doubt, frequently to insist upon it. In all events, wherever production men were available, the practice was to be found. Even in California, which in 1909 had barely been touched by the advance representa-

tives of a future leading industry, the motion picture of this type reared its head. A half-reel lecture film on the wine industry was produced in that year near Fresno, at Wahtoke vineyard, under the personal direction of Horatio Stoll, secretary of the Grape Growers of California. Possibly the Selig unit, which was investigating the picture possibilities of the State at that time, and which produced the "Industries of California" mentioned a paragraph or two back, supplied the equipment and the technique. Odd coincidence, though, that the honorable secretary should bear a surname later to become so celebrated in English filmdom!

"Film editorials," rather than "semi-educationals," would have fitted Selig's equal suffrage film. "Your Girl and Mine," announced in 1914 for production in ten reels in association with the National American Woman Suffrage Association—half financed by Mrs. Medill McCormick and half by Selig, himself. Giles Warren directed that one. It would have applied even better to the same producer's "The City of Boys," concerning a Michigan summer camp maintained for wayward lads, and to Vitagraph's earlier "safety first" film, "The Price of Thoughtlessness," directed by Ned Finley who did also "The Price of Thrift" for the United States Bankers' Association. In 1914 Finley was making still another under the mark of Vitagraph, a fire prevention film for the New York Fire Department.

Today we group pictures of that sort under the heading of Social Service. Some recalcitrant soul probably would wish to classify under the same heading, the films on beer-making, shown in Texas in 1911, to counter the then-rising forces of Prohibition.

THE FORK IN THE ROAD

ANYWAY, somewhere in the four-year period from 1910 to 1914, there was discernible to persons living then and with no precise information concerning what the future was to bring, a definite trend toward a non-theatrical field. Frank Woods, writing in the *New York Dramatic Mirror* of July 9, 1910, remarked it. He said flatly that the motion picture theatre could not subsist on educationals alone, answering the prophecy which had been uttered here and there that educational subjects would ultimately be the chief fare to be offered by the theatres. "The primary purpose of the theatre," he said, "is entertainment."

But there was no single effort which produced the change. It was brought about, rather, by an accumulation of many minor happenings, such as the desire of the factory owner to see his own achievements on the screen, the wish of the local cameraman to augment his income, the hope of the minister to regain the wandering attention of his flock, the more convenient and cheaper supply of film stock, and other conditions, a few of which have been indicated.

I have fixed on the year 1910 rather arbitrarily, perhaps, as the approximate

date of the full start of the non-theatrical field in America. Quite certainly the sharp separation from the theatrical side came somewhere in this period. The year 1910 is favored largely because of two pointing circumstances which are at least symptomatic of the change. The first is that, in June, 1910, the Patents Company issued a bulletin warning exhibitors that "advertising pictures supplied by others than licensed exchanges are not licensed for use in public exhibitions," and saying further that, "advertising pictures made by a licensed manufacturer, may be displayed in private only for the convenience of the advertiser and his associates but such pictures may not be displayed during a regular performance."

The second circumstance, also in 1910, had to do with the distribution of educational films; and in that connection, on a later page, I will remark it. There is even an excellent third reason, which is that in 1910 was founded the first exclusively industrial production company; but for the present we may ignore that, too.

Issuance of the warning bulletin implied that there must have been more than academic objection to the practice of showing advertising films in theatres. So there was. Some of the opposition came undoubtedly from regular producers; but the disfavor of exhibitors who protested the presence of advertising subjects among the regular releases from the exchanges was more serious. As I mention this I am looking again at an especially strenuous note of condemnation written by a theatrical exhibitor to the *Moving Picture World*, published in the issue dated September 10, 1910. It was part of a discussion started in the spring when the well known writer on "big business" subjects, James H. Collins, had an article concerning the situation in the paper known commonly and profanely as "the advertising man's bible"—*Printer's Ink*.

SO THE PICTURES WENT TO CHURCH

THE interest of the church, strange as it seems, was one of the first to win results. I say "strange as it seems" merely because of the church's traditional distrust of the theatre; but, as a matter of fact, the first modest circuit of places for the exhibition of motion pictures, unsupported by jugglers and clog dancers was a chain of Houses of the Lord.

In 1900 one Archie L. Shepard, exploiting the first movies to be seen in the smaller communities of the midwest and northeast, used them to make up a complete evening's entertainment. Since

1896, his projector then an Amet Magniscope (developed for George K. Spoor by E. H. Amet of Waukegan), he had been presenting his pictures as a vaudeville turn, as the custom was; but now he couldn't obtain theatres for his new project. Consequently he used churches. They had the only available halls large enough. The wonder is that he obtained permission. His film subjects must have been particularly immune to moral criticism; and then, it is said, he had a way of ingratiating himself by lending his pianist, soloist and some of his pictures to a church before he conducted a show there for himself.



Dr. William Henry Maxwell
New York school superintendent who
supported classroom films in 1910.

Shepard had no real heart in this uphill, non-theatrical field. It was but a stepping-stone, in his estimation, to a larger goal, and he worked incessantly toward that. This ultimate aim was to book full-length entertainment picture programs in regular stage theatres. Eventually he persuaded the Cahn & Grant circuit in New England to let him play its houses on Sundays when they otherwise would be closed. His great suc-

cess at this, and in subsequent tours of the smaller cities, took him permanently out of non-theatricals but, in 1904, he was said undoubtedly to be "the largest single exhibitor of motion pictures in the world."

It has been supposed that Shepard may have derived his idea of an all-film show from his earlier management of the dramatic reader, Clara Louise Thompson. She had appeared on the lyceum circuits in what she called a "picture play," a four-act drama entitled "The Chinook," the text of which she read while slides were presented in fairly rapid succession on a screen. There is question, to be sure, whether or not one needs to trace any such precise inspiration for Shepard. Lantern slide narratives were old enough in all conscience. A proof taken at random is that letter of Madame de Grafigny in which she tells of her visit to Voltaire at Ciry, when he showed lantern slides while he made daring and witty comments on foibles of the day. And yet, the illustrated story was, in many respects, a radically different form.

Actually there were several attractions of the Thompson sort simultaneously on the lecture routes. They were all inspired, I have no doubt, by the popular and pleasant experiments of Alexander Black, New York author and newspaperman—and of more recent years one of the editors of King Features Syndicate. Black, an enthusiastic amateur photographer, had tried his hand at building a story in successive, closely related lantern slides,

with an accompanying minimum amount of lecture spoken by himself.

In the course of the presentation he had moments when the changing slides were so slight in their differences of scene that an especially quick change gave startling illusions of movement. An "effect" showing President Cleveland pounding a table was especially sensational. Black's novelty act on the Pond circuit became very well known. His first picture play, "Miss Jerry," was widely described in the newspaper press, and *Scribner's Magazine* published it in full, all this, of course, helping imitators to work out "picture plays" of their own.

The appearance of two "Passion Plays" about 1897 or 1898, both given considerable publicity, must have aroused great interest in the church field, surely suggesting proselyting possibilities of the medium. One was the aforementioned production by Richard Hollaman, and the other was an authentic reproduction of a real passion play, made in coöperation with the theatrical firm of Klaw & Erlanger at Horitz, Germany, the potential profits of which Hollaman had been trying to anticipate. Ironically enough, the greater success was won by the spurious version.

A print of the Hollaman play made from the negative produced in 1897 and controlled by Edison, was acquired in 1898 by the evangelist Henry H. Hadley. He took it for exhibition at the Methodist convention ground at Asbury Park, N. J., and thence on the road for a highly remunerative tour. In the meanwhile, in 1898, Edison's pioneer cameraman, William K. L. Dickson, had stirred the ecclesiastical world anew by producing, with Mutoscope and Bioscope, the first motion pictures to be made in the Vatican, his subject the gentle and much interested Pope Leo X.

In 1910 the place of motion pictures in church work was so widely admitted that the *Moving Picture World* maintained the Rev. W. H. Jackson on its editorial staff to review new films suitable to churches, while, through the same columns, W. Stephen Bush, a lecturer residing in Philadelphia, volunteered repeatedly to show clergymen how they might present movies to their congregations. Numerous trials of the new medium in churches were eagerly reported, including enthusiastic demonstrations by ministers at Pasadena, California; Appleton, Wisconsin, and Brooklyn, New York—where films were shown twice a week in the Church of Our Lady.

At New Britain, Connecticut, Pastor Herbert A. Jump, who had wished for motion picture equipment and had had it amply supplied by a well-to-do friend of South Congregationalist Church for a test of thirty evenings during the summer of 1910, was so elated by his experience that he printed an elaborate account in the following year to guide the brethren of the cloth who might wish to emulate him.

Of course, the churchmen were not wholly in ignorance of what religious pictures might do for them. They already

had provisions in many places for showing lantern slides illustrating bible stories. No doubt Mr. Charles B. Kleine, a New York optical manufacturer who had substituted the calcium light for the old oil lamp in magic lantern projection and was selling his improved, duplex, dissolving stereopticons widely, had encouraged the idea. Also, there may have been more than chance in the fact that Mr. Kleine's son George who, by taking an important part in developing exhibition systems, had become the world's largest film distributor, imported from Italy, in the season of 1912 to 1913, the "stupendous" Cinés Societa Italiana eight-or nine-reel production "Quo Vadis," based on the powerful Sienkiewicz novel of the same name. This venture is said to have brought the younger Mr. Kleine a half million dollars in the first twelve months of his management.

But George Kleine's most outstanding religious importation, exhibited soon after by arrangement with Klaw & Erlanger, owners of the stage rights was the Italian version, made in Rome, of Lew Wallace's story of the Christians of the first century, "Ben-Hur."

LYMAN HOWE

WHILE Kleine was opening the church field, wittingly or unwittingly, by the showman's angle, another pioneer was penetrating it by a different route. This was Lyman H. Howe, of Wilkes-Barre, Pennsylvania. Howe had begun his adult career by working for the railroad, progressing as far as the post of baggage-master. From here, in March, 1890, he stepped forth as a lecturer with traveling shows to introduce the lately-invented phonograph. He had distinguished company. Bernard Shaw did the same thing from a cart-tail in London.

In Howe's case it made him particularly susceptible to news of new Edison achievements; and six years later he found through that interest his celluloid ladder to fame. Gathering all the suitable motion pictures to be obtained through the thrifty application of his modest resources, he joined the pieces to make a full evening's entertainment—the average length of a film subject then was fifty feet—and exhibiting it, met with immediate success.

Howe and his movie shows—for he speedily developed others—soon became familiar attractions on the church and lyceum circuits. His fifth motion picture company opened in Cincinnati May 20, 1910, with the announcement that it would play only "large city time" of one to six weeks in each place. I find newspaper references to the popularity of his shows in New York City in 1911. Also in January, 1914, when he put on a Sunday performance there. The circumstances then so impressed local newspaper reporters—who seemingly did not realize that Sunday was the practical time for a poor proprietor of a peep-show to hire a regular theatre and that sanctity had nothing to do with it—that they referred to him as "the Reverend" Lyman Howe. Only

"sacred" and "educational" performances were lawful in New York on Sunday in those early years.

In June, 1917, Howe opened New York offices at 729 Seventh Avenue, for the purpose chiefly of inspecting and buying for his programs all the likely film material in the market. At that time his organization consisted of two parts. One was the production division, called the Lyman H. Howe Films Company, with studio and laboratories at Wilkes-Barre, and the other was Lyman Howe Attractions, Inc., operating the traveling companies which for twenty years had been exhibiting in about five hundred American cities twice each season.

In the early days, at least, Howe's chief projectionist was Edward Hadley, who had operated the Lumière cinematograph at the Union Square Theatre in New York in 1894. In later years Hadley became an exhibitor himself. Howe's general manager was S. M. Walkinshaw, also an early associate; and under him was a corps of cameramen and animation artists, turning out new material constantly.

It was said in 1914, just before the outbreak of the World War, that the name of Lyman H. Howe had become known in every city and town east of the Mississippi. One is interested now to know that in the presentation of his pictures he used sound effects from behind the screen and that in certain comic interludes produced for him at the Lubin Studio before he went in for production on his own account, he had dialogue spoken in the wings by actors who attempted to synchronize what they said with the moving lips of the actors in the silent picture.

Howe didn't like silent screen entertainment at any time. Even in his travel subjects he worked studiously to do without subtitles. One of his most successful "effects men"—"imitators," he called them, to give life to the pictures"—was LeRoy Carleton, who died, much-lamented, in 1910, at the early age of thirty-three. What a support Howe would have been for the modern talking picture!

When he, himself, died, March 30, 1923, it was said that he had accumulated out of this business a fortune of half a million dollars. A half million dollars, it will be observed from two references to the amount, seems to have been the current measure of a successful life. However, the Howe enterprises did not cease with the death of the founder. The business continued from the now-historic headquarters at Wilkes-Barre, tapering gradually off until, in November, 1935, the remaining

equipment was sold by the trustees.

There probably were others beside Lyman Howe who presented picture shows on the lecture circuits in the very early days, but certainly there were few who were content to remain there and develop the work. Once they had won a foothold in the glamorous world of picture-making, their goal became the theatre. Take the case of Charles J. Hite who, at the age of thirty-eight became president of the Thanhauser Corporation and first vice-president of Mutual Films.

Originally a school teacher in Fairfield County, Ohio, he became interested in organizing shows for lyceums. By 1906 he had found films to be such popular attractions that he formed the C. J. Hite Moving Picture Company to supply the lyceums already served in other ways by his bureau. Nevertheless, he used that success merely as a stepping-stone to more profitable branches of the business. When an automobile accident cut short his career in the summer of 1914, most of the city newspaper obituaries observed that he probably had been the first person to use the cinematograph through a lyceum bureau. Of course, the writers of those notices probably never had heard of Lyman Howe, whose greatest triumphs were in smaller towns.

The non-theatrical motion picture show of the pre-war days was typically one using discarded theatrical films, rented from a showman who carried his machine and screen with him and operated the projector himself. We have seen that there was plenty of used "educational" movie material and at least two outstanding, aggressive managers of road shows, Howe and Shepard, with that splendid character, George Kleine, better situated and trying to see his way to an organized, national non-theatrical distribution.

Although Kleine subsequently became one of the successive "executive vice-presidents and general managers" of the General Film Company, from April, 1910,

to May, 1913, and in that capacity had his attention directed mainly to the theatrical field which he even served regularly with theatrical features produced by his own organization, he never completely deserted non-theatricals. Indeed, after leaving General Films he seems to have spent most of the time permitted him by broken health, developing the lesser market. From his case and that of Charles Urban notably, one may see how it is that once a person has glimpsed these opportunities for service

in motion pictures, it is almost impossible ever to forswear the vision.

(To be continued)

Next Month

November's installment is the story of New York's 1910 plan to use 1,000 classroom reels offered by theatrical distributors, and describes early attempts to solve projector and film problems. If you did not begin this important history with the first installment, you may still procure back numbers by remittance with order. For a limited time, new subscriptions will be accepted to start on request, with Part One in the September number.

Preparing Sound Film Strips

Full details of procedure for the production of effective teaching material in the form of sound-film-strips.

By CHARLES R. THOMAS
Bureau of Public Roads,
U. S. Department of Agriculture

THE production of a sound film strip requires close attention to many small details for a successful picture. The technique of script preparation and the laboratory work of production are allied to motion pictures rather than to lantern slides although the film strip may be said to be an outgrowth of lantern slides.

The sound film strip furnishes a comparatively inexpensive medium for telling a connected story in pictures that cannot be disarranged nor the lecture accompanying the pictures garbled by a poor speaker. The sound strip has found a place in teaching and in industry. An automobile dealer may be a poor demonstrator of a new vehicle model if the details are unfamiliar. The film strip gives him the details and aids in the demonstration. The teacher is saved many hours of study in preparing lectures on specialized subjects. The sound-projection equipment is compact and light in weight.

There is no standard form or typical kind of information for sound film strip use any more than there is for lantern slide presentation. The only safe rule is the one used by all good speakers: fit the talk and pictures to the audience. The old example also applies of the shotgun loaded with many small ideas as compared with the rifle with its bullet of concentrated and connected information. Film strips may be highly technical or they may be so filled with elementary explanation as to be trite to a technical audience. Their chief value is for exact presentation of the educational type; for entertainment they are an inferior medium to motion pictures, with their animation, and to lantern slides, with their better quality of pictures.

Preliminary Script Production

The first question to decide in the production of the preliminary script is whether the story is to be told with emphasis on the pictures, or whether the pictures are to be used merely to illustrate the lecture. This emphasis will depend on how well the pictures explain the subject. As a rule, pictures should be projected rapidly with short verbal descriptions that seek to make the pictures tell their own story. The lecture should elaborate the ideas provoked by viewing the pictures and should never repeat the story plainly told through the eyes of the viewer.

A 15-minute lecture usually requires about 70 pictures, or frames as they are called, and a lecture of this length fills one side of a disc sound record. A longer lecture necessitates a delay in changing the record and is not desirable.

As a first step, the idea to be explained in the film strip should be crystallized in a preliminary script. Pic-

tures available will often suggest ideas for this script. Figure 1 shows a convenient form for a preliminary script. The frame or sequence number is given, a short description of the picture in hand, to be found or to be made, is written often with a thumb-nail sketch, and a rough draft of the lecture is prepared. Such a preliminary script indicates weak points in the continuity, especially in the picture story. Revision of the preliminary script usually is necessary to suit the pictures.

Photographs Should be Sharp

A good picture for a film strip, first, should meet the requirements of the story and, second, should have photographic quality that will permit successful copying. Any size of photograph may be used provided that,

PRELIMINARY SCRIPT	
for	
:Bituminous Road Construction	
1. Title	Music plays and fades to BITUMINOUS ROAD CONSTRUCTION Music swells to
2. Credit title	(Standard Credit Lines) Music fades to
3. Illustration on p. 5 for source "Roads of Antiquity"	The earliest known use of bitumen in road construction seems to have been in ce- menting the bricks of a pro- fessional road at Assur. Similar roads were built in Babylon.
4. Old-style heating ket- tle for bitumen (Find kettle to photograph and include man with thermometer in pic- ture.	In building these ancient roads the heating kettle (of which this is a more modern version) was a necessity and remained so up to a few years ago.

Figure 1. The first page of a typical factual preliminary script (Actual size 8½x11 inches)

in the small sizes, the negative is available for making an enlargement. The frame of the picture as it appears on the screen depends, of course, on the aperture of the film strip projector which should be slightly smaller

than the aperture of the motion picture camera used in copying the photograph. The standard apertures are about 3/4 by 1-inch size. Enlarged, this proportion is about 6 by 8 inches; 4 by 5-inch and 8 by 10-inch sizes also approximate the proportions of the film strip frame.

Figures in the photographs should be large with action apparent but avoid, if possible, the appearance

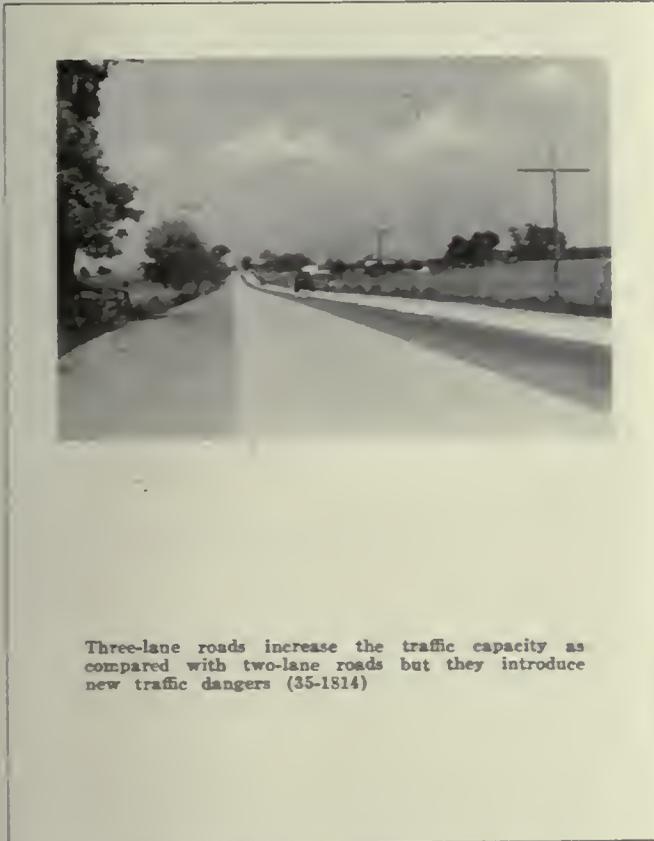


Figure 2. Typical final script sheet from a loose-leaf book.

of suspended animation such as a man with a foot in the air. The rules of good picturization apply to film strip pictures with emphasis on good definition or sharpness that will permit a good copy. In photographing, stop down the exposure as much as light conditions will permit to insure sharpness of details at all distances.

Final Script Preparation

For the final script a loose-leaf binder book to hold stiff white 8 1/2 by 11-inch sheets of paper is used to aid in the assembly of the pictures. The lecture for each picture is written either on another piece of paper attached to the sheet with a small piece of adhesive tape, if many changes in the text are expected, or it is typewritten directly below the picture. The picture may also be attached with adhesive tape, or the paper may be slit for the insertion of the four corners of the picture. A typical sheet is shown in figure 2. With this arrangement changes are made rapidly in the order of the text and pictures.

If dialogue is desired in the lecture, several types are available as in playwriting. Perhaps the simplest form of dialogue is to have a second voice interrogate the lecturer. This permits abrupt changes in thought without injuring the continuity. Another voice may be in-

troduced at convenient points in the lecture to explain new subjects. Conversation of the rapid-fire question and answer type often may be used to advantage.

Preparation of Photographs

The most satisfactory method of preparing the photographs for copying on film strips is to enlarge the pictures from the negatives to not less than 8 by 10-inch and preferably a 10 by 12-inch size with the principal objects in each picture falling within a 6 by 8-inch field. An inch or more additional picture margin on four sides allows space for a variable camera frame line. Vertical pictures may be enlarged so that horizontal proportions result by omitting a part of the picture.

If the picture on the screen is to be framed by the projector aperture, probably the most satisfactory type of projection since it eliminates half-tone frames around the picture, the proportions of the picture should be those of the projector aperture. Following are data on apertures:

Type	Apertures in inches
Motion picture camera (silent)...	.0747 by 0.999 6 by 8 approx.
Motion picture projector (silent)...	.600 by .835
Film strip projectors (sound) S.V.E....	.0675 by 0.900 6 by 8 approx.
Visomatic695 by .895

The object of enlarging the photograph is to give all of the pictures the same tone and intensity and to permit retouching. Laboratory problems of timing and developing are much simplified by the uniformity of the picture to be copied on the film strip. For example, it must be remembered that all of the pictures on the negative of the film strip remain in the developer the



Figure 3. Template on a picture card to be used in making the film strip.

same length of time even though the quality of some of the pictures might demand a longer or shorter period of developing. For these reasons, picture enlargements are usually made direct from the negatives and on bromide paper of a semi-gloss type. Clouds may be inserted in vacant skies by using an additional cloud negative. This use of clouds in the sky usually increases the interest of the picture and also avoids the effect of scratches on light sky areas.

Since scratches, due to adjustments of the projector, appear early in the life of all film strips and disfigure the light areas, it is desirable to reverse charts and diagrams so that they appear with white lines on a black background. This also improves projection by removing some of the light that adds to the illumination of the room.

Copies must be made of some photographs to obtain negatives from which to make bromide enlargements.



Figure 4. Title for a factual film strip subject.

The prints from which these copies are made should be sharp in all distances and have contrast in light and shadows but they should have shadows from which all the detail has not been lost. The texture of the paper shows less if prints for copying are made on glossy stock.

The bromide enlargements are then mounted on black cardboard, usually 11 by 14 inches in size, using a hot press and transparent mounting tissue. The mounting must be firm to permit retouching. The name of the strip, the photograph identification, and the sequence number in the story are written in white pencil at the top of the card.

Each mounted picture is tested for field by using a template like the one shown in figure 3. Retouching follows. Highlights are put in photographs that have no contrast, prints that are not the right shape are built out, and all necessary fine-grained retouching done.

Titles are prepared to fit the mood of the picture. A typical title for a factual film strip is shown in figure 4.

The laboratory details of copying, developing, and printing are matters for the photographer. This article seeks to present only such information as is necessary for the writer in preparing film strip material.

Making Sound Records

The recording practice in the preparation of radio transcriptions is practically the same as for film strip records. Sound film strip projectors operate at 33 1/3 revolutions of the disc per minute. Ordinary phonograph records of higher speed cannot be used on these machines.

A narrator script is prepared that contains only the words to be spoken, has no carried-over paragraphs, indicates the bell signals for picture changes, and aids

in accurate timing. Figure 5 shows a typical narrator script.

The narrator should be experienced and, of course, have a voice that records well. Only a voice test will determine recording quality.

The lecturer is usually introduced with music that is lively—avoid doleful tunes—and he is followed by the same kind of music. The narrator announces the title of the lecture as the music fades at the introduction; as the music swells again a credit title appears on the screen. The music then fades as the lecture begins.

Lecture notes are sometimes prepared for use with a silent film strip projector, or where it is not desired to use the sound record. The frame numbers often appear on the pictures for convenience in following them with the lecture.

As a rule, only one film strip should be shown at a time. The attention of the audience lags after 15

HIGHWAY RESEARCH HIGHLIGHTS

Script for Recording

(Music begins) (Music fades) (15 seconds)

First Voice Highway Research Highlights (3 seconds)

(Music increases in volume)

(Bell 1)

(Bureau credit slide. 9 second pause)

(Bell 2)

(Music fades) (5 seconds)

(32 seconds)

George Washington in a speech to both Houses of Congress in 1790 said about research:

"I cannot forbear intimating to you the expediency of giving effectual encouragement, as well to the introduction of new and useful inventions from abroad, as to the exertions of skill and genius in producing them at home; and of facilitating the intercourse between the distant parts of the country by a due attention to the post office and post roads."

(Bell 3)

Figure 5. The first page of a typical narrator script

minutes of recorded talk. A dark exhibition room and a good screen improve the presentation. Sound film strips should be shown following silent pictures and preceding motion pictures. The order of interest is usually: silent still pictures, sound still pictures, silent motion pictures, sound motion pictures.

AN EXTREMELY valuable summary in the field of psychological films is *A Review of Sixteen-Millimeter Films in Psychology and Allied Sciences*, by L. F. Beck of the University of Oregon, Eugene, Oregon. The author lists psychological films now available, evaluates many of them, and makes a number of suggestions for production in this field. This pamphlet may be obtained from Mr. Beck at a cost of ten cents.

(The News Letter, May, 1938)

What I Want From The Producer of Educational Films

An open letter from a teacher — giving frank criticisms on educational film material now available, with definite suggestions for improvement.

By DONALD C. DOANE
Caruthers High School, California

LAST semester, as has been my usual practice, I used many educational motion pictures, and have already scheduled more for next semester. I feel, however, that both the films and the methods of distribution are falling short of providing the service to education that they might well render.

Perhaps a few words from the teachers who use these films—their criticisms and suggestions—might affect future plans. In the hope of thereby obtaining a better product, I am, as a representative teacher, telling of some of my experiences and venturing to suggest, in the light of these experiences, some ways in which the product might be made more suitable for the use for which it is intended.

In order that situations may be made more concrete, difficulties and problems are described as I met them, relating them specifically to my high school classes. This does not mean, however, that these are my problems alone. Judging from conversations with other teachers as well as from the results of experimental observations, I believe they may be accepted as typical of the reactions of the teachers who use this valuable educational device.

Dear Mr. Producer:

This year I inaugurated a new science course. It is a combination of the important basic concepts from the various sciences necessary for an adequate cultural background, together with "consumer education" and the how and why of the many devices for better living today. It is a course containing an extensive range of subject matter with many topics, the majority of which must be presented and studied in essence. Yet I want the pupils to have a thorough understanding—an appreciation of the ideas involved. This, it is generally conceded, is a situation where visual aids, particularly the motion picture, are at their best.

After outlining my course, subject matter, methods and time, I first set out to find motion pictures to give surveys of the sixteen units, that is, a film to introduce and summarize each of the units. But I was greatly disappointed. The first unit occupying three weeks is concerned with astronomy, geology and weather. The first two topics I found to be most effectively covered in a series of ten films primarily made for college use, but widely advertised and offered for elementary and secondary schools; but no adequate survey film for either topic or for the whole unit could be found. To cover

the field would necessitate using the entire series which, in my case, would mean using about one film, each on a different topic, per day.

According to accepted techniques for the use of educational films, such as these, I should first introduce the topic, including an introductory showing of the picture and setting of problems; then should come the solving of the problems with independent research and cooperative efforts by the pupils. This may require a supplementary showing of the film (some say several supplementary showings). Next comes the recitation and summarizing of the topic accompanied, of course, with a final presentation of the film to integrate the concepts. At the rate of one film per day, all of this including, say, four showings of the film would be covered in a one hour period. These are sound films and require, considering time consumed in setting up, etc., about fifteen minutes each. It is fortunate that I use my projector in my classroom; in many schools the pupils have to go to a special classroom or auditorium to see a film. And yet, if I only use a few of these films, I am putting disproportionate emphasis on those single phases of the topic.

Perhaps you answer that you cannot please every teacher, that you have to produce for the majority of schools, not the special needs of the few. But where are astronomy and geology taught? In general science or similar courses. You will grant that few, if any, secondary schools teach these subjects as separate courses. And how much time do they spend as a rule on these topics? No more than I intend to at the most. Therefore, to use these films properly I would have to concentrate on a few of the topics within the subjects, which, in effect, means that I must run my classes to fit the films and not in accordance with the needs of the pupils. And you say that you are ready to produce more films and better ones if there is a market for them? Perhaps operating in accordance with the rule "The customer is always right" might improve the market.

Nevertheless, I am using four of these ten films in the first unit. The object of my original search, a film as an organizing device, is still lacking. Those I will use will be of aid in clarifying the concepts which they cover, but each concept is covered in so much detail that I can only afford the time and cost of a few. The other concepts involved in the unit will have to be presented without the aid of films.

Yes, these films are excellent treatments of the

phases of the topics they cover. But the physical make-up of the series makes them usable only as illustrated lectures in the usual secondary school situation. Granted that this particular series was made primarily for college use; they were certainly made with an eye also to the high schools. More of that later.

The next two units of this course occupy five weeks. Many topics are suitable for film presentation, yet on only one minor topic in these five weeks is a film available even from my list of several thousand films.

Then follow eight weeks on biology including physiology and hygiene. This is where you are at your best. There are plenty of films, both for organization and summaries and for exposition of difficult concepts. Of course, in this subject the issue is complicated by the fact that the subject matter is covered in two different common courses, being surveyed in a few weeks in general science and intensively studied throughout a year in biology. Would it not be a simple matter to meet the demands of both?

From there on my course is largely concerned with common materials, appliances, products, etc. There are industrial films telling about soap—what a tremendous company ours is, how far the products come from, how terrifically complicated the process is, whirling machines, etc., all about how it is boxed and shipped in big special trains, and ending with a sweet family scene using our product. Then there are industrial films telling about breakfast foods—what a tremendous company ours is, how far the products come from, how terrifically complicated the process is, whirling machines, etc., all about how it is boxed and shipped in big special trains, and ending with a sweet family scene using our product. Of course, there are the films telling about how automobiles are made—what a tremendous—and so on and on, through the realms of fuels, foods, chemical products, apparatus, household appliances, textiles, metals, clothes, books, rubber—almost every conceivable product. And they are usually two or three reels in length, occupying an entire period or more, often necessitating the last part to be cut short or left until the next day (and the distributor allows usually one day).

Last year, after having shown several industrial films to my classes at various times, I tried an experiment with a particularly unimpressive one. I announced that the students could either stay and watch the film or go to the library and study. About one-third left before the film started, and before the film ended, I had but two pupils left. The others found studying less boring than the film. Don't I recall some statement, made years ago, that with movies in the classroom, children would come eagerly to school and that the truant officer need be no more?

How many commercial films am I using this year? Four or five at the most. Yet I am eagerly searching for material such as they might well contain.

Now, to be more constructive, what do I want?

First of all, I want films supervised from conception to execution by educators. I want them made with conscious planning, with a definite subject at a definite grade level in mind, just as text books are made. It would not require much additional effort to make several editions for various grade levels. These should be made with constant consideration of the place given the subject of the film in the entire subject matter of the course at that grade level. Too often the film is made merely as an exposition of some interesting topic with no consideration of the school situation, then cataloged under whatever subjects it might fall, and often later, I suspect, a set of aims and objectives are set up. Out of my card index catalog of over 3,000 films about one hundred appear to have been set up with their places in the curriculum definitely in mind. And most of these one hundred have all been produced by two producers, although dozens, if not hundreds, have entered the field.

I have talked quite a lot about overviews, summaries, topics, exposition, concepts, etc. Perhaps I should explain. I want films definitely set up for one of three purposes: (1) Films to give an overview of a common unit of subject matter—that unit in its entirety, with an aim to introduce or summarize the material of that unit, and with no effort to teach the various topics within that unit. (2) Expository films to teach or explain abstract or otherwise difficult concepts within that unit, confining themselves to one such single concept. Grade placement must be considered in the first two types—a topic broad enough for an overview in, say, biology, might be a single concept in general science. Accordingly, different treatment would be needed. (3) Films to supplement regular units of instruction, to give what might be termed a "field trip" in the classroom. Of the films chosen for my course, two are the overviews I originally sought, fifteen are of the expository type, and seven are shown because of their supplementary interest.

I want one of the first or overview type for every unit, not for just a few isolated topics. If your selection of units is satisfactory, I am willing to build my course about them. Incidentally, why couldn't a wide selection of unit summaries covering numerous methods of grouping be effected by re-editing, and so well adapted to the various curriculum techniques?

As to the second or expository type, I want a large number of films offered in such a way that I can select only those topics which I feel can be more adequately grasped by use of such a film. And these films should be only as long as they need be for that topic, regardless of reel length. It is difficult for me to consider and present simultaneously as many topics as are often needed to complete a 400 foot reel (said ironclad length of teaching unit being chosen only because it is the 16mm equivalent of the 35mm 1000 foot reel).

As to the supplementary films, I don't want attempts to be too specific in parts of the film. I want them so I can use them with little or no intensive class study; perhaps use them in assem-

blies. They alone of the three types should make an attempt to partially replace the teacher. With them I seek to broaden the confines of the classroom.

As to your commercial films, it is hard to say in this limited space just what I want because the use will vary more widely. But if you consider it worthwhile to have films shown in schools, why not make what schools really want? They will then be much more widely used. If you aim to tell about the industry as a whole as exemplified by your firm from the social science angle, confine yourself to that. If you go into the techniques employed—the science angle—give adequate explanations that will not leave the pupil, and often the teacher, wondering.

Of course, I want teachers' guides or at least a full subject matter outline for all industrial films as well as for all films made for sale or rental to schools.

So far, I have said what I wanted for science classes. But I have looked also for films to aid social studies classes I have taught. In science, from the standpoint of the classroom, the score is

Not all teachers may agree with the opinions and findings here expressed by Mr. Doane. They may even be moved to state their differings in print.

A cordial invitation is hereby extended for further articles on the "state of the visual field" based on individual experience.—*The Editor.*

so-so, but here, except in the field of geography, most of your products to date are virtually unusable.

Consider all the fuss made about the effect of theatrical movies on the morals and ideals of children. Then, consider your products made for school use. Using them, experimenters have reached the conclusion that films are not satisfactory for presenting general ideas and creating attitudes. Something is wrong some place. If you want to find out where the trouble is, try showing one of your "attitude-creating" educational films in a theatre to an audience which has paid admission. You know what the result would be. Yet perhaps, on the same

(Continued on page 274)

Some Uses of the Microprojector In Physics and Chemistry

Some very specific suggestions for advanced users of the micro-projector in science teaching.

By THEODORE SARGENT

Swampscott, Massachusetts, High School

THE microprojector, when used in the form of an optical bench assembly, may be adapted to many phases of physics and chemistry teaching. Such a form of instrument is assumed as being available for the procedures described in this paper.

I prefer the D.C. arc illumination unit in direct optical bench alinement with condensers, cooling cell using CuSO_4 solution, and adjustable condenser for supplying correct numerical aperture to fit each objective used. Both 4 and 16mm. objectives are used as well as the usual oil-immersion objective and the 4x or 10x ocular in combination with total reflecting prism. A horizontal stage microscope is recommended for all projection.

For polarization of light, the polaroid disks now available made of synthetic dichroic crystals serve very well, one polarizer ahead of the substage condenser and one analyzer in the ocular field. The Nicol prisms, if available, can of course be substituted for the polaroid disks.

Applications In Physics and Chemistry Teaching

1. *Stress and Strain on fibers, filaments and surfaces*

By the use of micro-adjustments on the stage of the

microscope the stress and strain on fibers and filaments can be projected for complete study, showing full variation of physical properties. When examined under polarized light brilliant strain patterns provide dramatic color expression. Strain applied to glass surfaces, celluloid and other transparent materials can be studied both qualitatively and quantitatively.

2 *Surface tension phenomena with films on aqueous and other solutions*

With the use of hanging drop slides and special slides made with a well in the center, soap solutions and oil films of varying viscosity are strikingly projected under low power magnification as well as high power. By dropping dispersing agents on the surface while in projection the breakdown of the surface films is also shown. Such surface action as the peculiar rotation of salicylic acid crystals provides problem material for the capable student.

3. *Brownian movement observation with high power oil immersion projection*

Using a hanging drop of rutile or TiO_2 suspension

and oil drop immersion objective, excellent Brownian movement is shown. A second method is to use a smoke chamber on the stage with low power objective. By blowing a small amount of cigarette smoke in the chamber the Brownian movement in gases is strikingly shown. Such cells are available commercially, or the writer will gladly suggest construction of such a cell.

4. *Physical examination of wool, cotton, silk, rayon, linen or other textile fibers*

By lightly staining in carmine, eosine or other dyes and use of balsam with cover glasses, permanent slides for projection may be made which give excellent results in identification of fibers. Effects of various solutions on fabrics may also be shown as well as laundering effects with soaps and detergents.

With use of cross-haired slide or objective, the thread count of fabric samples can be made as projected.

5. *Gross projection of prepared slides showing fingerprints or other print materials which permit light transmission*

Canal patterns of fingerprints project very well. Further application can be made in blood smears and similar investigations which suggest themselves in biological or physiological or pathological examination.

6. *Migration of charged particles in solutions*

By constructing a special slide with rectangular well and platinum electrodes connected to a polarized circuit, the migration of charged particles in electrolytes is strikingly shown. By this technique the electric character of charged particles is clear to the student. Use a reversing switch to show changes of migration while being projected and the results are dramatic in effect. Colloidal solutions are particularly well adapted to this work and the student easily grasps the significance of ionic charge and migration.

7. *Interference patterns of light*

By projecting through ruled gratings the many types of diffraction and interference patterns can be shown. These gratings, with a little care, can be adjusted on the stage to give quantity of results desired. Newton's rings have been successfully projected.

8. *The optical principles of image and object relationship*

With the optical bench instrument the instructor can show the usual forms of lenses and mirror phenomena as they are related to image and object size, position and character. This can be done with or without the microscope in position and the optical system is made visible by blowing smoke through the system. This forms a series of Tyndall effects that show clearly the action of the lenses in use, at the same time as the projection occurs.

9. *The optical principles of refracted light and color sense*

The refracting prism can be used to produce the spectrum of the electric arc. The choice of proper filters can show color values of transmitted light, both additive and subtractive, according to the manner in which the filters are placed in the optical path. Polarized

light increases the variety of demonstrations possible.

10. *The gross examination of properties of crystals and other small forms of matter*

With white and polarized light, properties such as opacity, solubility and refraction of minerals, textiles, ceramics, tissues, foods, paper, petroleum, rubber, paints, liquid specimens, crystals and many common compounds can be studied if thin layers of material are selected. Starch grains show a dark cross that rotates as the analyzer is turned. This is a standard test for starch in botanical materials.

11. *The projection of crystal growths in solutions*

Some suitable and interesting growth patterns are shown in the crystallization of ammonium chloride; sulphur in carbon disulfide; sodium nitrate; copper sulfate; sodium chloride; potassium dichromate; sodium hyposulfite; potassium chlorate. It is important to show melting under the effects of the heat of the arc beam by moving the cooling cell out of the light path and the subsequent crystallization without changing the field of projection.

By experimentation the operator can easily learn to produce saturated solutions on the microscope stage for this technique. The crystallizing of supersaturated solutions such as sodium hyposulfite is recommended also.

12. *The growth of crystals in dark field projection and with polarized light*

The full sweep of striking color effects show vividly in dark field projection of growing crystals. The technique is not difficult to master. All demonstrations suggested in the previous section are suitable. The hyposulfite or ammonium chloride are good examples. Crystal mixtures such as copper sulfate and magnesium sulfate give interesting effects and demonstrate an analytical method of separation through refraction.

13. *The Tyndall phenomena in colloidal solutions*

Through careful preparation of latex colloidal solutions adjusted to give clear projection field and then to condense the arc beam, an impressive showing of the Tyndall cone can be made. Other colloids are also suitable if properly diluted to offset opacity.

14. *All material now available on microscope prepared slides can be projected in the micro-projector*

The caution should be made, however, that the beam is cooled to the degree necessary to prevent damage to the material mounted on the slide.

15. *Dark field and opaque projection offers some opportunity*

Colloidal sulfur and latex in dark field projection by the writer has proven successful and suggests further valuable opportunities for investigation.

The micro projector will become increasingly useful as the teacher familiarizes himself with its technique and becomes convinced of its superiority as a classroom instrument over ordinary microscope examinations in the hands of many students at a time. Control of material, economy of purchase over many microscopes, directed learning techniques, interest stimulation through careful presentation, all point to further adoption of this instrument as a teaching device.

NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

Government Film Receives Award

Supporting critical and box office reaction in this country, the International Cinema Exposition held annually in Venice has awarded the highest prize in the documentary classification to *The River*, the film story of the Mississippi produced by Pare Lorentz for the United States Government. The film was selected by an international jury as the best out of 71 subjects entered. The award marks the first time that a government-sponsored American film has received international recognition, although Mr. Lorentz' first picture, *The Plow that Broke the Plains*, was entered in the preceding competition and was accorded considerable praise.

The distribution of these two films has been transferred from the Farm Security Administration to the National Emergency Council.

Developments in Radiovision Service

As reported previously in these pages, the Smithsonian Institution and the Office of Education have cooperated with the Educational Research Bureau in the production of recorded radio programs. Two series of these programs are now available for use in schools, either as a series of phonograph records or as 12" @ 78 rpm. electrical transcriptions. "Our Wonder World" is the illustrated version of the Smithsonian Institution program, "The World is Yours". Filmstrips are projected to show the exhibits and points of interest that are described by a radio cast. "Planning Your Career" is a Vocational Guidance series of ten fifteen-minute programs. This series is not illustrated.

A recent, significant development in this service is the plan to illustrate with filmstrips the programs of the American School of the Air which lend themselves to such treatment, with the approval of the Columbia Broadcasting System. Two editions will be available, a daily one which fully illustrates the program, and a weekly one which contains selected pictures for the programs of the week. There will be two picture sizes, the standard single frame and the new double size. Although the number of pictures will depend upon the nature of the program, the average will be about fifty pictures.

Further information may be obtained from the Educational Research Bureau, located at 274 Madison Avenue, New York City.

Directory of U. S. Government Films

A complete list of the motion pictures available from the various government departments and agencies has been compiled into a 16-page mimeographed publication by the Division of The National Emergency Council of the newly created United States

Film Service, of which Pare Lorentz is the director and Arch A. Mercey, Assistant Director. These directories are available to schools, colleges, adult educational groups and other organizations without cost.

While requests for bookings should be forwarded direct to the government agency distributing the desired films, the United States Film Service will assist in obtaining films and in planning educational motion picture programs. It also operates as a central office of information about Federal motion picture activities. The Service is located in the Commercial Building, 14th and G Sts., N. W., Washington, D. C.

Film Service for Washington Schools

The Central Washington College of Education of Ellensburg, Washington, under the direction of President R. E. McConnell has installed a subscription library of 16mm sound films, involving an investment of approximately four thousand dollars.

It is planned to service the school systems of Central Washington, a considerable number of which are equipped with sound projectors. The service is in charge of E. L. Muzzall, Director of Public Service, formerly Superintendent of Schools, Toppenish, Washington.

New Addition to Peace Film Library

"Peacemobiles" acquired during the Summer a silent film of the Sack of Nanking taken by two American missionaries while the Japanese were executing 20,000 inhabitants of China's capital. This film has been added to the talking film *Thunder Over China* and is accompanied by Dr. Onderdonk's lecture. Dr. Onderdonk has recently returned from his eighth trip to Europe, having attended the International Summer School at Pontigny, France, besides interviewing Austrian refugees. Inquiries can be addressed to him at 1313 Geddes A. Ann Arbor, Mich.

SMPE Meets in Detroit

Detroit, Michigan, will be the scene of the twenty-third Fall, 1938, Convention of the Society of Motion Picture Engineers, October 31st to November 2nd, inclusive, at the Hotel Statler. Meeting in this City for the first time, the engineers of the motion picture industry will view first-hand some of the great progress that has been made in industrial motion pictures. A comprehensive program of interesting papers and technical presentations is being arranged by J. I. Crabtree, Editorial Vice-President, and Glenn Matthews, Chairman of the Papers Committee.

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

A Desperate Adventure (Novarro, Blore, Marian Marsh) (Republic) Artist-hero's canvas of imaginary "ideal girl" brings complications when he meets her living self. Pursuit ends in his preferring her much nicer sister. Light-weight, fairish comedy but the likable Novarro deserves better. 9-13-38
(A) Hardly (Y) Fairly good (C) No interest

Affairs of Annabel (Jack Oakie, Lucille Ball) (RKO) Crazy farce comedy, more burlesque than satire on Hollywood. One-track-mind press-agent puts heroine through incredibly absurd situations to build up her screen reputation. Ridiculously exaggerated, continuous nonsense, very funny to many. 10-11-38
(A) Hardly (Y) Fair (C) No

Army Girl (Preston Foster, Madge Evans) (Republic) Legitimate thrills at desert Cavalry Post over tests to decide replacement of horses by mobile tanks, involving well tangled romance between rival captains and colonel's charming daughter. Well acted, human interest comedy. 9-13-38
(A) Good of kind (Y) Good (C) Perhaps

Ave Maria (Benjamin Gigli) (Itala Films) Foreign production, mostly English dialog, distinguished by Gigli's superb voice. Lowly Austrian girl reaches operatic stardom by help of great tenor who falls in love with and wins her after long misunderstanding. His fine singing atones for lack of romantic appeal. 7-12-38
(A) Fairly good (Y) Mature (C) No interest

Birth of a Baby (American Committee on Maternal Welfare, Inc) Unusual presentation of human birth from start of pregnancy through delivery and infant care (showing to general public in theatres). Serious, scientific, utterly frank, dignified. Stresses proper medical care, dangers of artificial abortion, etc. 9-27-38
(A) Novel (Y) and (C) Only parents should decide

Blockheads (Laurel and Hardy) (MGM) Outlandish slapstick with crazy story of Laurel staying in trenches 20 years after war is over. Discovered by Hardy, he brings endless complications to his pal who has just married. Much provocation for non-intelligent guffaws. 9-27-38
(A) Crazy (Y) Perhaps (C) Probably funny

Boys' Town (Spencer Tracy, Mickey Rooney, Henry Hull) (MGM) Heroic priest, believing no boy is "bad," surmounts endless obstacles to found home for wayward boys, where toughest problem (Mickey) is finally solved. Some sentimental melodrama but gripping, moving story. (Based on actual Boys' Town in Nebr.) 10-11-38
(A) (Y) Very good (C) Probably good

Childhood of Maxim Gorky (Russian, English titles) Striking realism, fine acting and direction, in strong picture of Gorky's childhood background. Benighted, elemental life of endless wrangling, maudlin affection, bestial cruelty in dreary land. Depressingly convincing picture of low-level civilization. 10-11-38
(A) Good of kind (Y) No (C) No

Courier of Lyons (French, English titles) (Pax) Forceful, well-directed, historical drama based on real case of mistaken identity and miscarriage of justice during French Revolution. Pierre Blanchard in dual role, falsely convicted by unrelenting judges, is beheaded as criminal he resembled. Acting superb. 10-11-38
(A) Very good (Y) Perhaps (C) No

Crime over London (Basil Sydney, Margot Grahame) (G-B) Mildly-diverting, poorly edited, implausible film of American crooks in London, thwarted by Scotland Yard in daring daylight robbery. Joseph Cawthorn is fairly amusing in double role, and attractive settings provide some interest. 9-13-38
(A) Hardly (Y) Doubtful (C) No

Danger on the Air (Donald Woods, Nan Grey) (Univ) Mediocre murder yarn, set in broadcast station. Acting commonplace, dialog ordinary, flippant and loud by turns. Engineer-hero turns sleuth when body of program sponsor is found, discovers he was murdered, traps killer in confession. 9-7-38
(A) Hardly (Y) Passable (C) No int.

Defense of Volochayevsk (Russian, English titles) (Amkino) Pictures gradual expulsion of Japan from Siberia in 1918, by peasants and Red Army, with much glorification of Lenin. Despite skilled directing and acting, film is utterly confused, drags terribly with "slow tempo" technique, and is twice as long as need be. 8-30-38
(A) Depends on taste (Y) and (C) No

Delinquent Parents (Doris Weston) (Progressive) Crude attempt to moralize over the responsibility of parents for the attitudes and acts of their children. Succeeds in being merely cheap and sensational. Artificial in situation, absurd in motivation, with poor acting to make the mess even worse. 8-16-38
(A) (Y) (C) Traah

F. P. 1 Doesn't Answer (Conrad Veidt) (G-B) Reissue of 1933 film. Weaves mystery melodrama around construction of floating airplane-landing platform in mid-ocean. Mixture of healthy romance, lively action, and long struggle against dark villainy. Elaborate sets, striking photography. 7-19-38
(A) Good of kind (Y) Good (C) Probably good

Four's a Crowd (Flynn, de Havilland, Russell, Connolly) (Warner) Fast, furious clever romantic farce, hilariously exaggerated out of any semblance to life. Breezy dialog, zigzag motivation, unconvincing reversals, toy trains, dog chases. Related to real drama as "awing" is to music. 9-13-38
(A) (Y) Very good of kind (C) More or less funny

Four Daughters (Lane sisters, Rains, Garfield) (Warner) Vivid, realistic portrait of one happy family of four daughters, and the joy, sorrow and tragedy that romance can bring. Fine cast, notable characterizations, Garfield outstanding. Exceptional film despite artificial touches. 10-4-38
(A) Excellent (Y) Mature but good (C) Beyond

Give Me a Sailor (Martha Raye, Bob Hope, Para) Fast, hilarious comedy of romantic mix-ups, commendable for restraint. Martha in new type of role—and most welcome—as ugly duckling who unintentionally wins "legs" contest and is transformed into glamour girl. One unconventional but harmless situation. 9-7-38
(A) Good of kind (Y) Entertaining (C) Possibly

Gladiator, The (Joe E. Brown, June Travis) (Columbia) Despite some unnecessary crudities, Joe's best in months. Real human comedy included in the hilarious, but quite funny doings, as dumb, kindly hero, butt of many jokes, suddenly and temporarily becomes a superhero through serum injection by experimenting scientist. 9-20-38
(A) Fairly good (Y) and (C) Mostly good

Higgins Family, The (Jimmy, Lucille and Russell Gleason, Lynn Roberts) (Republic) First of a new "Family" series. Rather too farcical for realism, with Russell over-prankish as the inventor-son, but elementary, amusing situations and some simple, homely values will prove entertaining to the not over-critical. 9-27-38
(A) Fair of kind (Y) Mostly good (C) Mature

High Command (Lionel Atwill, Lucy Mannheim) (Grand Nat'l) Rather ordinary British-made film with action—much of it confused and choppy—centering around such unpleasant ingredients as illicit love, jealousy and murder. Chief values are Atwill's acting and genuine interest and suspense in final scenes. 9-20-38
(A) Mediocre (Y) and (C) Unwholesome

Hold that Coed (Barrymore, Murphy, Weaver) (Fox) Bold, uproarious travesty of politics and football. Hilarious, pointed caricature by Barrymore as swaggering Governor running for senator. Preposterous football games—and real ones. Joan Davis on team! Overdone, but often funny; whole too farcical for serious objection. 9-20-38
(A) Depends on taste. (Y) and (C) Amus., effect dbl.

I Am the Law (Robinson, Beal, Kruger) (Columbia) Far-fetched, but lively, suspenseful melodrama, lightened by appealing humor. College law professor on sabbatical leave, becomes special prosecutor and by highly original methods amazes the racketeers. Not over-violent except for prolonged fistfight and grim suicide. 9-20-38
(A) Very good of kind (Y) Good (C) No

I'm From the City (Joe Penner) Two reel comedy material made into feature length picture, with Joe's usual muddle-headed antics and adenoidal mouthings. Afraid of death of horses he is forced into riding contest and wins in wild cross country ride. Loud laughs for Penner fans. 9-7-38
(A) Inane (Y) and (C) Probably amusing

If War Comes Tomorrow (Russian, Eng. Titles) (Amkino) Awesome picture painted by Soviet propagandists of what would happen if any country started war with USSR, using Nazi

Germany in illustration. Ultra-modern warfare with Soviets ridiculously superior in every way. Thrilling battle scenes, fine photography. 8-23-38
(A) Hardly (Y) Undesirable (C) No

Juvenile Court (Paul Kelly, Rita Hayworth) (Columbia) Well-worn theme of tough alum youngsters, incipient gangsters, till reform and reformation are achieved through alum-born lawyer-hero's idea of athletic clubs. Quite wholesome effect despite some artificiality in situation and action. 10-11-38
(A) Perhaps (Y) Fair of kind (C) No

Keep Smiling (Jane Withers, H. Wilcox) (Fox) Another fixer role for Jane, more credible and appealing than usual. Helps uncle, once ace director, make comeback and gets in movies herself. Lively, substantial plot, exposing grimmer side of Hollywood, well balanced with Jane's amusing antics. Fine work by cast. 9-27-38
(A) Fairly good (Y) and (C) Amusing

King of Alcatraz (Lloyd Nolan, Gail Patrick) (Para) Hectic melodrama about murderous crook escaped from Alcatraz. Boards ship disguised as old lady, pulls gun, gets control of ship, but two heroic radio-operators save situation. Terrific thrills, terrific fighting, terrific absurdities. 10-11-38
(A) Hardly (Y) No (C) No

Lady Objects (Lanny Ross, Gloria Stuart) (Columbia) College grad (architect-hero) marries classmate (lawyer-heroine). She succeeds, he fails, takes to drink, charged with murder at accidental death of cabaret queen—but heroine frees him in courtroom climax. Lanny sings much, acts what he can. 10-4-38
(A) Hardly (Y) Doubtful (C) No

Lily of Killarney (Gino Malo, John Garrick) (Ameranglo) Irish dramatic romance with charming melodies and scenic backgrounds, Elementary theme—to save family estate, hero bets his horse against villain's and wins (naturally), also clearing way for marriage to peasant heroine. Touches of homey humor. 9-20-38
(A) Fair (Y) Perhaps (C) Too mature

Meet the Girls (June Lang, Lynn Bari) (Fox) Tiresome, cheap mess concerning adventures of two jobless night-club entertainers on ship bound from Honolulu to U. S. Stolen gem motif, ineffectually handled. Practically whole cast are unpleasant characters, including heroines. Gambling and drunkenness are features. 9-7-38
(A) Poor (Y) Unwholesome (C) No

Men of the Sea (Boris Livanov) (Amkino) Excellent acting and skilfully handled battle scenes chief merits of rambling, Russian propaganda film concerning Baltic sailors' defense of Petrograd in 1918. Stress on military tactics and discipline obscures and weakens story. Extreme glorification of Stalin. 7-5-38
(A) Perhaps (Y) Hardly (C) No

Missing Guest (Paul Kelly) (Univ) Loosely made, commonplace murder mystery set in old haunted mansion reopened by heroine 20 years after father's murder there. Again an irrepressible, fresh reporter-hero solves crime. Unfunny pair of amateur detectives lugged in for comic relief! 10-4-38
(A) Poor (Y) Hardly (C) No

Mother and Sons (Russian, English titles) (Amkino) Dramatization of Soviet round-the-world air flight. Usual slow tempo and many close-ups, but less propaganda and more human interest, especially in finely-done mother role. But dialog amply boasts of supremacy of Soviet men and machines. 9-27-38
(A) Fair of kind (Y) Doubtful int. (C) No

My Lucky Star (Sonja Henie, Richard Greene) (Fox) Sonja's marvelous skating probably compensates for fatuous story with preposterous collegiate background. Heroine is sent to college to model clothes, gets involved in cheap divorce suit, and an ice carnival (in department store!) straightens things out. 9-7-38
(A) Perhaps (Y) Prob. entertaining (C) Fair

Passport Husband (Stuart Erwin, Pauline Moore) (Fox) Laughably absurd farce-thriller. Over-dumb hero gets mixed up with two girls, tricked by crook gang into marrying wrong one, but finally marries right one after capturing whole gang by ridiculously impossible coup. Some cheap risqué touches. 10-4-38
(A) Feeble (Y) No (C) No

(Concluded on page 278)

AMONG THE MAGAZINES AND BOOKS

Conducted by The Staff

The *School Executive* (57: 483-4, June '38) "A Visual Education Program in a Small School," by George L. Berry, Director of Visual Education, Glencoe, Minn.

Here is a brief, explicit plan for the organization of a new visual education program in a small school system. The author recommends that all problems of administration be handled by a director of visual instruction, and outlines his duties. Other features of a visual program which receive attention are space requirements, necessary equipment, form letters, blanks and records of visual material used.

Minnesota Journal of Education (XIX: 12-14, September '38) "A Visual Education Program—How to Build It," by Clarence Funk.

Mr. Funk relates his experiences in building an audio-visual program and the difficulties he faced in the supervision of it. Working out a film schedule to correlate with the subject matter being taught, selecting films containing good instruction material, arranging for their projection, and instructing teachers in desirable teaching techniques, are some of the problems which he discusses.

"The Department of Visual Education — A Service Bureau for Classroom Teachers," by Edwin A. Kirwin, appears in this same issue (page 14). Here again the functions of a visual aids department are outlined. The director "may do much to improve classroom instruction through the guidance of teachers in the use of visual aids."

Camera Craft (XLV: 375-79, August '38) "Producing 16mm Sound Pictures," by William A. Palmer.

The majority of 16mm sound films now in use are reductions of the 35mm size. This article maintains that 16mm sound pictures can also be produced successfully by photographing the picture and sound directly on 16mm film, and proceeds to describe clearly the two types of 16mm recording equipment in use. One is called the "single system" and the other the "double system." The advantages and disadvantages of both are frankly set forth. According to the author, the single system is the simplest and cheapest for there is only one mechanism to look after, synchronism is automatic, and the film is not more difficult to process than silent film. Complications arise, however, when it comes to editing the film made by this process. Mr. Palmer recommends the single system for the amateur who wishes to make his own sound recordings because of greater ease of operation.

The double system, which has been adopted by Hollywood, is more complicated and costly, requiring two entirely separate machines. Yet it is the only feasible one when the "off-stage" lecture is to be added to a film after the pictures have been photographed. By this method, any owner of a silent camera can make a sound film by taking the picture, editing the film, and

then going to a studio to have the sound track and combined sound print made.

Building America (Vol. 3, No. 4) "Education." Like others in this splendid series, this unit presents, through pictures and words, an important aspect of American life. It reviews the high points in the history of education, from colonial days to the modern school of today. Our nation's great system of education is vividly described, from the nursery school and kindergarten to college and the adult school. Finally, discusses how the American people can improve education.

(Vol. 3, No. 5) "Our Federal Government." A clear exposition of the everyday services which the government performs for the people. The unit outlines the work of the various departments of the government and of the bureaus within these departments. It touches upon two important features of the government—its income and expenditures, and the influence of citizens and organizations upon legislators. Finally, it points out some of the ways in which the American people can defend and extend democracy.

(No. 6) The unit on "Chemistry" describes the many ways in which chemical science is supplying the ordinary needs of our people, how it is contributing to the conveniences of modern life, and possibilities of future uses.

(No. 7) "War or Peace?" presents a vital problem facing our people. This unit reviews the history of American wars, of the World War, and current conflicts. It presents the questionable practices of the large munitions corporations, propaganda activity of nations, and peace organizations. It concludes with a discussion of the question, "How Can America Stay out of War?"

(No. 8) "Seeing America." As a single set of *Building America* consists of eight units, this issue concludes the third volume. It covers the United States in terms of regions, pointing out what the early settlers found in each region and what each is like today.

Forum (100: 1-2, July 1938) "Education by Film"—Editorial Foreword, by Henry Goddard Leach.

Recognizing the fact that teachers, as well as parents, realize the potential power of motion pictures to supplement and enliven the traditional processes of education, Mr. Leach feels that the film which may prove of most value to students is the occupational film, and after that, the documentary film.

Teachers can select and interpret occupational films which will acquaint children with many of the complicated careers and ways of earning one's living. By showing a person practicing his career, the film has a personal, and hence, emotional appeal to the child. "It may be that the child will be impressed for life by a discovery, very personal to

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him, revealed by one second of passing film—a discovery more germane to his career than years on years of patient study."

Documentary films such as *The River* by Pare Lorentz, and *The March of Time* are familiar to Americans and American companies are engaged in turning out others. If, however, facts are so rearranged as to distort their application, the films are not education but propaganda. The short episodic film, cut out of a commercial film for school use, is also discussed.

Book Reviews

THE STEREOGRAPH AND LANTERN SLIDE IN EDUCATION—by G. E. Hamilton. 21 pages, paper cover. Published and Copyrighted by the Keystone View Co., Meadville, Pa.

This is an able and scholarly presentation of the nature, values and uses of the stereograph and lantern slide. Although it is frankly the publication of the well known firm specializing in this material in the school field, the brochure has definitely an educational rather than commercial tone. It is an expert answer to the many questions arising in teachers' minds regarding these two standard forms of the still picture so widely used in teaching.

The first part discusses the nature and composition of the stereograph, the effect of realism it gives the viewer, young or old, the increased interest that is roused by this feeling of reality. The individualistic character of the stereograph determines the best methods for studying the pictures and the mechanics of handling the 'scopes. The potential educational values to be derived are presented at some length, and the hygienic aspect of stereographic practice. The organization of stereographs, in relation to the course of study and suggestions for stimulating teacher-use of the material conclude this part of the monograph.

The second part treats lantern slides—the importance of quality as tested by definite standards, the four types of photographic slides, and the growing use of hand-made slides. Then, detailed discussion of subjects in which slides are valuable, when they should be used, how many should be used, the difference between real "use" and mere "showing," and why lantern slides are not displaced by motion pictures. It concludes with suggestions for classification and filing slides for ready reference and accessibility, and the need for Teacher's Manual and descriptive matter to accompany the material. (Available without charge from the Publishers on request).

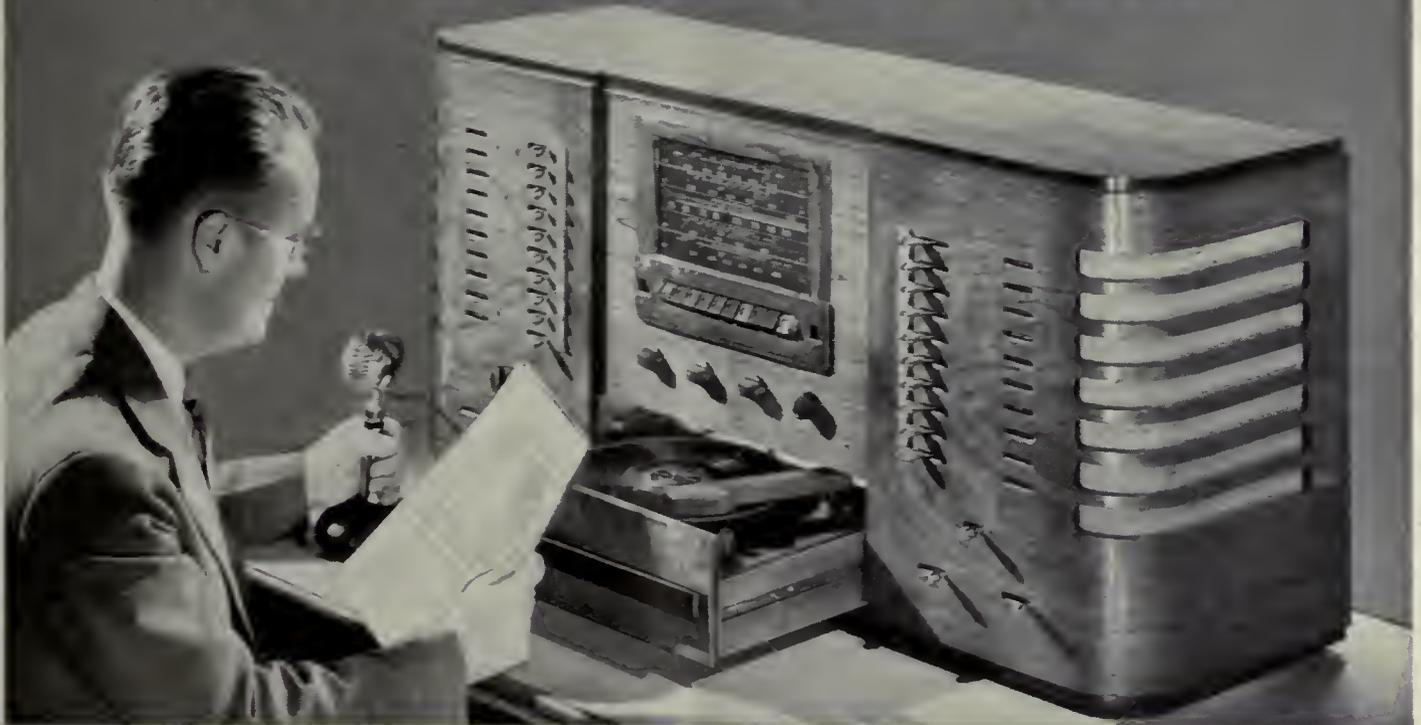
N. L. G.

HOW TO USE TALKING PICTURES IN BUSINESS—by Lyne S. Metcalf and H. S. Christenson. 246 pages, illustrated. Published by Harper Bros., 1938.

Here is the best material yet offered for the guidance of commercial and industrial firms contemplating the production of pictures for "educational" purposes in the business world. It is detailed, complete, authoritative, yet is expertly non-technical. With technical vocabulary kept at a minimum, this comprehensive presentation in clear, everyday English makes agreeable as well as enlightening reading.

(Concluded on page 275)

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SCHOOL DEPARTMENT

Conducted by Wilber Emmert

Director Visual Education, State Teachers College, Indiana, Pa.

Photographs Permanently Portray Project Procedures

WITH the definite recognition of the camera as a valuable teaching aid, teachers, supervisors, and administrators have turned to the photograph as a means of permanently portraying project procedures deemed proper in a progressive, creative, child-activity school.

These portrayals may be made with either the motion picture camera or the still camera, depending on the purpose the pictures are to serve, and with recognized advantages and limitations possessed by each type of recording. For example, the motion picture is well suited to group assembly use such as the P.T.A. meetings, school assemblies, and community gatherings; whereas the still picture serves better in the newspaper, the magazine, the office file, and the classroom portfolio.

Conscious of the values of the still pictures of classroom activities, the State Teachers College, Indiana, Pennsylvania, under the direction of the writer, engaged in a broad program of photographic recordings



The Radio Committee Broadcasting Current Events

in the college and the laboratory schools of the institution during the second semester of 1937-38. Upwards of four hundred pictures were taken, ranging from the activities of the kindergarten on through to college classroom and club projects. Generally a series of views was obtained, consisting of from three to as high as eight scenes of the activities of the enterprise.

The primary purpose of the undertaking was to permanently portray the techniques employed in the creative projects of this teacher training institution. Then after the records were secured they were available for interpretation and demonstration use. In some cases they were inserted in the newspaper, the magazine, or the college bulletins; in other instances they were used by the teachers themselves to indicate to the student teacher, the supervisor, or administrator the

progressive development of the concepts embodied in a project.

Teachers realize that there is a creative way of approaching most school projects, and that child freedom is essential to the successful outcome of the enterprise. Generally speaking, the creative lessons of the project progress through well defined stages. At its inception, there is a time given over to getting ready, formulating plans through questions and suggestions, clarifying concepts, developing interest and enthusiasm. Next the pupils become active in outlining procedures, drawing on paper the plans conjectured in their imaginations. After their mental images have been clarified, and working plans have been formulated, committee assignments are made and work upon the project is definitely started. As the work progresses, practical and technical difficulties must be solved as they arise. Finally there is a period of evaluation, refinement, and critical criticism of the finished product.

Current Events Modernized

In an effort to give contemporary value to the sixth grade English practices, a great variety of situations were provided whereby the children could take part and which demanded English expression, both oral and written. One of the most difficult objects to achieve, that of developing on the part of the child a sense of clear enunciation, clean articulation, and good voice quality, was accomplished through the use of the microphone attached to the radio for the monthly current news events. To secure the interest of the class, maintain the cur-



A Scene from the Project on Colonial Life

rent events program at a high standard, give the children practice in program planning, and provide opportunities for effective oral expression, the radio committee was organized. This committee evaluated all the news items of the month and selected

(Continued on page 268)

● ●
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 THREE SMART GIRLS
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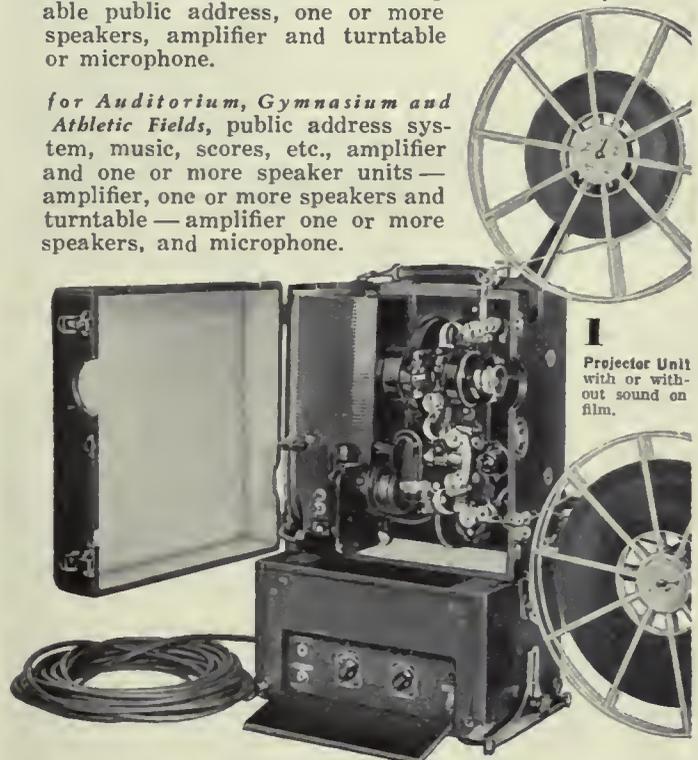
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those deemed of most value and of widest interest. These were built into a broadcast program, patterned after those presented by leading news commentators. News reports were carefully selected, evaluated, and cast into proper form for the news broadcast. The program director, selected by a vote of the class, assumed responsibility for the introduction and the order of the speakers, as well as for the mechanical side of the broadcast. Through a series of try-outs, with the microphone in one room and the radio in the classroom, the persons with the best "radio voices" were selected by a vote of the class as the ones to present the program over the radio. As would be expected, the pupils did not have to be driven to master correct speech habits, but rehearsed with each other in efforts to speak slowly and distinctly, and with well modulated voices. Since the microphone seems to possess tremendous power in making children conscious of their own speech habits, it might well be used in other situations in the classroom. Special day programs, musical programs, story hour, the reading of a play, science news broadcasts, health talks, and so forth, come well within the scope of this type of activity. The picture accompanying this article is just one of the series of this project, and illustrates the final stage with the radio committee presenting the news broadcast of the month from one room while their classmates are listening to the radio in their regular classroom. Each person on the pro-

gram is alert to his place and deeply conscious of his responsibility for the success of the broadcast.

Colonial Unit Dramatized

In an effort to more closely integrate the fourth grade work in geography and history, projects were devised whereby geographic backgrounds with emphasis on vocabulary development and types of



The Completed Newspaper Project

reading and study might readily be transferred to meet the child's needs in history units. Through the use of the play, stressing self-expression and creative work, the children were led to a realiza-

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tion of the social studies relationships rather than to separate geography and history concepts. The year 1938 marks the Tercentenary of Swedish Settlement in Pennsylvania. The fourth grade, therefore, wrote, and produced a play dramatizing the Tercentenary of the Swedish Settlement in Pennsylvania as the conclusion of that phase of work called "Colonial Life." A number of photographs were made of the project, including: Making Scenery for the Play, Scene at Queen Christina's Court, People of New Sweden Trading with the Indians, Dutch Home in New Netherlands, etc. The accompanying picture illustrates this fourth grade's concept of "A Dutch Home in New Netherlands." One can readily infer the activities engaged in by the children, the insights experienced, and the habits and skills gained through the pursuit of this integrated project.

Newspaper Bulletin Board Techniques

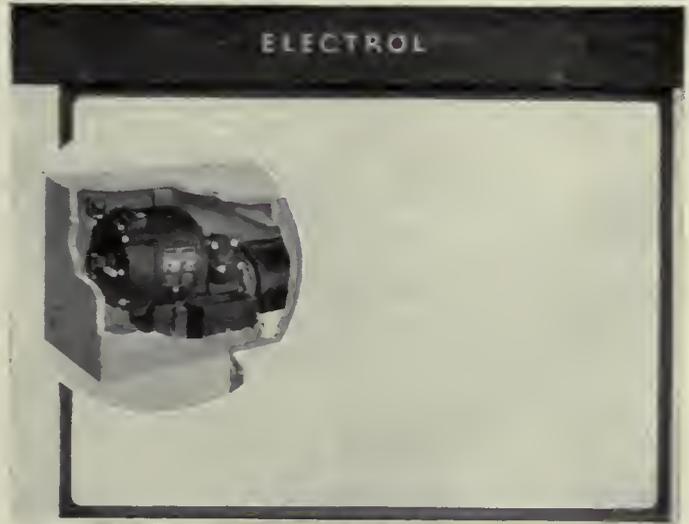
During the school year of 1937-38, Dr. Edgar Dale conducted a nation-wide experiment in a number of high schools and certain teacher training institutions on "How to Read a Newspaper," with the idea that the research findings might provide arguments for the introduction of such a course in the high schools of the nation. As a cooperating member of this group, the Indiana State Teachers College engaged in the activities of the project and had many of the scenes photographed. One series shows progressive stages in the project, "Making the Bulletin Board Display." The clippings were first selected, classified and arranged in an appropriate lay-out on a flat topped table. The completed display in place is shown in the accompanying picture. The central panel was made up of headlines clipped from the papers and arranged with proper sentence sequence to produce the message.

Other Activities Photographed

For integrated mathematics-geography projects in the Junior High School of the college laboratory schools, the construction of the graph of certain relationships, was photographed in its various steps. This graph was large, made on the bulletin board, and with the graph lines consisting of white wrap-

(Concluded on page 274)

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Current Film Releases

New Series of Classroom Films

International Geographic Pictures, New York City, announce the completion of a new two-reel 16mm sound educational picture entitled *Territorial Expansion of the United States from 1783 to 1853*, which is the first of a series of geographic and historic classroom films now in the process of preparation. The film shows, in chronological order, the growth of this country from colonial times to its present continental size, exclusive of territorial possessions. Animated maps are used extensively, supplemented with authentic representations of history's great events. A lively narration accompanies the picture, which has been approved and purchased by many University Extension Divisions that have film libraries.

The second subject in this series, *Territorial Possessions of the United States*, rapidly approaching completion, continues the story of American expansion. It explains how our insular possessions were acquired and portrays historic events pertinent to the acquisitions.

Research is finished on three more pictures which will be released during the coming months and should be of particular interest to the educational field.

Educational Features Released in 16 mm

From Films, Incorporated, comes announcement of the availability of over seventy-five feature length photoplays in 16 mm sound, which have been carefully chosen for distribution to schools. These films have been announced in the form of a School List and are offered for the first time in 16 mm. Included in these

fine professional productions are such outstanding features as *The Crusades*, *Scrooge*, *Lives of a Bengal Lancer*, *Huckleberry Finn*, *Mrs. Wiggs of the Cabbage*

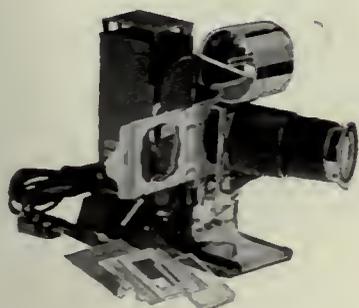


A Scene from "The Mystery of Edwin Drood"

Patch, Ruggles of Red Gap, *Peter Ibbetson*, *Mystery of Edwin Drood*. From the few titles mentioned it is apparent that the pictures on the School List have considerable curricular value. An even more interesting aspect of the list is that new subjects will be added periodically. Future releases include such screen classics as *Maid of Salem* and *The Plainsman*.

These features are available for national distribution from Films Incorporated, New York City, or from branch exchanges located in Chicago, Illinois and Portland, Oregon. The subjects are offered at very reasonable rentals. Study material for these films is in

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the course of preparation and will be released at an early date. Study Guides have been prepared by Recreational and Educational Guides, Inc., 1501 Broadway, New York City, on some of the films on the School List, such as *Scrooge*, *Maid of Salem*, and *Peter Ibbetson*. These can be secured directly from this organization.

An attractive folder listing and describing the films on the School List may be obtained by writing to Films, Incorporated, 330 West 42nd Street, New York City.

Lumbering Industry Filmed

Trees and Men, a comprehensive sound film of the timber industry has just been completed for the Weyerhaeuser Timber Company by Dowling and Brownell, industrial motion picture producers of Hollywood, California. The central theme of the production is the harvesting of timber in the Northwest as a crop, the natural renewal of the forests, and the long-range planning by private, State, and Government interests, to protect the future growth in the vast timber area. The picture includes a historical sequence of the development of the western part of the United States at the time of President Lincoln's administration, showing the march of the pioneers westward in covered wagons and the development of early railroads.

A four-reel version of the film is available free to non-theatrical audiences from Modern Talking Picture Service of New York City.

INTERNATIONAL GEOGRAPHIC PICTURES

Announces

A new series of historical-geographical
16mm. classroom films

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FROM 1783 TO 1853

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New Castle Films Reviewed

Much pictorial material of value in many subjects of the school curriculum is available in the long list of Castle Film productions. Recent additions to the list are the four one-reel subjects cited below, which are offered for sale to school-film-libraries, like all Castle films, at very reasonable prices, thus affording schools an opportunity to build up a permanent film library at low cost. The subjects described below are 400 foot, 16mm reels, with photography good and frequently exceptionally fine, with vocal accompaniment giving detailed explanations of the material shown. Of special interest to language teachers is the fact that many Castle subjects are available with the vocal narrative in French or Spanish as well as English, as desired. Three of the following films bear such indication.

Modern Rome ranges widely over the architecture and streets of the modern city, including the Tiber and Hadrian's Tomb, the Forum, the Colosseum, Arch of Titus, and less ancient structures like St. Peter's, St. John's, the Capitol, Piazza del Popolo, and the Palace of Justice. Shown also are monuments to the Unknown Soldier, to King Victor Immanuel, fountains, pyramids, markets, and three leading figures in modern Rome, the Pope, the King, and Mussolini in action. Some night scenes furnish a striking conclusion. (English or French accompaniment.)

Hawaii gives a partial view of beauty spots in the islands along with buildings, statues, flowers, volcanoes, dancing girls, and famous Waikiki beach. A large part of the reel is devoted to fast action pictures of surf-riding, both expert and inexpert, on surf boards and in outrigger canoes. (English or French accompaniment.)

Sahara shows swift glimpses of Fez, its people, narrow streets, shops, artisans, fakirs performing startling and not always appetizing tricks, with much footage of fast riding horsemen on their

famous Arab steeds and patient camels which alone make possible the desert caravans. Striking shots of Sahara sands, dunes and oases in calm and storm. (English or French accompaniment.)

Camera Thrills in Wildest Africa offers really notable animal pictures made by an auto-expedition through African veldt and jungle, with long shots and close-ups of wild life in its native haunts, carrying on its cruel struggle for existence. Crocodile, antelope, wildebeest, zebra, hippopotamus, giraffe, cheetah, rhinoceros, leopard, elephant, lion, singly and in droves, keep interest tense in this action-panorama of Africa's fauna.

N. L. G.

Prize Documentary Film

Conquerors of the Arctic, five-reel 16mm sound film is now available for rental and sales, Garrison Films announces. The film is a complete record of the historic 1937-38 Polar Expedition and was awarded first prize at the Paris Exposition of documentary films. A detailed descriptive booklet concerning the production is available free of charge on application to Garrison Films Inc. 1600 Broadway, New York City.

Other additions to this film library this month are: *The Fight for Peace*, Van Loon's indictment of war, *People of the Cumberland*, Erskine Caldwell's story of the Highlander Folk School and the people of the Tennessee Valley, and *Peter the First* full length Russian historical drama, with English titles.

Peace Film Released in 16mm

Exclusive 16mm rights on the new eight-reel film, *The Fight for Peace*, produced by Warwick Pictures, have been acquired by Post Pictures Corporation, 723 Seventh Avenue, New York City. The picture is a powerful indictment of warring nations and shows what happens to those which are unprepared. Composed largely of newsreel footage, it presents leading figures in the World War

and grim, real shots of the war, with its accompaniment of destruction and despair, followed by sequences showing the rise of the regimes of dictators, contemporary figures, recent aggressions by Italy, Japan and Germany, and the Spanish Civil War.

The Fight for Peace has been endorsed by many organizations as a vivid plea for peace. The story is by Hendrik Van Loon and narration by David Ross.

Another Distributor for Disney Cartoons

Audio-Film Libraries, 661 Bloomfield Avenue, Bloomfield, New Jersey, is another source from which five popular 16mm color Walt Disney Silly Symphony cartoons may be rented. Titles of the subjects are *Old King Cole*, *Pied Piper of Hamelin*, *China Shop*, *Grasshopper and the Ants*, *King Neptune*.

Additions to Bray Library

The 1938-39 catalogue of 16mm silent and sound motion pictures available from Bray Pictures Corporation, 729 Seventh Avenue, New York City, is now ready and will be sent upon request. Included in this extensive library of educational films is a revised edition of the *Human Body Series* which is now twelve reels in length and divided into the following seven parts: *The Human Skeleton*, *The Human Skull*, *The Digestive Tract*, *The Respiratory System*, *The Urinary System*, *The Circulatory System*, *Human Development*. Accompanying the reels is a manual which closely follows and describes in detail all the facts presented in the film. One copy will be furnished with each set of prints purchased.

They have also added the following four new Nature films edited especially for use in the elementary grades by Miss Rita Hochheimer: *Baby Bear*, *Making Friends with Chipmunks*, *The Humming Bird*, and *Woodpecker, the Farmer's Friend*. The material for these subjects was photographed by William and Irene Finley.

Ideal Catalog Ready

"The Ideal Pictures Corporation, 28 E. Eighth Street, Chicago, Presents Its 1938-39 Motion Picture Offerings," is the title of their new film catalogue. Of its 106 pages (8½x3½), 83 are devoted to 16mm sound film classified into nine main sections—Feature, Featulette, News and Screen Magazine, Serial, Comedy and Cartoon, Musical, Social Science and Travel, Sport, Educational; 14 pages to five divisions of 16mm silent subjects, and the remaining pages to 35mm and 8mm silent films and their Free Film department.



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 - a. Hooke's Law
 - b. Elastic limit
5. Polarized light
Majority of the many phenomena
6. Electrolysis
 - a. Polarization at anode
 - b. Crystal growth
 - c. Farady Effect
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Details too small for the class to see in the experiment itself, are readily observed when magnified through projection. Transparent materials can be projected in true colors. The contours of opaque materials can also be projected. When motion is present it is shown vividly on the screen.

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KEYSTONE VIEW COMPANY

MEADVILLE, PENNA.

School Department

(Concluded from page 269)

ping string held in place with thumb tacks. The graph was used as a part of a group report on an assignment, then left in the classroom for individual study and further reference work.

At the conclusion of the fourth grade project on the study of peoples of many lands, an international bazaar was held. The entire series of group activities in the making of the background scenery for the various booths, constructing the booths, and arranging the wares for sale at the stands was photographed. Concepts developed during the study of the unit provided the working knowledge for the construction work.

The success of these photographic endeavors was so marked that the college plans an enlarged program of this sort for the coming school term.

Films Stolen

Walter O. Gutlohn, Inc., reports that a 16mm sound print on the feature picture *Let's Sing Again*, starring Bobby Breen, and a one-reel Toddle Tale cartoon *Along Came a Duck* were recently stolen in the New York area. It is suggested to non-theatrical film users, that if these films are offered from a questionable source, they notify the Gutlohn Company, 35 West 45th St., New York City.

What I Want from the Producer of Educational Films

(Continued from page 259)

program would be a theatrical film which would have profound and lasting effects, perhaps good, perhaps evil, on the attitudes of school pupils.

In the first place, I have yet to see a film produced for schools in which acting takes a predominant part, that is anything but "hammy." If there are social study films, outside my ken of which the above is not true, I hope to be enlightened soon as to their titles and whereabouts. Acting is probably necessary in nearly every social studies film which may be made. I want social studies films which are good enough to be shown in a theatre and have the audience enjoy them. I think it can ultimately be done. Regarding your statement that one of the major difficulties lies in the fact that teachers won't use films properly, why not make them in a way which will encourage proper use, which will make the proper way the easier way instead of the more difficult way?

Maybe it appears to you that I am disgusted. No, I'm not. I am just a busy teacher with five different subjects to teach. As a consequence, I am using about fifty different films all told, some being used in two or three subjects. Of these, only five are industrials.

And yet, I don't feel that I am a "faddist" or am overusing films. I have found that, properly

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 Hundreds of features and short subjects—
 entertainment and educational—16 mm. sound
 and silent, 8 mm. silent and 35 mm. silent.

Ideal Pictures Corporation

28 E. Eighth St. Chicago, Ill.

used, they are one of the most effective teaching devices. When I find an excellent film, I sometimes wish to take up to two hours showing it, stopping, repeating, working it over with the class. And then, I want to shut the sound off and give consideration to details. Finally, for a rounded conclusion, another showing of the whole film with sound. But my teaching would be infinitely better if I had more of these really adequate educational films to help me.

Of course, if you do make the ideal films, they still have to go through the hands of distributors for sale or rent, and your best efforts will be for naught if they do not also realize the schools' needs. Maybe I'll write to them soon.

Very truly yours,
 A Teacher,

(In the next issue, the same teacher will write another open letter—"What I want from the Distributor of Educational Films.")

Among the Magazines and Books

(Concluded from page 264)

This book cannot fail to be profitable reading for any executive planning picture production, whether it be his first or his twenty-first venture. Full and satisfying answers will be found to all his questions . . . What have talking pictures, both still and moving, achieved for business in the past? . . . How used now? . . . How extensively? . . . With what success? . . . What do they cost, and why? . . . What type needed for each purpose? . . . How are various types effectively shown? . . . Why do some pictures fail? . . . How plan pictures on paper? . . . How keep down production costs? . . . and countless specific questions on minute details, with constant warning and sound advice for guarding against extravagant cost and profitless expenditure.

The book carries through the entire procedure of selecting, planning, writing, making, distributing and showing the picture, always with the purpose that the total cost of the procedure shall be well below the return benefits realized. And not only are the mechanics and technique of picture-making covered by the volume. The writers are evidently sound in their ideas of pedagogy. They emphasize the limitations of both motion-picture and still picture, distinguish the effectiveness that each can have in the learning process, and thus accurately assure additional outside circulation for such of these industrial productions as may have real value for the educational field. In short, it is a piece of writing that should be a potent force in promoting further the already astonishing growth of the industrial picture field, a growth which should give the field of formal education much food for thought.

N. L. G.

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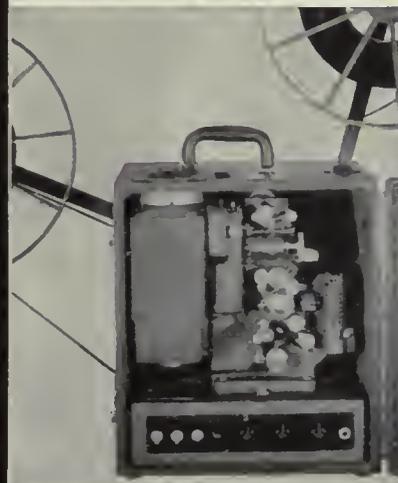
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General Science on Film Slides

As a companion to their physics and chemistry series, Visual Sciences of Suffern, New York, now offers a new film slide series in general science, which consists of eleven rolls of 35 mm. safety film totaling 450 frames and covers the following topics: water, air, levers, inclined planes, pulleys, energy, heat, sound, light, magnetism, and electricity.

While intended primarily for junior high schools, the new series will also be found of value in grade schools, where in many states the teaching of science is now begun. In addition, the compiler has used these film slides effectively in high school physics classes as a memory refreshing preface to the study of topics in more advanced form. They may be used with any textbook since they deal with those fundamentals universally considered minimum requirements for this subject. No special manual is needed since all the frames are self-explanatory.

As general science is most easily taught by diagrammatic representations, the new series makes use of a minimum of explanatory printed matter and devotes nearly every frame to a drawing, sketch or diagram. Visual Sciences also offers for general science classes, a single roll of film slides on optical illusions, which is useful as a supplement to the treatment of light. This roll may also be used effectively in the development of the scientific attitude by impressing on the student that the senses can be confused or deceived. In this connection, this roll has also been used to good effect in general assembly programs, as well as in physics, art, and psychology classes.

The Visual Sciences film slide series are all prepared and produced by Mr. Gerrit C. Zwart, principal of Suffern Junior High School and head of the science department of Suffern High School. They may be exhibited in any 35 mm. film slide projector, or, by means of this company's Scioscope, in any standard glass slide projector. The Scioscope has no moving parts other than the focusing lens and may be attached or removed in a moment without tools.

A New Viewer for Film Slides

The Albert Specialty Company, 231 South Green Street, Chicago, announces the new Vuescope for viewing 35 mm. black and white positives or color transparencies as well as the popular 2"x2"

glass slides. It may also be used to determine the enlarging possibilities of negatives. Its adjustable lighting system is said to give even illumination without eye strain, and the adjustable high power magnifier brings out the fine detail. For added convenience, an adjustable stand is available.

RCA Announces New Sound Unit for Small Schools

A "table model" control cabinet for schools which makes the manifold services of sound available for the first time to smaller educational institutions at much lower cost, has been announced by W. L. Rothenberger, in charge of RCA Victor's Commercial Sound activities.

In one smartly styled cabinet built for mounting on a table or desk is included a high fidelity radio receiver, a phonograph turntable, a microphone, a powerful monitoring loudspeaker, and switch controls for each of twenty classrooms. Pro-

rooms. Of simplified design and construction, the unit is easily installed.

The new unit, designated as MI-6718, permits distribution of radio broadcasts, recorded music and announcements to any or all classrooms. It also permits two-way communication between the principal's office and any classroom by throwing a single switch. In addition, a program from any point in the school may be picked up and re-broadcast over the entire system. There is a special connection for using the amplifier housed in the cabinet for public address purposes with a microphone and loudspeakers at any distance from the unit, such as in a school auditorium. An input circuit which makes it possible to control microphone volume from a remote position is another new convenience.

The cabinet is 42 inches long, 18¾ inches high and 13¾ inches deep, and is designed to assure ease of operation. The phonograph turntable, equipped with a separate volume control, is mounted in



A school principal making an announcement to students in classrooms throughout his school, using the new RCA Victor "table model" sound control cabinet.

vision is made for twenty additional classroom controls, to be installed later if required, to service a total of forty

a drawer beneath the radio receiver and may be pushed back out of sight when not in use.

Orton Hicks Joins Gutlohn

From Walter O. Gutlohn, Inc., comes announcement that Orton Hicks, who recently resigned from the presidency of Films, Inc., is now actively connected with the Gutlohn Company as Chairman of the board. Mr. Hicks has been identified with the 16mm field for many years. In addition to his association with the Gutlohn Company he is also president of the Seven Seas Film Corporation, specializing in motion picture service to steamship and railroad lines.

Lower Prices Announced by Bell & Howell

As a result of increased activity at the Bell and Howell plant, Chicago, substantial price reductions have been announced. Their extensive line of 16mm cameras now range from \$79 to \$252 (formerly \$85 to \$266.50); 8mm cameras from \$51.50 to \$80 (formerly \$55 to \$85). New prices on silent 16mm Filmo projectors are as follows: Model S \$125; ST \$139; SU \$164; JJ \$242; 129-C \$192. Greatest reductions have been made, however, on the three Filmosound Models 138-M, 138-M2, 120-J—now priced at \$346, \$369 and \$595.

To help you dramatize your lessons on **PREHISTORIC ANIMALS**



**—BUT IF YOUR SUBJECT IS
THE TINIEST OF ANIMALS—**

“THE PROTOZOA”—Another new Eastman Classroom Film, prepared in cooperation with the Department of Biology, Washington Square College, New York University. The life of various protozoa observed by means of microcinematography. Dissection of amoeba under the microscope. Methods and means of locomotion, food-getting, digestion, reproduction, elimination, and defense in such animals as amoeba, condylostoma, exuviella, actinophrys, dileptus, paramecium, blepharisma, frontonia, spirostomum, acintinosphaerium, stichotricha, difflugia, zoothamnion. 2 reels—\$42.

“A LOST WORLD”—A newly released Eastman Classroom Film. Prepared from the motion picture *The Lost World*, based on a story by A. Conan Doyle. An account of an expedition which supposedly discovers an isolated region inhabited by prehistoric animals—pterodactyl, brontosaurus, allosaurus, triceratops, tyrannosaurus. Battles between the reptiles, a forest fire, and the escape of members of the expedition form a highly interesting and informative picture story. 1 reel—\$24.

Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y., for further information on Eastman Classroom Films.

Eastman Classroom Films

Important Reductions by Ampro

Ampro Corporation, Chicago, announce that production the past twelve months has exceeded all previous records, enabling drastic price reductions on the following models:

Silent	New Price	Sound-on-Film	New Price
Model J	\$125	Model U	\$345
Model K	135	Model UB	365
Model KS	140	Model N	415
Model KD	150	Model NB	435
Model NC	175	Model L	455

Three Dimensional Projection

Although stereoscopic photography is nothing new, this type of photography has not enjoyed the popularity it deserves, mainly due to the fact that only one person at a time could view the stereoscopic picture. The Stereoly-Polaroid System, however, now makes it possible for three dimensional pictures to be projected and viewed by an audience as simply as ordinary black and white and color pictures.

This process takes advantage of the recently introduced Polaroid screens or filters, which are artificial mediums for polarizing light so that it will vibrate in a single plane. The entire process revolves about the Stereoly Attachment—an accessory for the Leica camera, manufactured by E. Leitz, Inc., New York City. Ordinarily to engage in stereoscopic photography, a special camera was needed—a camera that was relatively expensive and not readily adaptable to ordinary photographic needs. The Stereoly Attachment slips over the regular 50mm lens (except the Leitz Xenon f:1.5 lens) of the Leica. It has two prisms spaced at about 2½ inches apart, which produce the two required images. The latter are reproduced within the single Leica negative area.

In order to project the stereoscopic pictures a black and white or color transparency is placed in a Leitz VIII-S projector, having a Leica 50mm lens (except the Leitz Xenon f:1.5 lens) mounted on it. The Stereoly Attachment is then placed over the lens with the aid of a special bracket and two Polaroid filters put over the prisms of the Stereoly. One is oriented to polarize the light vertically and the other so positioned that the light passing through it is polarized horizontally. On the screen there are two overlapping images. Now, it is only necessary for the spectator to wear a pair of spectacles, the "lenses" of which are Polaroid screens oriented in a similar fashion to the filters over the prisms of the Stereoly Attachment. In this manner each eye can see only one of the images of the stereoscopic pair and depth, or the third dimension, is perceived.

Film Estimates

(Concluded from page 262)

Poet and Tsar (Russian, very full English titles) (Amkino) Slow, sentimental story of trials of Pushkin and his friends under Nicholas I, stressing Tsar's cruelty, of course. Usual faults of endless close-up, tireless posing, and Russian love of mere talk and long speeches. 9-13-38
(A) Hardly (Y) No (C) No

Princess Tam Tam (French-English titles) French writer, seeking material, tries to Parisianize elemental African negress (Josephine Baker) while his wife philanders with black Moor. Both ventures fall and blacks and whites pair off properly. Typical Continental sex comedy, mildly amusing. 8-2-38
(A) Fair of kind (Y) No (C) No

Prison Break (Barton MacLaue, Glenda Farrell) (Univ) Noble hero goes to prison for another on manslaughter charge, foils prison break, is paroled but can't find honest job. His capture of escaped convict, responsible for his troubles, finally brings happy solution for him and loyal sweetheart. Hackneyed melodrama. 9-7-38
(A) Hardly (Y) Unsuitable (C) No

Pugachev (Russian, Eng. titles) (Amkino) 18th Century peasant revolution vigorously screened, leading role notably done, tempo good, heavy with detail, violence, brutality, but lightened by comedy bits. Cossack wins brief power as Czar, wrecks vengeance on nobles (burlesqued), and dies predicting present-day Russia. 8-9-38
(A) Good of kind (Y) and (C) Little interest

Return to Life (Present-day Spain) (Garrison Films) Telling plea for help by Loyalist Spain. Shows care of children, sick and wounded. Hospital methods, bandage-making. Struggle to harvest food for 2/3 Spain's population from 1/3 the territory. Little of warfare, much of the consequences. 8-30-38
(A) and (Y) Good of kind (C) No

Rich Man, Poor Girl (Robt. Young, Ruth Hussey) (MGM) Light little comedy. Somewhat confused in purpose, overweighted with dialog, but with some homely humor and character interest, as wealthy hero struggles to overcome the class-conscious pride of his fiancée's poor and commonplace family. 8-30-38
(A) and (Y) Fair (C) No interest

Robber's Bride (German, poor English titles) (Ufa) Gay, tuneful, richly staged operetta (Millocker's Gasparone) with much dancing, music refreshingly non-"swing", and well tangled plot about coffee smugglers, fortune hunters, imaginary arch-robber, and true love troubles. Good for German language students. 10-4-38
(A) Good of kind (Y) Fairly good (C) No

Room Service (Marx Bros.) (RKO) Hilarious stage play is rather restrictive vehicle for nonsensical antics of rowdy trio, but more plot, less vulgarity than usual. Concerns hectic efforts of shoestring producer to get backer for show and avoid eviction from hotel. Fast, furious action and dialog. 9-20-38
(A) Depends on taste. (Y) Prob. funny (C) Perhaps

Safety in Numbers (One of Jones Family series) (Fox) Homely, human, pleasantly complex, really climactic story of how small-town folk thwarted attempted swindle by city crooks through faked proof that local swamp was valuable mineral water. Good fun for all but the over-critical. 9-13-38
(A) Good of kind (Y) (C) Thoroughly amusing

Secrets of an Actress (Kay Francis, Geo. Brent) (First Nat'l) Unpretentious, dignified, well-knit little triangle with actress heroine, hero and his self-sacrificing friend, finely played by Ian Hunter. Troubled romance, numerous reversals. Simply and convincingly done save for maid's labored comedy. 9-20-38
(A) Good of kind (Y) Mature (C) No

Sing You Sinners (Crosby, MacMurray) (Para) Bing effective in character part. Music incidental to heart-warming, simple, humorous story of likable family—Bing easy-going, irresponsible son, Fred the hard-working son. Fine family relationships but dubious values involved in racetrack elements. 9-27-38
(A) Pleading (Y) Perhaps (C) Hardly suitable

Slander House (Adrienne Ames, Craig Reynolds) (Progressive) Apt title for fashionable beauty salon where much of action occurs. Unpleasant, sensational stuff. Heroine gets involved in scandal which is climaxed by neglected wife's attempted suicide as result of malicious gossip of patrons. Hero unconvincing. 9-20-38
(A) Hardly (Y) No (C) Certainly not

Spawn of the North (Fonda, Raft, Lamour) (Para) Impressive backgrounds, fine camera shots and a trained seal provide chief interests in clumsy, rambling melodrama of Alaskan salmon fishing. Long sequence of greswome sea fighting. Grim climax. Fine acting by Barrymore and Tamiroff, rest of cast ineffectual. 9-7-38
(A) Fair of kind (Y) Strong (C) No

South Riding (R. Richardson, Edna Best, Edmund Gwenn) (UA) Fine, mature, leisurely British film, expertly acted, rich in character interest. Impressive realism and restraint in absorbing human drama built round community problems and leaders' individual lives. Charming rural settings. 10-4-38
(A) Excellent (Y) Mature (C) Too mature

Straight, Place and Show (Ritz Brothers, Arlen, Phyllis Brooks) (Fox) Typical desperate clowning by Ritz brothers. Hectic pantomime, wrestling match, misplaced racehorse, wild steeplechase, and continuous raucous noise almost bury romance of aristocrat hero and horse-trainer heroine. Many laughs for the many. 10-11-38
(A) Hardly (Y) Perhaps (C) Perhaps

Tenth Avenue Kid (Bruce Cabot, Beverly Roberts, Tommy Ryan) (Republic) Grim, unpleasant crime thriller. Tries to make amusing toughest boy character to date, tool of crookdom and center of violence, flying bullets, falling bodies. Largely artificial stuff that outweighs effect of lad's final reformation. 9-27-38
(A) Poor (Y) and (C) Certainly not

Thank You, Madame (Jan Kiepura) (German-English titles) Fairly entertaining film; pleasing settings, fine singing, good acting, elementary humor. Trite plot of humble-life hero rising to operatic stardom. He almost loses his simple flower-girl sweetheart in the rise, but climax sees them happily reunited. 9-7-38
(A) Good of kind (Y) Perhaps (C) No interest

Three Loves Has Nancy (Gaynor, Montgomery, Tone) (MGM) Breezy, sophisticated, well-acted, farce. Clever dialog and amusing, unconventional situations when guileless small-town heroine invades the penthouse apartment of a conceited New York author and his publisher, who become rivals for her hand. 9-27-38
(A) Very good of kind (Y) Sophisticated (C) No

Three on a Week-end (M. Lockwood, John Lodge) (GB) Realistic delineation of English working class on holiday at seaside. Central theme—of young nurse who deserts fiancé and saves bereaved husband of her patient from suicide—slowed up too much by humorous activities of other week-enders. 9-13-38
(A) Perhaps (Y) Little interest (C) No

The Sheik (Rudolph Valentino) (Para) Of interest chiefly as an amusing antique (reissue). Much more "dated" than Son of the Sheik. Unbelievably crude in lighting, photography and acting, latter consisting of facial grimaces. Wisdom of disinterring the Valentino legend very doubtful. 7-19-38
(A) Perhaps (Y) Probably amusing (C) No

Treasure Island (Beery, Jackie Cooper) (MGM) Reissue of 1934 release. Recommended then as "expert, realistic story, with notable beauty of settings and photography. Scenes of violence and bloodshed—faithful to story—strong for sensitive children. Beery's 'Silver' softened to crafty, good-natured rogue." 7-26-38
(A) and (Y) Excellent (C) Good but exciting

Touchdown, Army (John Howard, Mary Carlisle) (Para) Very fresh hero becomes West Point plebe, meets upperclassman rival for Colonel's daughter, out-stars him on gridiron and wins girl. Some good bits on West Point life, with some absurdities and much stock football footage. 10-4-38
(A) Depends on taste (Y) (C) Probably good

U S S R 1938 (Russian, English titles) (Amkino) Masterful propaganda by deftly chosen, obviously posed and finely photographed scenes showing that Elysium reigns in all Russia. Absorbing shots of transportation, industry, art, education, sports, war machine, costly equipment and huge buildings. All smiles and songs. 7-19-38
(A) Good of kind (Y) (C) Doubtful

Valley of the Giants (Wayne Morris, Claire Trevor) (Warner) Pretentious film with striking scenes of Redwood lumbering in incessant Technicolor. Rest mere frontier melodrama, he-man pioneers fighting ruthless villains, fists, guns, dynamite. Poor direction. Villainess turns heroine, villain repeats incredibly. 9-13-38
(A) Depends on taste (Y) Thrilling (C) No

You Can't Take It With You (L. Barrymore, Arnold, Arthur, Stewart) (Columbia) The famous stageplay finely screened with notable cast. Weird family done to the life, hilariously funny, wholesomely entertaining. Marked changes and additions to original make film very long but comedy values are fully sustained. 10-11-38
(A) (Y) Excellent (C) Good

Youth Takes a Fling (Andrea Leeds, Joel McCrea) (Univ) Inappropriate title for pleasing, convincing little story of hero who yearns to go to sea, and earnest, romantic heroine who has found her love and finally wins him. Slight, simple, but excellently acted, directed and produced. 10-4-38
(A) Good of kind (Y) Good (C) Little interest

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- Castle Films (6)
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(See advertisement on page 245)
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- Eastin 16 mm. Pictures (6)
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(See advertisement on outside back cover)
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- William J. Ganz Co. (3, 6)
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- Harvard Film Service (3, 6)
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Chamber of Commerce Bldg.,
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- International Geographic Pictures (5)
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- J. H. Hoffberg Co., Inc. (2, 5)
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- Institutional Cinema Service, Inc. (3, 6)
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Wabash, Ind.
(See advertisement on page 272)
- Lewis Film Service (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 264)
- The Manse Library (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 264)

- Park Cine Laboratory (4)
120 W. 41st St., New York City
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- Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Pictures Co. Inc. (2)
Rockefeller Center, New York City
(See advertisement on page 267)
- Visual Education Service (6)
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(See advertisement on page 265)
- S. O. S. Corporation (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 275)
- Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 248)
- Visual Education Service (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.
- ## PICTURES and PRINTS
- Colonial Art Co.
1336 N.W. 1st St., Oklahoma City, Okla.
(See advertisement on page 264)

SCREENS

- Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 269)
- Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Institutional Cinema Service, Inc.
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- Williams, Brown and Earle, Inc.
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Johnson Co. Bank Bldg.,
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- Edited Pictures System, Inc.
330 W. 42nd St., New York City
- Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 275)
- Keystone View Co.
Meadville, Pa.
(See advertisement on page 274)
- Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 270)
- Society for Visual Education
(See advertisement on page 271)
- 327 S. LaSalle St., Chicago, Ill.
- Visual Education Service
131 Clarendon St., Boston, Mass.
- Visual Sciences
Suffern, New York
(See advertisement on page 270)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

- Keystone View Co.
Meadville, Pa.
(See advertisement on page 274)

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156 King St., W. Toronto
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(See advertisement on page 274)
- Spencer Lens Co.
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(See advertisement on page 273)
- Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

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- (1) indicates firm supplies 35 mm. silent.
- (2) indicates firm supplies 35 mm. sound.
- (3) indicates firm supplies 35 mm. sound and silent.
- (4) indicates firm supplies 16 mm. silent.
- (5) indicates firm supplies 16 mm. sound-on-film.
- (6) indicates firm supplies 16 mm. sound and silent.

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EDUCATIONAL SCREEN

The Magazine Devoted Exclusively
to the Visual Idea in Education

NOVEMBER, 1938

Teachers Library
VOLUME XVII, NUMBER 9
WHOLE NUMBER 166

Public Library
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The
Dawn
of
Intelligence

Painting by Pothast
(Courtesy of Colonial Art Company)

IN THIS ISSUE

*The Use of Motion Pictures in
an Elementary School*

*What I Want from the Distributor
of Educational Films*

*Visualizing Life — Today and
Tomorrow*

Motion Pictures — Not for Theatres

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The EDUCATIONAL SCREEN

NOVEMBER, 1938

VOLUME XVII

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Contents

The Use of Motion Pictures in an Elementary School. Ruth Livermon	285
Visualizing Life — Today and Tomorrow. Marian Evans	288
What I Want from the Distributor of Educational Films. Donald C. Doane.....	289
Motion Pictures — Not for Theatres. Arthur Edwin Krows.....	291
Film Estimates	295
Origin of Christmas Customs— In Hand-made Lantern Slides. By Ann Gale.....	296
Among the Magazines and Books.....	297
News and Notes Conducted by Josephine Hoffman.....	300
In and For the Classroom Conducted by Wilber Emmert.....	302
Current Film Releases.....	308
Among the Producers.....	310
Here They Are! A Trade Directory for the Visual Field....	312

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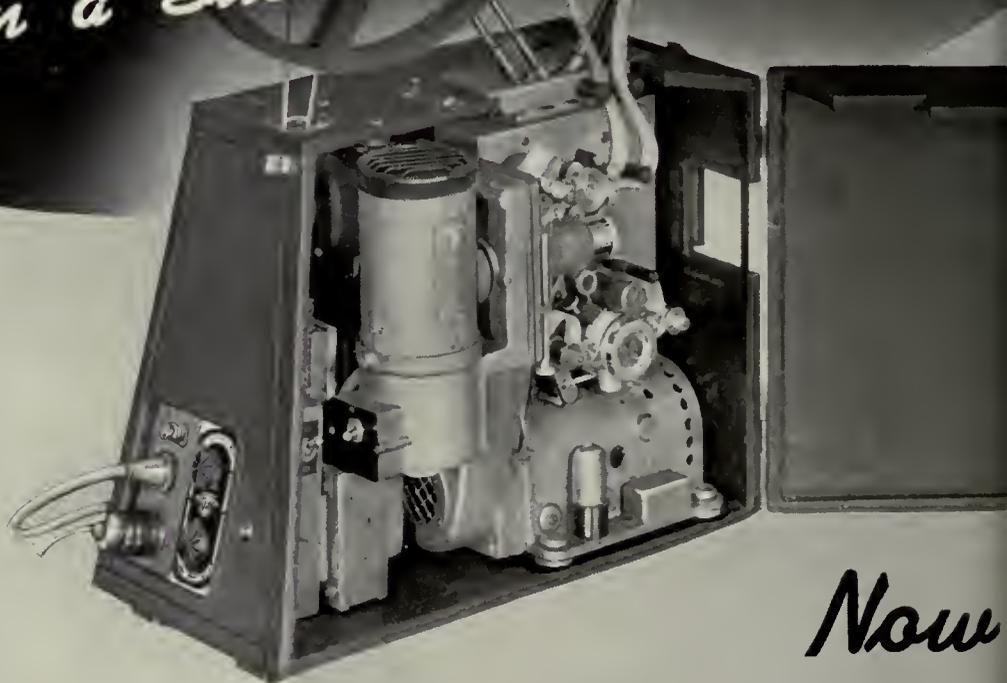
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The Use of Motion Pictures in an Elementary School

A concrete example of sound methodology for using motion pictures, as practiced in Meadowbrook School.

By RUTH LIVERMON

Principal Meadowbrook School, Norfolk, Va.

THE motion picture in school life is generally considered as an aid in achieving three ends: namely, (1) Entertainment, (2) Appreciation, (3) Instruction. Due to the economic status of the Meadowbrook School, the first is disregarded entirely; the second somewhat sketchily attempted; and the third is dynamically fostered.

Two-thirds of this school's population come from the upper strata of the financially secure citizens. Attendance at regular first class commercial movies, children's little theater plays, and concerts takes care (to a large extent) of the children's entertainment in their leisure hours. The school does not need to supplement the entertainment angle of the motion picture field. In fact to do so would compete strongly and perhaps unsuccessfully with the work of these other groups.

Beginnings have been made however in the field of appreciation. Experimentation has this year been attempted in music with the ERPI film, *The Symphony Orchestra*. This was used in conjunction with the Damrosch music hour. In art the use of the Harmon Foundation film, *We Are All Artists*, is contemplated. As a large per cent of the younger folk comes from homes which are architecturally beautiful, in which are placed the finest old furniture and modern radios, surrounded by exquisite gardens, the need for stimulation in this field is not felt to appreciable degree.

It is in this third group, instruction, that the school places its forceful emphasis. Because of its adherence to the progressive philosophy and practices of the new state curriculum throughout its entire school range from the beginning first grade to its final term of the seventh, the school integrates its motion picture program within the units of work of each grade. It is necessary at this time to mention only the stimulation of the motion picture upon the active, absorbing interests of children of any age, its power in the development of imagination and the retention of facts, and its success in banishing verbalism. For each unit of work at least one suitable movie is scheduled.

It might be well to remark here that it is in the primary grades that difficulty is found in locating always a film adequate to unit needs. By and large, however, more films have been located than was at first expected. Due to the lack of reading skills in the primary grades, the sound picture is the ideal answer. Such films as *The Adventures of Bunny Rabbit*, and *Animals of the Zoo* (Unit on "Pets"), and *Man's Cloth-*

ing, A Woollen Yarn, The Land of Cotton, (Third grade unit—"Clothing") serve successfully.

Invaluable is the sound motion picture in the units of the upper elementary groups. There is scarcely a unit which does not in some aspect find its film at some place in its development. Moreover in scientific units, several films on a single unit may be obtained. For example on the unit, "Astronomy," the following films were found of worth: *The Moon, The Solar Family, The Earth in Motion, The Tidal Theory of the Earth and Moon's Creation*. Likewise on the 5th grade unit called "Marine Life," this group found *Beach and Sea Animals, Pond Insects, Tiny Water Animals, The Frog*, of immense worth. Helpful pictures such as *The Ant, Butterflies, Aphids, The Spider* were discovered for the 4th grade's unit on "Insects." Even such a difficult seventh grade unit as "Money" found its film in the Canadian Mint reel. Geography appears to have provided a rich harvest as no portion of the earth's surface seems to have escaped the film's eye. Units on the "Machine Age" are to be had from such reliable sources as the libraries of Westinghouse, General Electric, and Ford. (Perhaps it might be well to say in passing that



A review through creative murals on *Beach and Sea Life*, before the film showing.

the films mentioned from these last sources were found free of any advertising except the final statement to the effect that the film was made by that company or the company's seal or signa.) On units dealing with ma-



Class, group leader and teacher discussing questions to be observed in the coming movie.

chinery the following were used: *New Frontiers* (Westinghouse), *The Work of the TVA* (U. S. Gov.), *The Life of Edison*, *The Light of a Race* (General Electric), *Coal* (Pocahontas Fuel Co.) In the previous year *The Chronicles of America Photoplays* (Yale University) were used in their entire scope in relation to History Studies.

To realize the most effective results from motion picture films in class instruction, much care, time, and thought need to be expended prior to the initiation of the unit. In the Meadowbrook situation units are planned and written in the term before their actual teaching. Film catalogues are searched, descriptions of probable kindred films are made, the relation of the film to the unit, its estimated place in the development of the work, and its actual scheduling take place. In this way a great amount of wasted time, energy, and money are saved. Films generally arrive at the school the day before they are to be shown. Opportunity is thus given to the teacher to sit quietly alone and preview its showing. From this experience she writes questions and data to be closely observed by the class. Typical questions are these.

TINY WATER ANIMALS Grade 5L-5H

1. What are protozoa?
2. What instrument has to be used to observe these animals?
3. On what do protozoa feed?
4. Describe some of the smaller animals.
5. How do protozoa reproduce?
6. What is the simplest known animal?
7. Does it have a brain? eye? mouth?
8. How does this animal travel?
9. How does it take nourishment?
10. What in the human body closely resembles the amoeba?
11. Of what are all living things composed?

Generalizations attempted in final discussion of the film:

1. Propagation of the Species.
2. Tree of Life.

On the next day the questions are put before the group and emphasized. After the actual showing of the film, the class sits in the auditorium discussing the film and the questions. It is generally their desire to have the film run again for them. At other times they prefer

to return to their room and carry on their discussion, hunt for additional material and return later in the day for the final showing of the film. (All films in the Meadowbrook School are shown at least *twice*. The school does not believe in the osmotic process of absorption).

Our experience has taught that elementary children benefit more from the one reel length of approximately 400 feet of film. It is frequently brought out that more information is necessary. Other facts are sought in books or elsewhere. In the discussion lies, perhaps, the heart of motion picture procedure; for it is here that the teacher seeks to cause children to see the logical law of cause and effect, the universal aspect, and the generalizations upon which life concepts are built. As the next step in film work each class has a check-up in concrete form on its findings. Additional findings, true and false statements, competition tests, written conversations, stories, dramatizations, drawings crystalize their results. Some examples of these check-ups follow.

Grade 5L-5H

Fill in blanks with the following words:

Hairs	mouth	protozoa
splitting	see	amoeba
brain	cells	microscope

1. All living things are composed of _____.
2. We call these tiny water animals _____.
3. Our red and white corpuscles resemble the _____.
4. The _____ makes it possible for us to see these tiny animals.
5. The amoeba does not have a _____ or _____ and it cannot _____.
6. These animals reproduce by _____.
7. These animals move with the help of _____ on their bodies.



Class, group leader and teacher discussing the movie afterwards from their questions.

Generalization is attempted in the discussion, of which a specific example is given here.

A. Propagation of the Species

Grade 5L-5H

Unit of Work—"Marine Life"

THOUGHTS OF A MICROSCOPE

(After seeing the film *Tiny Water Animals*)

"Scientists work with me day and night. Without me the microscopic animals would not be known to the

world. The different shapes of the protozoa would not be known. Taking a drop of pond water and putting it under me, the worker can see an amoeba. The amoeba is an odd little animal and does strange things. It eats through its skin."

A word of caution might be well at this time. Although the motion picture is a powerful medium of experiencing reality, it is only one of the many varied activities of unit work. Its integration and place in enlarging horizons and forming generalizations is not used alone, in isolation, but in correlation and in conjunction with other media such as still pictures, slides, cartoons, speakers, trips, collecting, building activities, experiments, and clay work.

Experimentation continually goes forward. The use of the same sound film on different grade levels has proved beneficial. A 4th and 7th grade both were working on an astronomy unit. The film, *The Moon*, having been shown to both groups, aided each to a clearer conception of the unit than could possibly be achieved through any other means. Each group through its discussion and check-up gained generalizations possible and proportionate to its intellectual maturity.

Because of the emotional appeal of symbolic music, the process film, *Rhapsody in Steel*, produced by the Ford Motor Company, was shown to the upper grades (4-7). By written material and drawings the generalizations—Man's dwarfing by machines, his dependence upon these machines—were definitely observed. Perhaps the linking of synchronized rhythm adding the emotional element, so adequately accomplished by the commercial film and so advocated by the experts in mental hygiene, will prove a strengthening force to the development of the sound motion picture in education.

Even further correlation of film with the work of all upper grade units was tried. The sound film, *Man's Clothing*, scheduled for the 3rd grade unit was presented to the older group. Two questions relating clothing to each different unit were given to each group before the showing. Drawings bear out the fact that even to groups of this age the relationship of man's clothing to their unit was observed. (It was amazing to the adult group who framed the questions that the basic relations of living were so closely linked.) A similar experiment was made with *The Development of Transportation*. Questions with unit topics show this correlation of the same film for various grades.

Grade 6H-7L

Unit of Work—"Weather"

Questions:

1. What is the effect of weather upon transportation in the past? In the present?
2. What instruments has science invented for the aiding of transportation in weather crisis?

Grade 7H

Unit of work—"Social Agencies of the Community"

Questions:

1. What welfare organizations deal with transportation especially? (The Traveler's Aid, The Salvation Army)
2. How does transportation in Norfolk affect the social agencies in their work?
3. How does the history of transportation parallel the history of this country?
4. Show how these movements are linked?

Grade 4H

Unit of Work—"Insects"

Questions:

1. What insects are brought from one place to another by man's means of transportation?
2. What are nature's quickest means of transportation?

Grade 6L-6H

Unit of Work—"Records"

Questions:

1. How has transportation in the past influenced the use and preservation of records?
 2. How does transportation today affect the use of the written and spoken word?
- Picture discussions were held after the film showing.

Grade 5L-5H

Unit of Work—"Marine Life"

Questions:

1. Are there any beach or sea creatures which have aided man's transportation in the Past? In the Present?
2. In the early history of this country what was man's chief way of traveling?



A field trip to the beach stimulated by the film showing.

Adequate financial provision for audio-visual integration in unit work is expensive. During the one and a half years of experience with this medium the problem of paying the rental, express and postage rates of worthwhile films runs to a fine sum. Even a working basis for an economically sound school community, to say nothing of the ideal basis, is still in the future. Regardless of its expense, and it is high, the value of motion pictures in elementary development still outweighs its headaches.

Our Cover Picture

Pothast is a modern American artist of Dutch parentage. His paintings are on exhibition in the leading galleries of the world and his interpretations of Holland life are recognized among his greatest accomplishments. Interiors constitute his chief works of art. They are colorful, perfect in draftsmanship and strong in their appeal. "The Dawn of Intelligence" presents a simple Dutch interior, revealing a devoted mother and her three small children, one of whom, is just realizing its capabilities of balancing its little body and taking a few steps, thus symbolizing the title.

Visualizing Life---Today and Tomorrow*

By M A R I A N E V A N S

Director of Visual-Audio Education
San Diego City Schools, Calif.

"Much have I seen and known; cities of men
And manners, climates, councils, governments.

I am a part of all that I have met;
Yet all experience is an arch where thro'
Gleams that untravelled world whose margins fade
Forever and forever where I move."

—Tennyson

TENNYSON'S poetic vision of the trail of the learner through life's limitless arch of experience symbolizes today's concept of learning as continuous growth in the art of living.

Youth's horizon is being extended and his arch of experience widened as modern education affords daily opportunities for him to face life directly through first-hand contacts and to experience vicariously through colorful visual-audio images and records. However, if we, as teachers, are to project this emerging concept of education as the art of living into the field of practice, we must concede that, as an *art*, it should be a far more highly selective process than it has been in the past, with a far greater emphasis upon the qualitative values of learning. During the past decade visual education contributed greatly to the enrichment of teaching. During the next decade visual-audio instruction may make an outstanding contribution by helping both teachers and pupils to "vignette" or selectively emphasize the most worth-while phases of living and world events.

Since visual-audio aids are flexible and adaptable enough to be quickly and economically acquired or discarded, these tools of instruction are ideally suited to aid in shaping and building our modern educational

program. Visual-audio instruments which are so constructed that they may simplify, synthesize, and emphasize a subject may do much to bring about a greater balance and integration in learning experience which will meet the current need for continually sifting out the irrelevant and outmoded, while at the same time introducing new and up-to-date information.

Thus, using modern visual-audio instruments, students and teachers may now "vignette" life experiences, daringly masking out and discarding the obsolete, useless, trite, and destructive elements so that they may bring into clearer focus the beautiful, useful, significant, and inspirational qualities of living.

What are these desirable qualities of living which are the essence of today's life-learning program which we must use as a guiding pattern in the selection and use of visual aids? State the goal of education as you wish, but expressed simply in terms of the lives of the learners, is it not the emergence of healthy, happy, socially harmonious, useful, creative, beauty-loving, and spiritually attuned individuals? Accepting this goal with its emphasis upon eternal human growth, may we not preserve the continuity between the theoretical aims and practices of education by selecting and grouping educational materials and methods from such broad, balanced, and basic qualities of living as *health, social harmony, work and recreational expression, love for and expression of beauty, and spiritual attainment?*

In order that you may know that it is possible to weave a visual-audio program around a real life experience curriculum with a true emphasis upon human life values rather than on subject content, we are presenting for your enjoyment a colored motion picture film entitled "Vignettes of Life."

This motion picture serves as an example to show how visual education may contribute to progressive education by producing in brief, interesting pictorial form the aims and trends of education itself. The film visualizes tomorrow's plan of life-learning as being guided by first, a design for living composed of man's constant and fundamental life needs common to both individual and group life, and secondly, a path of experience which is a flexible mosaic composed of the ever-changing interests of the growing individual in relation to his environment and the evolutionary world about him.

The inspirational theme of this motion picture is a beautiful painting created by Eugene Taylor, a San

*Address given at the meeting of the Department of Visual Instruction of the N.E.A., New York City, June, 1938.



The Painting which inspired the production of a school-made movie

(Concluded on page 306)

What I Want From The Distributor of Educational Films

An Open Letter from a Teacher—now writing to the Distributor with the same frankness as to the Producer in last month's issue.

By DONALD C. DOANE

Caruthers High School, California

DEAR MR. DISTRIBUTOR:

Perhaps you read my recent letter to Mr. Producer. You may remember that while I told him what I wanted, I also said that he has some films that fit my needs admirably. For all I know, there may be many more suitable films than I have on my list for this year—and maybe you have them. But you give me no adequate way of knowing about them.

Yes, you have catalog descriptions—usually two or three lines. Some day I wish the writer of your catalogs could be confronted with the actual problem of selecting films from such meagre descriptions. Furthermore, to prepare a class adequately for a film on some subject with only a two-line description is next to impossible. Yet it is a recognized fact, supported by ample experimental evidence, that the advantages of films are greatly decreased when shown without previous preparation.

You say I should review the film before showing it. I usually do. But it arrives the day before I am to show it and I can't review it until that night. The time is then past for an adequate preparation of the class.

Now, my determination to write this letter came when I was ordering my films for this year. Here, for example, is a topic on which I wanted a film. I looked at your catalog. I found a half dozen films, some covering the topic as a whole and some various parts of the topic, usually from different angles of approach. According to your descriptions, it was a toss-up; so I chose one as best I could. Then came the time to show it to my class—they were all prepared. I had set questions and problems to be solved by the film—and the postman brought a film which was anything but what I expected. So next year I will try another. Maybe it will be six years before I find the right one. By that time, there will be new ones.

I want an adequate catalog. Perhaps it is not feasible to print a complete catalog of the type I want. It would not be expensive, however, to make up in a loose-leaf form complete descriptions of the films. By complete I mean at least one full page per film, scene by scene, including, if you can, suggestions for use and references. These could be sent out to the teachers of the various subjects in all schools known to have projectors. Incidentally, think of the sales stimulation value of such sheets when sent to the individual teachers.

The cost need not be much. Mimeograph them if you wish, or better, an offset printing job will allow illustrations from the films.

I have implied that I wanted teachers' guides sent in advance for *every* film, rental, industrial, or what not. If a film is worth using, it is worth preparing a guide. Such sheets as I have just described could be prepared in such a way, including suggestions for use and references, that they would be suitable for teachers' guides. And, by all means, send them out when you confirm the order, not the day you ship the film. If such guides are not available, make them yourself.

Incidentally, if you had such sheets, I would buy some of them for distribution to the class. I have found that a mimeographed scene by scene synopsis of a film distributed to the class is an invaluable aid, particularly when the subject is difficult. If I could buy these already printed with selected scenes from the pictures, to be kept from year to year, I would find my teaching much more effective, and, as a consequence, inclined to use more of your films.

And another thing, will you clean out a lot of your old films? I know that many of your films are over fifteen years old. Why, half the stock listed in some of your current catalogs consists of pictures made before 1925. Haven't you seen in theatres lately the series of "old timers" that make the audiences howl with laughter—shots from films dating way back to the time many of your films were made? And haven't you, too, laughed at the techniques, the acting, lighting, photography, composition? Then the next day you went back to your office and rented or sold some similar old product to schools.

Sure, they'll take it. Many teachers think that such films are better than none. I don't. Many others order a few such films once, because your description sounds satisfactory, and then swear off the use of films deciding that all of your films must be equally poor. I know that is true; I've seen it happen. There are a few who have followed the subject of educational films enough to know, as a rule, which are those films but such teachers are, of course, an insignificant minority. One of you distributors has cut the price of such films half price without saying anything about the reason for that cut. Now put yourself in the unsuspecting teacher's place. Here are two films on the same subject—both sound adequate according

to the catalog descriptions, one rents for \$1.50 and the other for 75c. Remember you are a comparative greenhorn when it comes to selecting films, and your funds are limited. Which would you choose? The \$1.50 one because it costs more and therefore must be better? I doubt it.

Weed out your stock, or if you want, list these old films in a supplementary section of your catalog. At any rate, don't feature them equally with your better material.

Here's another idea. Maybe you won't agree with me and I'm not sure all teachers would, but this is it. Did you read in my letter to Mr. Producer about wanting films produced definitely to fill one of three purposes in teaching—(1) to survey or organize a unit of subject matter, (2) to deal with a single topic or concept and restricted to that one concept, or (3) to supplement classroom routine and subject matter limitations and provide a field trip in the classroom? It seems to me that the average size school system, in fact, all except the largest cities, will continue to rely on you for the first and third classes of films, survey and supplementary, but that the second type will be found more useful if owned by the schools themselves. Now, if this idea is right, you would be the logical sales distributors for such films, and you are the only ones in a position to make volume sales possible. To make this practical, most of such films will have to be shorter than 400 feet. They should be of just whatever length is necessary.

Now as to the selection of your films. Most of your selections appear to have been made on this basis: you hear of or see a film, and if you like it, you get it, gradually accumulating a more or less hodgepodge selection. And that is probably the way you have to work, considering the product available and the way it is offered to you. In fact, more films appear to have been made on such a basis because some photographer thought that it would be a good subject. Now, suppose instead that you could consciously build up a library selected on the basis of systematic planning of aids to the various courses and common units within those courses. I know your distribution would increase many times its present amount. One distributor has such a group of films in the field of physiology, possibly chosen with just such an aim in mind or possibly because there happened to be a particularly good selection of films in this field. Anyhow, this distributor has found these films as a group far busier than any of the others. And the same schools repeat their orders for these films year after year, not just sporadic orders but the kind of orders that you need most.

Selection of your films on such a basis would eliminate most of your "duds." Have you ever noticed that the number of bookings on your films corresponds pretty closely to the curricular importance of that subject; that films, no matter how interesting they may be, which are on subjects given only little or passing attention in the usual curriculum are usually still written down as losses?

If you worked from the needs of the school, not from what the market has to offer, you would find your bad guesses would be largely eliminated. And at the same time you would be giving us what we want.

But you say that you can't select this way because the supply is limited and only a couple of producers ever consider the eventual school situation in planning the films and making them. In answer to that, it seems you are in the best position of anyone to tell the producers what is wanted. Perhaps if you would form a group, a national organization of distributors, to study the schools needs, your means of meeting them, and to promote production along the lines of the needs and assure the producer of a market, you might find the nature and quantity more satisfactory.

There are good films now, yes, but on the other hand, there are many more teachers wanting to use films than there are teachers that actually do use them. These teachers won't use them or perhaps will use only a few, half-heartedly, the way you offer them. The market is there, and the producers will, of course, produce if they see an available market. True, the few distributors existing at present do not constitute an adequate market for a producer. But as films become more popular, you can subdivide, perhaps cooperating with county school units as sub-distributing agencies. Then, too, every satisfied user of a film of yours is a potential buyer of that film for his library and you should be the one to sell it to him.

Why don't you reach out a little bit and build up your market and thereby stimulate producers? Maybe it is because most of you are non-commercial and are primarily a service available to schools who want it, not a high pressure sales organization, and feel that it is not your business to stimulate your distribution. But I know of any number of teachers who have projectors available that have only remotely heard that there are some good educational films, and who, when told of material available in their subjects, are amazed. I know of others who would like to use your services, but will not because your methods are not adapted to the school's needs. I know of still others who have used films and been disappointed, sometimes on account of the film and sometimes due to their ignorance of proper methods of use. A little bit of publicity, properly directed, and a lot of teacher training at institutes, teachers meetings, teachers colleges, etc., and through books, pamphlets and adequate catalogs are needed. All of these can be sponsored, particularly by those of you who are public agencies. These contacts, if made by a representative with an adequate background in educational philosophies and techniques, could bring back to you a better understanding of your market and a chance to adjust your methods to its needs.

But at the present time, it seems to this teacher that your methods of distribution constitute a bottleneck between us and better films.

Very truly yours, A Teacher

Motion Pictures — Not For Theatres

By ARTHUR EDWIN KROWS

Editor of "The Spur", New York City

WE HAVE seen also that there was an ambitious start at industrial film production and, at a glance, it would appear that here was the beginning of specialized picture-making apart from the theatres. The symptoms were vigorous. Even the quoted warning to exhibitors not to show advertising subjects with their regular programs, had not been authoritative enough to check the movement. The licensees of the Patents group, themselves, openly flouted it.

Nevertheless, there still would have remained a flaw in the assumption of a considerable non-theatrical field for advertisers, for these industrial pictures were not, as far as may be determined now, made with any reasonable sense of how they were to be used. They were just pictures of factories and processes; and their exhibition was thought of vaguely as an event to take place some time, somehow, in some hall where they might happen to have a projector for some other purpose.

KLEINE TEMPTS THE SCHOOLS

I HAVE here to remark my second reason for selecting 1910 as the real start of the separation of the non-theatrical field. Before 1910, George Kleine, with a sufficient number of altruistic reasons in addition to the commercial motives which skeptics who never knew the man will recognize first, undertook the promotion of a school film service. His plan of attack was well conceived. He knew that in New York City the Board of Education was headed by one of the most progressive schoolmen of his time; and he reasoned that if he could persuade that gentleman, William H. Maxwell, to supplement his regular courses with motion pictures, he would have minimum trouble in extending his proposed film rental service to other school systems the country over.

Accordingly, George Kleine obtained the active coöperation of the People's Institute of New York City, the powerful group which under John Collier had created the highly useful National Board of Censorship and, under its auspices one Saturday night toward the close of February, 1910, he screened, at the headquarters of the New York Board of Education at Park Avenue and 59th Street, a select few pictures taken from an enormous mass of supposed educational material available through the Patents Company. He had with him, in reserve, enough more to make a ten-hour show. The large audience of school officials was greatly interested if not precipitate in its response. He submitted also a manuscript list of more than a thousand films of the same sort, ready and waiting. This was the 336-page catalogue which he pub-

Part Three begins in 1910. The non-theatrical field definitely opens. A large school system takes notice, and inventors work on safety film and better projectors.

lished in April, 1910, for general use.

The affair was surely impressive and redounded greatly to the credit of the gentleman whose vision and perseverance had brought it about; but there remained that obstacle to further achievement which neither he nor anyone else could surmount on the spur of that moment. Consequently it was not New York, but another city in the State, Rochester, which became the first American municipality of record to adopt motion pictures for regular use in its public schools. Rochester's claim was noted in the *Moving Picture World* of July 9, 1910, and no doubt in many other contemporaneous publications. Rochester, of course, was the home city of the Eastman Kodak Company.

It took no profound thinking to see that one of the chief handicaps was the lack of a low-priced, portable projector. Still, Kleine had learned that lesson. When he printed his catalogue, he had used an entire page to describe and laud a projector of this sort, called the Edengraph—purchasable at \$225. Also to an extent the need was being otherwise anticipated.

When the sale of theatrical equipment had reached its peak in this period, the manufacturers who held the basic licenses began to think of new uses for their machines. The churches, schools and clubs looked promising but, of course, it was impracticable to use there the heavy professional equipment, even if the prospects were willing to pay for it—and

they pretty generally were not. So the manufacturers put forth projectors more in line with the requirements. Edison's Home Kinetoscope, the production of which was discontinued after a disastrous fire in the manufacturing

plant, was a notable example.

But behind this sensible effort there was insufficient driving power. The large concerns, used to rich placer mining, in a manner of speaking, were unwilling to dig just yet for additional profits. When the non-theatrical users responded by purchasing only a few projectors at a time, the sales executives pooh-poohed the whole scheme as not worth their while, and returned to their theatrical interests. They wanted quantity production and quantity sale; and they were unwilling to work along without the combination.

LANTERNS TO SEE BY

THE Edengraph was developed about 1908 by Francis B. Cannock, who had been operator for Hollaman of the pretended Lumière Cinematograph at the Eden Musée since 1899, and Edwin S. Porter who, in 1903, produced the memorable "Great Train Robbery" for Edison. In 1909 these two inventors also evolved the Simplex professional projector, which still retains its high favor in theatrical service, while only grubbing historians recall the Edengraph.

Forgotten also is the Optiscope, a home projector, marketed by Sears, Roebuck in 1898. Don Bell, a projectionist working for George Spoor, used the Optiscope as his basis for developing still another "lost" projector called the Kinedrone. In having the parts manufactured at a Chicago machine shop, he did business with a man who was to become his partner in the now celebrated firm of Bell & Howell—founded on New Year's Day, 1907.

The first small projector to attain what may be called enduring non-theatrical celebrity seems to have been the Power Cameragraph, manufactured by the Nicholas Power Company of New York. It was still a rather heavy machine as compared with the average standard-film "portable" of today; but it was very much lighter than the theatrical type, and it had a "throw" of arc- or oxy-hydrogen light which sent a brilliant picture across the roomy old lodge hall, or Y.M.C.A. auditorium, or entertainment room in the parish house, or even in the open at night, across the picnic grounds.

It used regular 35-millimeter theatrical film. My recollection is that it was originally cranked by hand in the same manner as had been done not long before with the first theatrical projectors. As stereopticon slides were still shown commonly, even in theatres, there was an attachment



Photo by Hal Phyte

Alexander F. Victor's 1909 Animatograph combined camera and projector and had pictures spirally on a disc.

to meet that need. The machine actually was just a light, modified edition of the regular theatrical Cameragraph but, considering the circumstances of the time, it was an excellent contribution. Some early specimens of it may be seen even yet in creditable service here and there.

Nicholas Power was somewhat of a public benefactor. Apart from the basically efficient projector which he manufactured, he is accredited with the development of the fireproof magazine, the automatic fire shutter and the flame shield, all of great importance to the developing non-theatrical field with its profusion of fire hazards. But, if Power expected that field to return him a profit in his lifetime, he died in sore disappointment. He worked earnestly at that particular task, too. He used to show pride in his installations outside theatres and, while I have not seen by any means all of his enthusiastic announcements of such sales as they came along, I have read a sufficient number to believe that in those early years his largest non-theatrical order was for the sixty Cameragraphs which he had sold to the U. S. Army and Navy up to October, 1914.

Nevertheless, there seems to have been a kind of non-theatrical projector boom in 1914, because the Kleine Optical Company reported in July a remarkable rush of church orders for film machines in the Middle West. Kleine was the Chicago distributor for the Patents group; so this did not necessarily mean sales of his own projectors. The chances are, rather, that they were Edison Home Kinetoscopes. Something to do with the accretion of such business may have been the action, in November, 1913, of the Presbyterian Board of Publications, which contracted with the Edison Company for the purchase of Edison films on religious subjects approved by the Board, and for many church installations of the non-theatrical Kinetoscope.

The non-theatrical projector problem was to be met more fully by apparatus designed expressly for it, than by "junior models" of the professional equipment. Price had something to do with this. So had portability. So did greater simplicity of operation—for the novice, that is, because, remember, the appeal this time was essentially to amateurs. Hence the making of the Edison Home Kinetoscope had been a well-advised move.

The Acme was a machine much along the required lines; and it was destined to gain and to sustain a high popularity for ten years to come. It was a so-called "suitcase" projector, with shorter "throw" than the Power, but costing only half as much. One of its chief points of attractiveness was that the film could be threaded in it quite simply, much the same way as in a theatrical projector. In the De Vry projector, on the other hand, the full and takeup reels were mounted side by side on the same arbor, necessitating a twist in the film and a slightly more complicated system of threading.

Herman A. De Vry, born in Germany in 1877, had been a traveling prestidigitator and builder of magical illusions. His eventual business grew out of the establishment which he founded in 1900. He was exceedingly enterprising and he prospered. His first film world experience seems to have been with motion pictures for the penny arcades and, at the start of the century, his outfit comprised a Lubin camera, an Edison projector and a Gaumont slot-machine. He began working on his own portable device in 1912, and the following year he had his original "E" Model "suitcase" in factory production.

At about the same time another pioneer, in Davenport, Iowa, was evolving a suitcase projector along with the machine now known as the Victor Animatograph. Alexander F. Victor, the incorrigible inventor of this and many other film devices, was born in Sweden



H. A. De Vry and Lubin Camera in 1910. His suitcase projector started 1912.

in 1878, and had recently come from no less a remote place than India, where he is said to have been the first exhibitor of motion picture films.

A non-theatrical projector which, in point of portability, stood midway between the professional type and the suitcase machine, was the Graphoscope. Whereas the "suitcase" would then serve audiences of only two hundred to three hundred persons efficiently, the Graphoscope could care for upward of five hundred, and therefore was favored in lodges, granges and so forth, for semi-permanent installation.

FOREIGN PROJECTORS

AMERICAN manufacturers of professional film equipment were not alone in trying to develop the non-theatrical field in this way. One might have expected Germany to come in here; but Germany had never managed to cut profitably even into the theatrical picture field in America. I note, however, that in August, 1914, the Smallwood Film Corporation of New York, had taken over the American agency for the Kinnox, a small pro-

jector made by Ernemann at Dresden, and used in Europe by salesmen for pictorial demonstrations of their wares; but nothing much seems to have resulted from it in the United States.

The story was very different with the French invasion. It will be recalled that, until shortly before the World War, French pictures were extensively exhibited in this country, with the powerful Pathé Frères preëminent among the sponsors. Pathé theatrical projectors had not been able to hold the market against the native product favored by the Patents Company and General Film, although the dependable Pathé camera retained a kind of supremacy in the American studios for some years; but they had a small projector, developed abroad, which seemed well adapted to non-theatrical use. It was called the Pathescope.

Its first important demonstration in America seems to have been at the Camera Club, in New York City, in December, 1913, an explanatory talk being given then by J. Wesley Allison. The New York Camera Club has been the scene of much important history in this industry. It was there, also, that one of Edison's men had chanced to hear of the new film made by Eastman, and had given the first report of it to his chief which resulted in the proper birth of motion pictures.

This Pathescope projector had a number of cunning peculiarities calculated to keep all of its future business in the owner's hands, including an especial type of film, much narrower than the theatrical sort, and with a peculiar, patented arrangement of sprocket-holes which fit the cogs of the Pathescope and of the Pathescope only. Theatrical subjects, in the now standard 35-millimeter theatrical width, could be reduced optically for the required 28-millimeter size, but only on the equipment maintained by the Pathescope Company.

Difficulties in the way of obtaining and perforating the narrow gauge film were easily met, for Pathé Frères were not only makers of cameras and projectors and producers of photoplays, but they actually manufactured film. Indeed, they figured prominently in about every department of the industry.

SAFETY FILM

As manufacturers of raw stock, Pathé Frères provided the Pathescope with one of its most appealing and remarkable features. The narrow width film could not catch fire. The magic was not in the narrowness, of course; it was in the fact that the base was acetate of cellulose instead of nitrate of cellulose. But what they presently succeeded in doing was to associate in the public mind the idea of safety with the form—with their peculiar form.

This fact acquired especial significance as news of film fires involving theatrical stock came increasingly to public attention. Laws requiring fireproof projection booths, "fire gates" to cut off the heat of the projection light when the film

came to rest, and metal enclosures for the spinning reels were not made to apply to the Pathescope because it used only this so-called "non-inflammable" film.

The Paris laboratories of Pathé had announced their perfection of a non-inflammable stock in October, 1913; and the Préfecture of Police there had almost immediately ruled that there should be no combustible film in the city after December 1. American producers and distributors interested in the French market, together with those of other countries, protested loudly, so, about the middle of November, the enforcement of the new law was indefinitely postponed. The outbreak of the World War took care of any possible resumption for a long time thereafter.

It was commercially wise, of course, for Pathé Frères to separate their many properties, especially as all were new developments lacking precedent, and one should be able to expand rapidly without being handicapped by the others. Therefore there were separate sales of "American rights" to individual products, and the American rights to Pathescope consequently were bought in as an item apart, by Willard B. Cook of New York.

The machine in hand and brought to the United States, Cook worked to improve it while he began an intelligent and well-organized campaign to develop sales. He started early to advertise to the public the dangers of toy machines which used inflammable film, as compared with the merits of his own improved projector; and one of his reported achievements was to secure passage of a law in the State of Maine, prohibiting the use of any projector whatever save the Pathescope, without a booth. Non-theatrical exhibitors generally in the Pine Tree State could not afford to supply booths; and their choice of machines was obvious and profitable to Cook.

The safety consideration constituted a strong point. Cook reaped the first harvest, but it was not long before imitators sprang up. Their combined force gave impetus to a movement and, in a few years, film narrower than 35 millimeters meant non-inflammable stock everywhere in America.

To prove that the fire hazard offered an excellent campaign platform for Cook, witness a couple of news items of the time. In the late winter of 1910 to 1911, the Boston School Committee had voted to bar all motion picture exhibitions in the city schools, declaring as one of their reasons that films were a fire menace. Not until the autumn of 1913, when certain safety precautions had been taken, did the New York City Board of Education permit its free lecture bureau to install film projectors, and then only four such machines were allowed.

Asbestos projection booths were advertised extensively in 1912. In June, 1914, the Interstate Commerce Commission required all films to be shipped in metal containers instead of the then customary wooden and fibre cases and, in that same

month, Fire Commissioner Adamson of New York, had raided violating local film producing companies and laboratories, actually evicting the personnel in eight. But then that year, 1914, had been heavy in film fires. The Edison Company had one in April; Lubin had had a blaze in June, and Edison had had another in December. I believe it was this last-named fire which discouraged further manufacture of the Home Kinetoscopes. These happenings, and pertinent others, impressed the public again and again with the fact that the nitrate base of all regular theatrical film is gun-cotton.

EASTMAN KEEPS HIS CUSTOMERS

THE Eastman Kodak Company was not unmindful of the inroads being made into its business by competitive film manufacturers. Pathé of France was not the sole offender. Lumière was exporting heavily from the same country, and the indefatigable Jules E. Brulatour was his American agent. There were arising Goerz of Belgium, Agfa of Germany and Dupont and Bay State of America, to negotiate large quantities and to undercut heavily in price. Eastman, especially, was ready to market any new type of film provided only that buyers might be found for it; so he placed on sale, along with his 35-millimeter output, a new non-theatrical standard in 16-millimeter width—"slow-burning," of course. It was not exactly unexpected, for toward the end of December, 1914, it had been quietly stated that Eastman had purchased a license from the Chemical Products Company for the manufacture of acetate stock.

The Eastman "non-flam" stock was undoubtedly admirable for its safety properties. It burned about as deliberately as a piece of wrapping paper, as contrasted with the precipitancy of nitrate film; but my recollection of the old Pathé non-flam is that it was even slower. In fact, I have a conviction that, when it was lighted, it would promptly put itself out. I seem to remember that the Pathescope reels, stored on the library shelves on the eighteenth floor of the old Aeolian Building, used each to have an end of the rolled film sticking out for the inspecting fireman to test with a match if he so desired.

An interesting story may be told of how Eastman met the manufacturing phase of competition. He had determined

Next Month

In Part Four (December) come records of the principal lecture films of the period just before the outbreak of the World War. These celebrated entertainment features powerfully stimulated the dawning consciousness of what motion pictures might be made to do in visual education. It is still not too late to date new subscriptions from the September issue which contained the first installment.

to prevent the commercial film laboratories from buying stock other than his own, for any purpose whatsoever. Accordingly, with the cooperation of Jules Brulatour—who in the Patents war had persuaded him to sell also to the Independents and in 1911 had repudiated his contract with Lumière to become the Eastman sales agent—he built at Fort Lee, N. J., atop the Palisades, across the Hudson River from New York City, the best equipped laboratory possible to erect at that time.

When it was completed, Brulatour invited the heads of the commercial laboratories to join him there. After they had assembled, the guests were taken on a detailed inspection trip and then seated at a fine banquet. With that ended, Eastman arose to address them, and spoke to them somewhat in this fashion: "Gentlemen, I have no intention of going into the processing end of the business unless I am obliged to do so to protect my customers. As long as my patrons may receive proper attention in your establishments, not a wheel will be permitted to turn here. But should this laboratory become the only one where prints may be made on Eastman stock, I shall be compelled to set it in operation."

The guests saw the light, of course, for they wanted no such powerful competitor in their own line. The Brulatour laboratory consequently was never opened as such, although it still stands, after all these years, well kept and probably still equipped to do business. To any laboratory man who wonders if the implied threat is still potent, may be returned the answer given to that visitor to Fort Gunnybags, in San Francisco, who wanted to know what had become of the Vigilantes who had formerly manned it—"Ring the bell, and you'll see."

But, returning to the main line of consideration, there probably was no organization actively engaged in the motion picture industry of the days before the War, the heads of which saw the opening non-theatrical field so clearly as those of Pathé Frères. Others were to respond when the need was forced on them; but Pathé anticipated the needs. Willard Cook, taking over the Pathescope, had somehow also taken over some of the same vision. The Pathescope user was offered with his machine the opportunity to rent films from a library of popular subjects reduced to size and printed on non-flam stock. So, also, the Pathé theatrical exchanges, throughout the United States, were ready to rent large quantities of regular 35-millimeter films retired from service in the theatres for non-theatrical exhibition.

A STEADY SUPPLY OF PICTURES

It may have appeared at first, that the coming of a low-priced portable projector would meet the only serious need of the non-theatrical user of films; but it had become clear now that the user needed also a guarantee that his film supply would be dependable and steady. It was all very well to sell to a church

or a club a machine for "show" purposes; but the purchaser demanded assurance that he might obtain new subjects whenever he wanted them. And the large catalogues of Urban and Kleine to the contrary notwithstanding, there was not much which was strictly suitable for a school or a church.

If it was not just a matter of having ordinary films, there were, of course, illicit sources of supply. Many theatre employees were bribed to send their pictures around to the neighborhood clubs between shows and, too frequently, the man who brought the non-theatrical projector for the evening's entertainment screened stolen prints on the same occasion. Many a devout church pastor would have been shocked to know that he had been party to some such rascally deal as this when showing films in his church on terms which he had every reason to believe were those of legitimate business.

Exhibiting rented films in more places, than had been contracted for by the theatrical exchanges, was an offense called "bicycling" in reference to the usual manner of conveyance. However, it was a practice not confined to non-theatrical exploitation. The smaller theatres prof-

ited hugely from it, which was much worse, because the exhibitors there fully understood what they were doing. As to "stolen" as distinguished from "borrowed," prints, these were rarely the original prints legitimately released by the exchanges. They were, rather, "duped" copies made with astonishing rapidity by dishonest laboratory workers who had managed to "borrow" the original for an hour or two.

It is said that they could print a duped negative from a positive print in the time that the unsuspecting owner was being held in conversation. Just back of Times Square in New York, there used to be a regular market for trafficking in stolen goods of this sort. I remember the story emanating from that quarter, that duped prints of Douglas Fairbanks's "Robin Hood" were being spread over the country while the picture proper was just starting its first week on Broadway.

But, in referring to non-theatrical film libraries, I am trenching on another chapter. The purpose of this present one has been just to sketch the situation which finally caused the separation of social service, educational and industrial motion pictures, from those dedicated to sheer entertainment.

Chapter II—Inventory

ALL the while that the force of circumstances was opening the non-theatrical field, more and more films befitting its first needs were being produced. It therefore took but a few seasons to outmode, in technical improvement, at least, nearly everything in the Urban and Kleine catalogues, although the items there listed went on and on, pioneering where the better values had not yet been appreciated. I dare say that some of those quaint releases are still in service after upwards of twenty-five years.

The most familiar single "educational" subject of the period before the World War was geography. In the Kleine catalogue of 1915, some 56 pages out of 162 are devoted to listings of travel films. Travel pictures were comparatively easy and inexpensive to make, and the American public was generally eager to see them. Outlying districts, just beginning to respond to the telephone and the automobile, showed so keen a hunger for knowledge about distant lands, that inhabitants would gather just to hear the printed globe-trotting lectures of Stoddard and Dwight Elmendorf read to them by one of their own number. Remember, too, that distant lands were the more or less recent homes of millions of naturalized United States citizens who still had their occasional moments of homesickness. In all events, the audience for such films was then surely ready-made.

Of course, the travel subjects of three to five hundred feet apiece—half a reel, that is—were common in the theatrical splits, and had been so for a long time.

Gaumont and Pathé Frères had provided most of these; naturally the scenes were chiefly of French, Italian and Swiss localities. England, curiously enough, was rather neglected. As the Pathé organization spread during the peak of its greatest prosperity, and opened studios in other countries, the scenes included also Germany, Spain and, sparingly, Russia.

Pathé began printing these little travelogues with its interesting stencil colors at a very early date. I seem to recall the stencilled ones as early as 1904 and if the colors were not absolutely true to nature, they were, at least, as genuinely pleasing as the synthetic hues of the lecturers' lantern slides being shown commonly on the old lyceum circuits. They were interesting in subject matter, well-photographed and generally presented in good taste. It is not surprising that they held their places on the standard theatrical programs until well into the war period.

PAUL RAINEY'S HUNT

There were no doubt produced many films which would fall into the broad category of geography long before 1911 when Paul J. Rainey went on his expedition resulting in "The Paul J. Rainey African Hunt Pictures"; but that effort, in five reels with a lecture, was probably the first outstanding real-adventure movie ever made—the first to be an entire show in itself. It was surely the first of that sort to attain widespread popularity. The Theodore Roosevelt African Expedition

pictures of 1910, photographed by the swashbuckling Cherry Kearton, were released by the General Film only as a "program feature" in two reels.

The Rainey film was not just a glimpse of a generally unfamiliar part of the world, but it was highly attractive in representing strange beasts, or anyway, beasts in surroundings more exciting than in a zoo. As an entirely independent program it ran for sixteen weeks at the Lyceum Theatre in New York, at a time when to book films into a so-called "legitimate" playhouse was considered downright vandalism. In the spring of 1913 the Rainey pictures had a command presentation before the King and Queen of England at Buckingham Palace. Their general distribution on a "state rights" basis, which means rental by territorial jobbers instead of through central booking offices, was handled with marked success by Carl Laemmle.

Rainey was described for the benefit of the curious as a wealthy Cleveland man, high official in a large coke-distributing concern, out for recreation. His ostensible purpose was to hunt lions with dogs, a bid for notoriety to be matched in later expeditions, by men who visited the Dark Continent to kill inoffensive wild beasts with bow and arrow and with lasso. However, Rainey was rather given to extravagances. In later years, when Rainey was president of the National Foxhound Club, he kept a pack of 150 prize dogs of that breed at his Mississippi plantation, and gave an annual barbecue there to his neighbors, with sometimes 5,000 guests present.

During his lifetime of 46 years, ending in 1923 on his estate in Nairobi when he died on his birthday, he hunted big game in many remote places, including Borneo, British Africa, the Malay Archipelago and India. He did his first serious motion picture making in 1910 with Captain Bob Bartlett in the Arctic. His last important opportunity to shoot was during the World War, when, as a captain in the British Army, he saw service against the Germans in East Africa.

The expedition for his African pictures, according to a statistical press agent, cost a quarter of a million dollars and lasted one year. Concerned in it were 35 white men, 325 blacks, 135 camels, 40 horses, 60 dogs, 54 oxen and 150 sheep on the hoof. It was photographed mainly from blind setups near waterholes. It is quite possible that the picture returns defrayed the cost, depending, of course, on the contract which Rainey made with Laemmle. Anyway, in the autumn of 1913 the management claimed in its advertising that the attraction had played to "more than a million dollars at one dollar prices"—and the lesser theatres had not yet been permitted to book it. It is interesting to add that before Paul Rainey died, he endowed a large tract of land in Louisiana to be kept as a bird and animal sanctuary under supervision of the American Association of Audubon Societies.

(To be continued)

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Arkansas Traveler (Bob Burns, Fay Bainter, Dickie Moore) (Para) Amusing, often improbable but well-knit story of small-town life with engaging characters and appealing action. For old friend's widow, hobo printer saves newspaper, builds radio station, rids town of crooks—and leaves audience happy. 10-18-38
(A) Very good of kind (Y) (C) Amusing

Barefoot Boy (also called "Boys in a Racket") (Jackie Moran, Marcia Mae Jones) (Monogram) Rural life (à la Whittier), with youngsters predominating, of much human interest, but vitiated by exaggeration, unbalanced emphasis, artificial action and clumsy narrative. Marcia Mae's role outstanding. 11-1-38
(A) Mediocre (Y) Hardly (C) Hardly

Brother Rat (Wayne Morris, Priscilla Lane) (Warner) Merry stage play of military school life becomes heavy on screen with antics of overgrown "cadets", absurdly exaggerated episodes, crazy conduct by officers, and constant effort at "louder and funnier" dialog. Thorough distortion of reality is poor publicity for fine school. 11-8-38
(A) Disappointing (Y) Doubtful value (C) No

Cossacks Across the Danube (Russian—No titles) (Amkino) Unusual comic operetta, light, humorous and human, of simple rural life in picturesque Ukraine. Strong character and picture values. Avoids aural and visual distraction by patches of dialog, of song, of silence. Story hard to follow without titles. 10-25-38
(A) Novel (Y) No interest (C) No

Down in Arkansaw (Ralph Byrd, the Weavers) (Republic) Elementary story of hill-billy folk fighting water-power development that will benefit whole region, as later proved. Much crudity, exaggeration, burlesque gunplay and "hick" comedy spread thickly over wholesome central idea. Funny to many. 11-1-38
(A) Mediocre (Y) Perhaps (C) Perhaps

Drums (Sabu, Raymond Massey, Roger Livesay) (UA) Vivid, full color picture of British army-post life on Khyber Pass frontier with magnificent mountain backgrounds. Little Indian prince's loyalty to England defeats Indian treachery in violent fighting climax. Great spectacle, tense action, much noise. 10-25-38
(A) Very good of kind (Y) Thrilling (C) No

Five of a Kind (Dionne Quints, Hersbolt, Trevor, Romero) (Fox) Fascinating scenes of Quints' singing, piano-playing, dancing, playing with dolls and puppies—crudely framed in lively, improbable yarn of rival newshawks, man and woman, seeking to "acrop" Quint broadcast, the man a cheap cad! Good taste missing. 10-25-38
(A) Interesting (Y) (C) Mostly amusing

Garden of the Moon (Pat O'Brien, Lindsay, John Payne) (Warner) Nostalgic, silly musical of absurd feuds between conceited manager of garish night-club and band leader, glorifying night clubs, "swing", and some painful "vocalizing." Tricky manager, faking death-bed scene, etc., wins contract and club success. 10-25-38
(A) Absurd (Y) Doubtful value (C) No

Girls on Probation (Jane Bryan, Ronald Reagan) (Warner) Parole-system melodrama of harsh father, understanding judge, and innocent heroine who persists in getting into trouble by misplaced devotion to obviously crooked girl friend. After much excitement and improbability, the good survive and the bad die by guns. 11-8-38
(A) Mediocre (Y) Little value (C) No

Girls' School (Ann Shirley, Nan Grey, Noah Beery Jr.) (Columbia) Somewhat romanticized and exaggerated story of girl's boarding-school life. Problems of snobbery, scholarship students, broken homes, parental wealth's effect on administration fairly accurately shown. Thrills, pranks, crises of "teen age make the picture. 10-18-38
(A) Interesting (Y) Good (C) Good

If I Were King (Colman, Rathbone, Dee) (Para) Old Paris lavishly portrayed, perfect in costume and background. King Louis XI (Rathbone) and Francois Villon (Colman) masterfully played, with deft use of Villon's poems. Mass action and dialog expertly handled. Historical drama beautifully done. 10-25-38
(A) Excellent (Y) Mature but good (C) Beyond

Inspector General (Czechoslovak, English titles) (Garrison) Dull screening of Gogol's satire on Russia's official graft of 100 years ago. Impostor, mistaken for Inspector-General, industriously gathers bribes from high and low in primitive village, and escapes in time. Badly overacted to make it "very funny". 10-18-38
(A) Crude (Y) No (C) No

Man with 100 Faces (Tom Walls, Lilli Palmer) (GB) Smooth, clever "Robinhood" thief, believing "attack is best defense", beats other robbers to valuable booty, defies Scotland Yard, donates spoils to charity, captures thieves for police, and escapes with girl he loves. Fantastic, amusing, well-acted comedy. 11-8-38
(A) (Y) Very good of kind (C) Perhaps

Marriage Forbidden (Pedro de Cordoba) (Special) Frank "documentary" on syphilis as national peril, from great Brienx play, "Damaged Goods". Acting dull save Cordoba's role of Doctor. Dignified story, of honest intent, nothing risqué, wholesomely thought-provoking, but publicity is cheap, offensive and false. 11-1-38
(A) Good of kind (Y) Mature (C) No

Moonlight Sonata (Paderewski, Marie Tempest) (British) Stupid story, woodenly acted save by Marie Tempest, with trite plot only slightly connected to Moonlight Sonata. Some good sets and photography, but mostly a feeble framework for presenting Paderewski's great playing of the classics, its chief value. 10-18-38
(A) Perhaps (Y) Perhaps (C) Hardly

Mr. Chump (Johnny Davis, Lola Lane) (Warner) Happy, lazy trumpet-player, jilted by girl for rich banker, turns roadhouse "swing artist". Gets rich through banker's false move, buys bank, but both end in prison. Illogical, unconvincing stuff, save glorification of "swing" for the addicts. 11-8-38
(A) Feeble (Y) Hardly (C) No

Mr. Doodle Kicks Off (Joe Penner, June Travis) (RKO) Ridiculous college makes ridiculous hero into ridiculous football star to get big endowment from his father. Idiotic full-length farce, seven mortal reels of Joe Penner's elemental clowning unrelieved by anything. Vacuous giggles for all who want them. 10-25-38
(A) Stupid (Y) Depends on taste (C) Perhaps

Night Hawk (Robert Livingston, R. Armstrong, June Travis) (Republic) Empty title for another gang-crime melodrama solved by nonchalantly clever newspaperman. Hectic adventure ash and ashore, lurid gunplay, jumbled motivation, twisted loyalties, dull romance, high improbability. Original touch—an Iron lung! 11-1-38
(A) Futile (Y) No (C) No

Phantom G-Man (Lloyd Hughes) (Victory) Awful hodge-podge about death-ray inventor robbed of invention by hypnotist villain despite supposedly comic prizefighter "guard". Secret rooms, sliding panels, trap doors, hypnotic hands, etc. Dragging story, poor direction, nondescript acting especially by hero. 11-1-38
(A) Stupid (Y) No (C) No

Smashing the Rackets (Chester Morris, Rita Johnson) (RKO) FBI investigator becomes successful racket-smasher (obvious echo of Dewey) is nearly foiled by crooked politicians but wins. Hectic mess of gang violence, double crossings, cheap romance, greswome trickery, killings by women, child murder, etc., for sensation-seekers. 11-8-38
(A) Depends on taste (Y) Doubtful (C) No

Speed to Burn (Michael Whalen, Lynn Bari) (Fox) Against usual background of racetrack crookedness, honest hero, heroine, loyal jockey and amusing Italian (Armetta in fine role) defeat crooks and bring hard-luck racehorse to victory. Lively fun with some banality. Funny ethics in police force demoralized by betting. 11-1-38
(A) Depends on taste (Y) (C) Mostly amusing

Strange Boarders (Tom Walls, Renee Saint-Cyr) (G-B) Mystery comedy of much novelty and character interest. Dnty calls Secret Service hero on eve of honeymoon to track spy-ring stealing government plans. Charming wife trails hero with laughable complications. Amusingly impossible climax rounds out lively entertainment. 10-18-38
(A) Good (Y) Amusing (C) Probably good

Suez (Tyrone Power, Loretta Young) (Fox) Unimpressive characterizations of De Lesseps and Eugenie compensated by fine supporting cast and splendid background of Suez Canal building, desert storm, and overthrow of Republic. Historical value, despite compression and distortion. Fine in action spectacle and scenic effects. 11-8-38
(A) Notable of kind (Y) Good (C) Perhaps

Swing that Cheer (Tom Brown, Wilcox, Moore) (Univ) Better-than-usual football story, in a conceivable college. Glory-loving quarterback refuses credit to interference-running pal who, faking injury, finally shows hero's and school's dependence on him in crucial game. Tense, happy ending readjusts sense of values. 10-25-38
(A) Pleasant (Y) Interesting (C) Good

The Chaser (Dennis O'Keefe, Lewis Stone) (Lively melodrama in hilarious mockery of law, courts and legal ethics. Shyster-lawyer hero gets rich at ambulance-chasing with help of drunken, crooked Doctor (Lewia Stone), outwits justice, nullifies evidence by marrying girl hired to get it, and goes scot-free! 10-18-38
(A) Hardly (Y) By no means (C) No

The Citadel (Robert Donat, Roaalind Russell and English cast) (MGM) Masterful, selective screening of fine novel, made in English locales. Powerful, convincing portrayal of weaknesses in present-day medical practice, contrasted with splendid idealism and humanity of young M.D. hero. Well-rounded realism at its best. 11-8-38
(A) Excellent (Y) Mat. but good (C) Beyond them

The Mad Miss Manton (Barbara Stanwyck, Henry Fonda) (RKO) Would-be clever, largely silly mystery farce of idle rich at play. Hare-brained "society" girls flutter around wiacracking, trying to solve murders, tangling with comic police and ultra-smart newspapermen. Artificial, costly effort to be very funny. 11-8-38
(A) Futile (Y) Doubtful value (C) No

The Singing Blacksmith (Molshe Oysher) (Jewish, English titles) (Collective) Carousing, philandering, likable blacksmith lives his merry career in Russian village from boyhood up, meeting adoration and criticism gaily and winning over scandal. Slow, gentle, picturesque. Hero's singing and heroine's charm, features. 11-1-38
(A) Good of kind (Y) No (C) No

The Sisters (Bette Davis, Errol Flynn) (Warner) Oldest of three Montana sisters, in Teddy Roosevelt - San Francisco earthquake time, marries gay, bibulous, spineless newspaperman, and suffers devotedly to a "happy ending", also hopeless. Intelligent, careful, serious screening of book too big for screening. Depressing. 11-1-38
(A) Disappointing (Y) No (C) No

That Certain Age (Deanna Durbin, Melvyn Douglas, Jackie Cooper) (Univ) Charming, amusing, well-acted story of young girl's infatuation for older friend of father and effective scheme of parents and victim to disenchant her. Understanding treatment returns her to normal. Deanna's songs a feature but incidental. 10-18-38
(A) Enjoyable (Y) Very good (C) Good

Too Hot to Handle (Cable, Loy, Pidgeon) (MGM) High tension melodrama at furious tempo, congested with impossible heroics by super-news-cameraman from war-blasted China to woodoo-infested jungles of South America. Life thoroughly distorted and inflated for maximum of thrills. Desperate dose for jaded public. 10-25-38
(A) Depends on taste (Y) Doubtful value (C) No

When Were You Born (Anna May Wong) (Warner) Minor thriller, with usual devices of secret doors, clutching hands and murders, but solution is reached mainly through astrological "science". Heroine makes even police take it seriously. Chief value, publicity for astrologers and their public. 10-18-38
(A) Crude (Y) No (C) No

Origin of Christmas Customs — In Hand-Made Lantern Slides

By ANN GALE

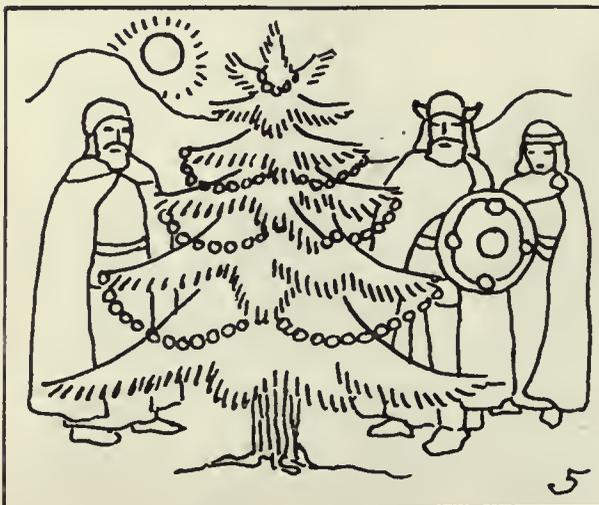
Art Department, Lindblom High School, Chicago

OUR Christmas customs are a peculiar combination of old pagan celebrations of the winter solstice and Christian rites. Children in the upper grades are interested in the sources of some of these customs. These pictures may be traced on slides and used as the basis for discussion and stories of the persistence of these ancient usages.

1. The Scandinavian peoples erected huge bonfires in honor of Thor at the winter solstice or Yule, as they called it.
2. The Yule log persisted through feudal times. The immense log was dragged to the main hall of the castle where it

crackled a welcome to all comers, and burned out all wrong.

3. At the winter solstice the Druids gave people mistletoe from the oak tree to hang on the doors of their houses as propitiation to the sylvan gods of that time.
4. To-day the mistletoe has kept this one meaning.
5. The old Teutons at the winter solstice decorated the fir tree which they thought of as a symbol of the sun.
6. The Germans continued the custom of decorating fir trees at Christmas time. This idea spread from there to England during Victoria and Albert's reign and to America.



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 THE MAGAZINES AND BOOKS

Conducted by The Staff

School and Society (48: 464-65, October 8, '38) "Visual Education and Nature Study," by T. D. A. Cockerell.

The author recognizes the fact that visual aids are very important to education. Especially are they valuable, he believes, in giving an understanding of nature for, in our contacts with the great out-of-doors, it is found that the sort of education putting all the emphasis on written records is not enough since nature is a perpetual moving picture and is communicated to us mainly by the eye. These aids, however, are sterile without intelligence, and the ability to profit by them will depend, he maintains, on natural ability and planned opportunity. These factors are especially important in visual education because, while speech or writing involves already-defined words, vision calls for originality in observation and the appreciation of subtleties which find no place in language.

He suggests, therefore, that fleeting impressions can be recorded and made part of systematic education by drawings, photography, and especially the moving picture and the beautiful color films. Moving pictures are extremely valuable because actions can be repeated as often as desired, slow motion can be used for the analysis of animal behavior, and time-lapse photography can show, in a few minutes' time, a smooth, rapid development of plant or animal, which would ordinarily require observation of weeks, months or years. For these reasons, then, Mr. Cockerell believes that the moving picture is the next best thing to seeing nature itself and, for means and methods of study, when intelligently used, is even a time-saving improvement.

Commonweal (28:406-8, August 12, '38) "What of Catholic Movies," by Katherine Brézy.

In comparing the presentation of religious subjects and characterizations in the theatre with that in the motion picture, Miss Brézy deplores the fact that the films represent the ascetic and contemplative life ("Cloistered" and "Monastery") as a result of the questionable judgment of the producers and the childish curiosity of the audience, while the theatre has depicted human, recognizable priests in "Murder in the Cathedral," "Shadow and Substance," and "Father Malachy." She feels that it is indelicate, if not impossible, to portray the inner life of the Trappists, for example, or the Carmelites, and suggests as an alternative that films of educational and historical value could be made of the lives of Francis of Assisi, Saint Vincent De Paul or Thomas à Becket—or, if there is an audience for more general Catholic activities, short feature films showing the practical work carried on today in various settlements and "houses of hospitality," Jesuit missions, and achievements in education,

literature, science and exploration. (Miss Brézy must have been very pleased with the human portrayal by Spencer Tracy of a very real character, Father Flanagan, in the movie "Boystown.")

California Journal of Elementary Education (7:40-47, August '38) "The Development of Visual and Auditory Aids in Santa Barbara County," by Lelia Ann Taggart.

To meet the need for adequate visual and auditory aids, with \$500 allocated to the undertaking, the teachers in the schools of Santa Barbara County employed George E. Stone, an instructor in photography at San Jose State College, to head the program. A Central Committee was formed to develop materials for distribution through the county library. Flat pictures, photographs, posters, and exhibits were assembled and catalogued. Lanterns, slides and stereographs were purchased. All materials are housed in one building and the circulation of them is supervised by volunteer teachers. In order that teachers should have the basic background to interpret particular pictures, teacher excursions were instituted to study cultural, industrial and historical subjects.

Etude (56: 496, August '38) "Worthwhile Music in the Movies," by Verna Arvey.

The American product, whether serious or secular, is today most accepted in Hollywood. One of the most noteworthy was the "Abraham Lincoln Symphony" of Robert Russell Bennett as performed by the Philadelphia Orchestra under Leopold Stokowski. Mr. Bennett will write, orchestrate and conduct original music for "The Pioneers" which, as a sequel to "Cimarron" will be released soon. Werner Janssen is to write original music for "Men With Wings" and Richard Hageman was signed by Boris Morros to write an original score for "If I Were King" starring Ronald Coleman. Alfred Newman supervised the music for "Alexander's Ragtime Band," regarded by all of the Fox executives as the finest film ever to emerge from that studio.

Northwestern Publishes Proceedings

The University College of Northwestern University announces publication of the proceedings of its *Conference on Visual Education and the Adult*, (held May 13th and 14th, 1938). The pamphlet was prepared with the cooperation of the EDUCATIONAL SCREEN and copies may be obtained by writing the University College Visual Education Project, Room 151, Ward Memorial Building, Northwestern University, Chicago, Illinois: Three general topics are discussed in the booklet. (a) Visual Aids in Industry, (b) Visual Aids in the Community and (c) Visual Aids in College Classes. Papers are included by the follow-

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Book Reviews

■ **SCHOOL USE OF VISUAL AIDS**, by Cline M. Koon, Senior Specialist in Radio and Visual Education, Bulletin, 1938, No. 4. 72 pages, paper bound. U. S. Department of the Interior, Office of Education, Washington, D. C.

This new government bulletin is the second publication resulting from the nation-wide survey on the use of visual aids in elementary and secondary school systems, conducted by the Office of Education with the cooperation of the American Council on Education, in 1936. 8806 complete questionnaires were returned by schools, the largest percentage coming from urban communities. The material collected was compiled by the Council and published in *The National Visual Education Directory*, in the same year.

Now appears the *School Use of Visual Aids* which is an interpretative study of the data obtained. Chapter 1 is devoted to a general summary of the reports—the use of audio and visual aids in different-sized school systems, frequency of their use, major difficulties and needs, and agencies distributing visual aids. The remaining three chapters, of which the pamphlet consists, present the findings regarding the extent and manner of use of; (1) Objects, Specimens, and Models; (2) Still Pictures and Graphic Presentations; (3) Motion Pictures. A list of helpful references is appended to each chapter.

The bulletin may be secured from the Superintendent of Documents, United States Government Printing Office, for 10 cents.

■ **PROCEEDINGS AND ADDRESSES** of the Eighth Session of the National Conference on Visual Education and Film Exhibition (DeVry Foundation) and Year Book of Visual Education.

Published and distributed by The National Conference on Visual Education, 1111 Armitage Avenue, Chicago—128 pages—paper—50 cents.

This meaty little volume packs into 128 pages a full record of what was said and done and heard and seen during the four days conference held at the Francis W. Parker School, Chicago, June 20th to 23rd last, under the genial auspices of the DeVry Foundation.

Speakers from many corners of this country and the world touched all aspects of the field, from the most formal and limited phase of visual education in schools to its most elastic extensions into business and professional realms. Addresses ranged over the use of slides in teaching literary backgrounds, sound-slides to help salesmen sell, the place of puppetry in visual education, the possibilities of films, silent and sound, black and white and color, in such diverse subjects as the anatomy of the brain, historical and economic highlights of 80 years past, present achievements of the rural Consolidated School, heroic explorations in the Himalayas, colorful life in the foreign section of a great American city, lessons in social ethics culled from the theatrical movie output, the fundamentals of American government, the workings of the Social Security Plan, and the detailed and intimate portrait of the whole State of Ohio afforded by the famous Aughinbaugh series of 12 scenic-historical travelogues.

Other subjects of lively interest authoritatively presented during the four teeming days were . . . the interaction of Books and Movies as a Librarian sees it . . . student-reading of "fan" magazines and its social and educational significance . . . activities of the Better Film Councils . . . the complex role of film laboratories in improving educational film production . . . production of school-made movies from coast to coast . . . film distribution systems for city, county, state and nation . . . advantages of sound with films . . . extraordinary use of documentary films in Europe compared with the United States . . . what the film means in CCC camps . . . and the tremendous activity of various Departments of the U. S. Government,

(Concluded on page 307)

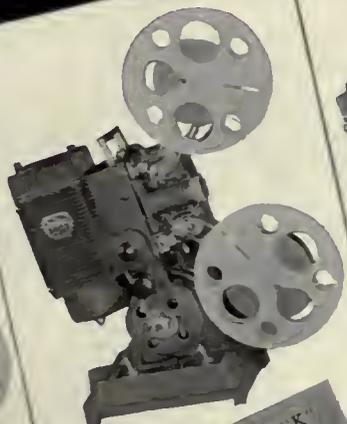
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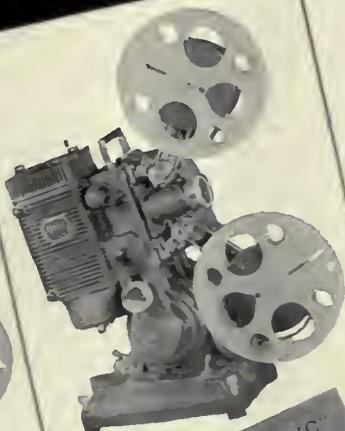
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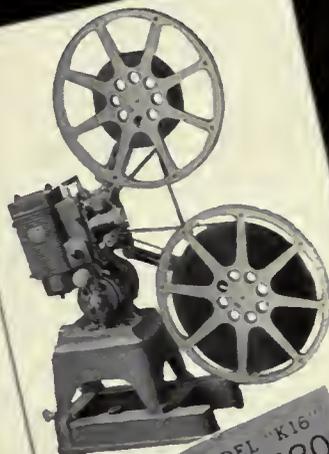
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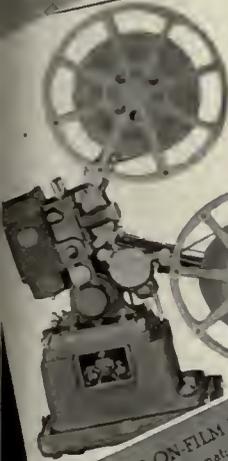
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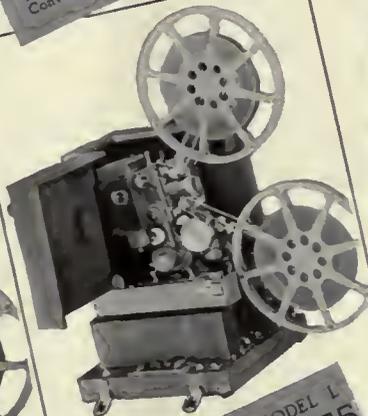
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NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

Burying for the Future

An ingenious Time Capsule, containing a visual record of contemporary civilization, was buried recently fifty feet in the ground on the site of the 1939 New York World's Fair to await archaeologists and antiquarians of 6939 A. D. Devised by the Westinghouse Electric and Manufacturing Company, the Time Capsule is approximately 7 feet, 2 inches in length, 8 inches in diameter, and is made of a corrosion-resisting copper alloy called Cupaloy. Within the metal shell is a Pyrex glass container imbedded in waterproof mastic. All air was evacuated from the glass container and replaced by inert nitrogen to act as a preservative.

The inner crypt of glass contains representative objects of today, photographs, a 15-minute newsreel portraying phases of modern life, and reels of Eastman Micro-File Safety Film. In this microfilm form, the capsule contains the equivalent of more than a hundred volumes including books, encyclopedias, philosophical discourses, technical treatises, histories, religious essays, the Bible, and statements of this age's achievements.

The copying was done on the Micro-File Recordak, an apparatus for rapid reduction of bound-volume to

film. The pages of copies numbered approximately 23,000, ranging in size up to newspaper sheets. This quantity of reading matter occupies 1050 feet of 35mm. film in the capsule. A small microscope, suitable for reading the miniature images on film, is enclosed, also.

In order that the Time Capsule may be located at the appointed time, a 64-page Book of Record has been prepared. Bound in buckram, sewed with linen, and printed in time-defying ink on imperishable rag paper, it should last as long as the Time Capsule itself. The ink, paper and binding were selected under the supervision of expert chemists and printers with the aid of the United States Bureau of Standards. Only 3,650 copies will be printed. They will be sent to museums, libraries, repositories, monasteries, crypts and various vaults all over the world. Direction for finding the record are given by geodetic coordinates, by geophysical calculations, or by astronomical data. It is hoped that these books will be cherished so that they will survive the passage of time and direct the searchers of the future to the site of the Time Capsule.

A New Film Distribution Service

A number of college departments, teachers and schools owning educational film have cooperated in the establishment of a rental library of classroom teaching films especially adapted to the senior high school, normal school and college classes. The organization, which is non-profit, has taken the name of the College Film Center with offices at 59 East Van Buren Street, Chicago, Illinois. Wesley Greene is executive director. A catalogue of over 125 instructional units is now being distributed to interested parties. Many of the films in this list are not available through other sources since individual teacher-producers have made the College Film Center their exclusive agent.

Conference on School-Made Films

A two-day Conference on "The Educational Production of Motion Pictures" will be held at Ohio State University, November 22-23, 1938, Columbus.

Speakers and their topics at the first session will be Charles F. Hoban, Jr., Director, Film Project, American Council on Education, "The Relationship of School and College Production of Films to the Objectives of General Education"; and Edgar Dale, Bureau of Educational Research, Ohio State University, "The Role of the Teacher and Student in the Production of Educational Films." On the morning of November 23, Hardy Finch, Head of English Department, Greenwich High School, Connecticut, will survey "The Status and Future of Educationally Produced Films." Mrs. Helen Rand Miller, Chairman, Committee on Standards for

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Motion Pictures and Newspapers, National Council of Teachers of English, will discuss "Reaching English Objectives through School-Made Films."

The afternoon sessions will be devoted to technical problems in film production, selection of equipment, planning, writing and filming the scenario, editing and titling.

Western Mountains in Kodachrome

"Friends of the Western Mountains" is the name of an informal non-profit organization founded in 1926 by C. Edward Graves, Librarian of Humboldt State College, Arcata, California, its object to stimulate greater interest in and appreciation for the scenery and natural history of the western mountains. Among the many activities of the organization has been Mr. Graves' personal lecture program consisting of colored lantern slides (standard size) synchronized with music and poetry. More recently Mr. Graves has turned his attention to the making of a Kodachrome record of the western mountains in 2" x 2" slides, which he is offering to schools at cost.

Mr. Graves further offers his cooperation in the development of special units of study such as volcanoes, glacial mountains, ecology of the timberline region, the California Redwoods, and the natural history of the Pacific coast shoreline.

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IN AND FOR THE CLASSROOM

Conducted by Wilber Emmert

Director Visual Education, State Teachers College, Indiana, Pa.

Visual Instruction in the Teaching of Percentage

By FRIEDA S. HARRELL

Vernon H. Davey Jr. High School, East Orange, N. J.

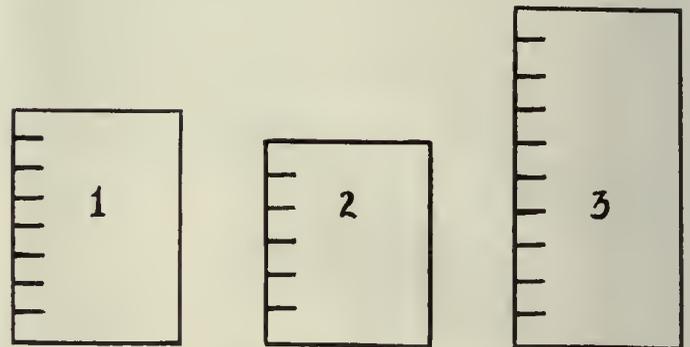
TEACHERS of science were among the first to utilize visual methods of instruction and to construct their own materials by diagram or by photography. The fact is well illustrated by the article, "Lantern Slides of Cellophane" by Webb and Wilson in THE EDUCATIONAL SCREEN for February, 1938. Teachers of the skill subjects, however, have been slow to adapt this medium to their use. Mathematics has particularly neglected it, although it can be used advantageously, even from a time saving standpoint, in many aspects of the subject.

Even the bugbear of seventh grade percentage can be at least partially conquered by the use of visual methods. A percentage diagram can form the basis of thought for all problem work. Three slides are sufficient, although more can be used. An india ink diagram on cellophane can be enclosed between two pieces of glass or simply glued between two 2½-inch frames of thin cardboard. It could also be drawn directly on one slide glass. If squared paper is placed behind the chosen medium, the diagrams can be made very quickly and three slides can be constructed in fifteen to thirty minutes. For 2" x 2" slides, the diagram can be drawn in white chalk on the blackboard and photographed. The negative of a 35 mm. film, since the black and white of the original are reversed, can then be placed between two glasses.

The slides are projected in daylight on the blackboard, the lines of the slide being blacker than the board. Children at the front corners of the class can be moved back or the front window shade can be drawn

if the diagram is not sufficiently clear. A section of board painted white is useful but not necessary.

Reproduction of the three basic diagrams follow.



Basic Slides, 1, 2 and 3

When the class have learned that "per cent means hundredths" and that 25/100 equals ¼ and 20/100 equals 1/5, etc., they are ready to be introduced to the percentage diagram. Diagram number one is projected on the board and individuals are sent to cut off with chalk a section equal to 25%, 50%, or 75% of the diagram. Other figures can also be introduced: a circle divided into quadrants, an equilateral triangle divided into equal sections, a parallelogram without sections which a child can cut into 50% divisions three different ways. The class will by this time have ideas of their own for further illustrations. A dozen oranges can be represented by the following diagram.

The slowest children can then see 25%, 50%, 75%, 33 1/3%, 66 2/3%, or 16 2/3% of a dozen, by shading

in the fraction with diagonal lines. The concept of a per cent as a fraction is well established before problem work is begun. A little imagination takes care of such problems as "What per cent of a foot is an inch?" or "What per cent of a yard are six inches?"



Figure 1

The contest element can be introduced here by dividing the class into two equal sections and giving a point for each correct answer. If each contestant calls on the next from the opposing team, it is insured that the dull children will be called on first. It is quite a feather in the dunce's cap, too, if he can get the correct answer, as he often does. While the work is new, the children beg to "keep on with the contest" long after any teacher could hope to get good attention for

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with the new

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color slides
(up to 3 1/4" x 4"
with accessories)

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Spencer Lens Company

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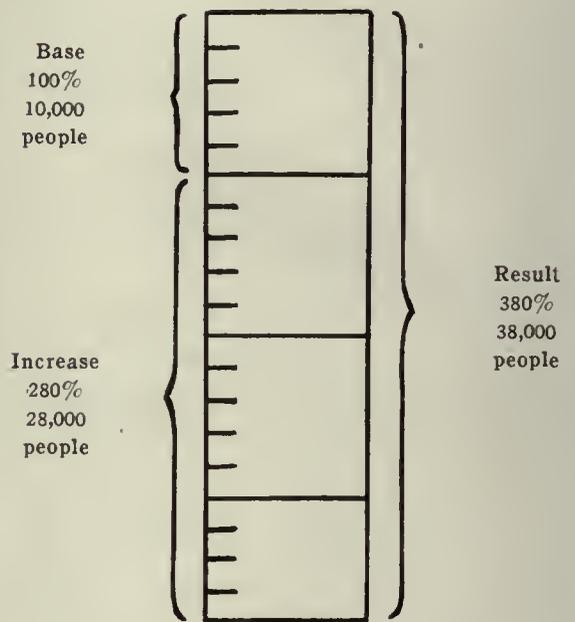
REFRACTOMETERS
COLORIMETERS
SPECTROMETERS
PROJECTORS

oral work of any other kind, but it is always best to stop while they still want more.

The same idea can then be put into operation, using slide 2 for thirds and sixths and slide 3 for fifths and tenths. Slide 3 can then be used for percents without fractional equivalents, approximating the fraction to the nearest tenth on the diagram. The 76% line would be in the eighth section. 8 1/2% would be placed in the first section, using almost all of it.

The concept of increase and decrease, which forms the basis of most of the applications of percentage can also be based on the diagram. An increase of 280% in the population of a town of 10,000 would be shown as follows:

Figure 2



$$\text{Formula: } P=BR=10,000 \times 3.80=38,000$$

This same diagram, used according to a certain plan, can be used to initiate and to fix certain channels of thought for problem work. The pupil quickly learns to reproduce the projected diagram on his paper, drawing around three sides of the end of his ruler. He can then be trained to label the diagram in a definite order as shown in the following problem:

... The population of a town of 10,000 increases 280% in 25 years. What is the population now? Using the diagram in Figure 2, he draws the first rectangle which represents 100%. Then he increases that rectangle by 280% of itself and finds out what per cent he has in all. The base is always located first if possible. If the class use the various adaptations of the formula $P=BR$, they soon learn that B is always under the 100% label, to the left of the diagram and that P or R are always on the right.

Decrease problems and their applications are, of course, even easier. A commission problem—If you are paid 2c for selling a 5c "Saturday Evening Post," what rate of commission do you get—would be diagrammed as in Figure 3.

The pupil can be led safely through such pitfalls as "What is the difference between 75% of a number and 75% more than a number or 75% less than a number?"

The NEW PICTUROLS

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The popularity of Picturols in visualizing lessons has necessitated the development of several new series on the Geography of the United States, American History and Vocational Guidance.

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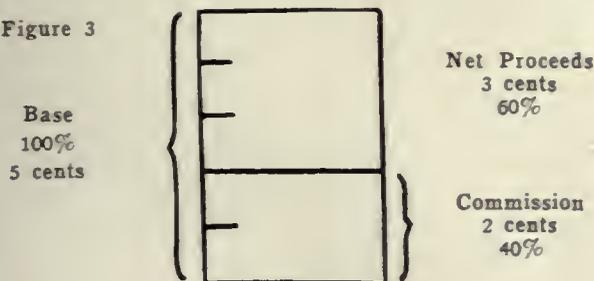
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because he can actually diagram and *see* the difference for himself.

Certain arguments against this method of instruction are quickly refuted. It might be considered a time-consuming method, but carefully laid channels for thinking out *any* problem eliminate the necessity of interminable drills in any one type of problem. These are usually

Figure 3



$$\text{Formula: } R = \frac{B}{P} = \frac{2}{5} = 40\%$$

necessary without the visual method of instruction and are often useless for the dullest children in the group.

The small fraction of a class who find abstract thinking easy can be excused from the diagrams and given supplementary stimulative work as long as they maintain stated average results. The dull child welcomes this method. He soon finds that it relieves him of the anxiety of staring at each new problem without the ghost of an idea of the correct procedure. The teacher soon misses those frequent pairs of stricken eyes that

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KEYSTONE VIEW COMPANY MEADVILLE, PENNA.

Book Reviews

(Concluded from page 298)

largest producer of educational and documentary films in the world, including the showing of the great Pare Lorentz film, “The River.”

The high value of visual material to the professional and commercial fields was vividly proven and doubtless came as a startling revelation to many a teacher. The filming of intricate operations in dentistry and surgery were shown. Various automobile manufacturers are using thousands of sound-slide projectors each, to increase sales efficiency. Dozens of selected reels from recent production from many sources punctuated and illuminated each day’s program. Industrials, documentaries, and travelogs shared the busy screen with the purely “educational” . . . travel films from Germany . . . “Sunkist for Profit” from California . . . the Coronation from England . . . the Panay film from China . . . the “Four Barriers” from the Alps . . . the manufacture of Safety Glass, Mohair, Irradiated Milk in various plants . . . a school-made “Mardi Gras” . . . “Thunder over the Orient” . . . the unforgettable “Plow that Broke the Plains” . . . the new “Men of Steel” . . . and more.

The last 40 pages offer a “year-book” section, reprinting in convenient reference form much data on the past year that all interested in the field like to have at hand, such as Local and State Meetings held, grants made for financing visual work, recent research, theatrical movies relevant to educational purposes, government film productions, summer courses in visual instruction, State distributors, bibliography and full Index.

This volume, paper-bound but substantial, contains not only evidence of the worth of the annual conference—sponsored by H. A. DeVry and so ably managed and directed by A. P. Hollis—but it gives permanence to much varied material decidedly worth adding to the literature of the visual field. Conference attendance, growing markedly each year, assures continuance of the sessions. We hope that such full publication of proceedings will become equally habitual.

N. L. G.

CURRICULUM ENRICHMENT THROUGH THE FINE RECREATIONAL FILMS



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Current Film Releases

Two New Eastman Subjects

A new one-reel Eastman Classroom Film has been prepared from the well-known feature motion picture, *The Lost World*, based on A. Conan Doyle's novel of prehistoric animals. The reel is both entertaining and informative, depicting the adventures of an expedition which discovers an isolated region inhabited by pterodactyl, brontosaurus, triceratops, tyrannosaurus and allosaurus.

The Protozoa, in two reels, is another new biological release. In contrast to *A Lost World*, it is a microcinematographic study of the tiniest of animals. The film shows the dissection of amoeba under the microscope, and the life of various protozoa—means of locomotion, food-getting, digestion, reproduction and methods of defense.

English Educational Films from Gutlohn

Mr. Harry A. Kapit, president of Walter O. Gutlohn Inc., has returned from Europe after completing a thorough study of the educational and documentary films produced in England, France and Belgium. He has found that the calibre of films produced abroad for audio-visual instruction ranks among our best efforts in this country and some of the pictures are years ahead of us in technique and subject-matter.

Among the noteworthy British 16mm. sound and silent films for which the Gutlohn organization is exclusive distributor in the United States and Canada are *Today We Live*, *Mites and Monsters*, *Monkey into Man*, *Five Faces*, *Zoo Babies*. These pictures and many others including *Voyage to the Moon*, *Travels in Poland*, *River Amazon*, *Water Birds* and *The Earth in Space* series will be available the first of the coming year together with study guides.

Walter O. Gutlohn Inc. are exclusive representatives for such prominent British film companies as The Strand Film Co. Ltd., and Educational and General Services Ltd. New material from these sources will be made available from time to time.

News Parade for 1938

1938 has been one of the most important years in the history of the world in many a decade. Historical events have occurred that have changed the maps of Europe and that have had a direct and important bearing on the welfare and living conditions of our own country. Castle Films will release in November *News Parade of the Year*, a historical pictorial resumé of the most important episodes of world history in 1938. It is a picture that will prove invaluable to schools for years to come. It will have an immediate use in education in both history and current events.

A few of the events pictured are the storms and floods in the East and West that caused so much havoc and crippled vast areas of our own country, the remarkable progress made in aviation, the undeclared wars in

(Concluded on page 311)



“BIG TIME”
Sound Movies
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Give them vibrant life with
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AMONG THE PRODUCERS *Where the commercial firms announce new products and developments of interest to the field.*

New Delineascope Introduced

Spencer Lens Company, Buffalo, New York, announce their new 750-watt Model GK Auditorium Delineascope, which brings new brilliance, vividness, and realism to the screen. The machine projects both the small and standard size slides. The condensing system for the 2" slides is mounted in a cage, which may be lifted out as a unit, and replaced by a different condensing system for the 3¼" slides. The condenser mountings are so designed that it is impossible to place them in the wrong slot or face them the wrong way. An especially important feature is the protection against film damage afforded by an ingenious cooling system, which includes a universal motor driven fan and a heat filter.

For smaller, intimate gatherings the Model GK Delineascope produces illumination of the utmost intensity; for large auditorium audiences it shows sharply defined pictures magnified thousands of times the original film area. It is said to project a 2" x 2" slide with greater brilliance than does the ordinary 1000-watt auditorium lantern slide projector with a 3¼" x 4" slide. It is a splendid instrument both for the amateur who delights in the finest home projection and for the professional in classroom, convention or lecture hall who demands an instrument developed especially to match the recent progress in color photography.

Clear, sharp definition with a flat field is secured with objection lenses 2½" in diameter. For 2" x 2" slides the 6½" (f2.6), 8½" (f3.4) or 10" (f4.0) focal length are available. For larger slides there are available longer focus objectives, 2½" in diameter and 12" to 24" focal length.

Operation is simple. Slides are placed in a standard type lantern slide carrier. The instrument can be elevated conveniently, to meet screen height, by adjusting the front legs. Critical focusing is secured with a spiral focusing mount. Two heat-proof carrying handles make it possible to remove the instrument from the projection table immediately after prolonged use.

Brochure on Making Movies

"We Second the Motion" is the provocative title of an attractive 36-page brochure issued by Burton Holmes Films, Inc., to aid those who are interested in the production of their own business motion pictures. The booklet is a concise, clear and informative treatment of

all the steps involved in making a film, silent or sound, from its pre-production planning to the completed job turned out by the laboratory. The instructions are confined to black and white films only since the situation in regard to color is changing rapidly. Fundamentals in scenario preparation, production and photography procedure, editing, titling, sound recording and sound editing are carefully explained. Helpful suggestions on how to secure proper film distribution and exhibition concludes this little pamphlet, which may be obtained from Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago.

DeVry Price Reductions

Prices on DeVry 16mm and 35mm sound projection equipment have been greatly reduced. This price reduction has been made possible by means of more economical methods of production and increased sales of DeVry products during the past months. The new quotations may be obtained from DeVry dealers or the home office at 1111 Armitage Avenue, Chicago.

Duplicates in Kodachrome

Color duplicates of original 16mm Kodachrome film are now possible to procure as the result of a successful duplicating method recently developed by Eastman Kodak Company, Rochester, New York. In lengths of 77 feet or more, the price is 10c per foot; \$10 per 100 feet; less than 77 feet, 11½c per foot.

The minimum charge will be \$5.75.

For sound films in color, a separate sound track may be printed on the film along with the duplicate film. The duplicate printing is done at Eastman headquarters in Rochester only.

Lantern Slide Units in Science

A new series of twenty units in Biology, consisting of twelve stereographs and twelve duplicate lantern slides in each unit, are being offered to teachers of science by the Keystone View Company, Meadville, Pa. The material has been classified into the following eight major groups containing from one to six units: Microscopic Life and Cells, Food Production and Digestive Processes, Plant Groups, Animals Groups, Reproduction of Plants and Animals, The Web of Life, Behaviorism, Genetics. Editorial work on these units was done by Mr. L. F. Pinkus, Instructor in Biology in the Sigel High School of St. Louis, and the photographic work by Mr. Arthur Eldridge of New York City, formerly of the University of Illinois.

Fifteen new General Science units, of twenty slides each, are also available. Subjects treated are The Air, Astronomy, Electricity, Health, Light, Living Things (Animals and Plants), Sound, Weather and Climate, Heat and Fire, Clothing, The Earth's Crust, Food, Machinery, Water. Subject matter and teachers' manuals were prepared by Dr. H. A. Webb of George Peabody College for Teachers.

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, 1938, 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, embodied in section 411, 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*, Inc., 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 Slaughter, Grand Beach, Mich.; Nelson L. Greene, 5836 Stony Island Ave., Chicago; Estate of Frederick J. Lane, 6450 Kenwood Ave., Chicago; Marguerite Orndorff, 1617 Central Ave., 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.

5. That the average number of copies of each issue of this publication sold and distributed through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is ———. (This information is required from daily publications only.)

NELSON L. GREENE, Editor.

Sworn to and subscribed before me this 1st day of October, 1938.

(SEAL) HELEN NOONAN
(My commission expires October, 1940)

Current Film Releases

(Concluded from page 308)

Spain and China, the political and economic events bearing on central Europe, the political changes in our own country and problems facing our next congress, and many other episodes having an important bearing on world history.

Health Subjects in Sound

The two silent 16 mm films, *The Road to Health and Happiness* and *The Life of a Healthy Child* have been thoroughly revised and produced in sound by the Film Division of the Victor Animatograph Corporation in cooperation with Dr. David B. Hill and others. The sound consists of a narrator giving an effective health talk. This should be welcome news to schools, health departments, dental and medical men throughout the country. These one-reel films were produced by a number of men over the country who are very much interested in health work and photographed by Dr. David B. Hill, First National Bank Bldg., Salem, Oregon.

The Road to Health and Happiness is a general health film suited for Junior and High School students.

The Life of a Healthy Child, illustrating health activities of a normal school child, is suited for grade school students.

These two sound films were shown twice daily by the Scientific and Health Exhibits Committee during the recent American Dental Association National Convention in St. Louis. They may be purchased from Dr. David B. Hill, First National Bank Bldg., Salem, Ore., or they may be rented from the American Dental Association, Bureau of Public Relations, 212 E. Superior St., Chicago.

Yale Drama Department Produces

The Department of Drama of the Yale School of Fine Arts has recently completed the first film in the United States to record behind-the-scenes procedure in dramatic production. The film, of feature length, is entitled *It's Not All Play*, and is the initial work in a series to be produced and released to theatre workers in churches, schools, and colleges. Professor Allardyce Nicoll, chairman of the Department of Drama, believes this educational film program will meet the demand of lay and professional theatre groups for a systematized approach to the lesser known backstage techniques.

In addition to the comprehensive and rapid survey of dramatic method offered by this first film, detailed treatments of each separate production technique are scheduled on the film program of the Department of Drama. To be released at later dates are films on *Direction*, *Plastics* and *Costumes*. Subsequent motion pictures in this educational series will deal with stage lighting and stage assembly techniques. These films are

directed, photographed, and lighted entirely by students in the Drama Department, with J. Warren Seer of Cambridge, Mass., second year student of lighting under Professor Stanley R. McCandless, as producer. With an original footage of 12,000 16mm. film, in editing *It's Not All Play* has been cut to 2,400 feet.

Two More Health Productions

From National Motion Pictures Company, Mooresville, Indiana, comes the announcement of two new pictures, *What Price Health?* and *If It's Health You're Seeking*, available in both 16mm and 35mm silent form. The one-reel subject, *What Price Health*, deals with community sanitation and meets the arguments against the cost of sanitation by showing the possible costs resulting from insanitation. The other film, in two reels, depicts the elements of a healthful life—diet, fresh air and sunshine, exercise, sleep, posture, cleanliness, physical examinations, care of the teeth and eyes, vaccination and prevention inoculation, moderation, and proper emotions.

Modern Packaging Filmed

Over the Counter and Off the Shelf, a commercial 16mm sound film, is the first movie developed to further packaging education, and present the package in its true light as a factor in consumer acceptance and sales. It stresses three basic objectives of a good package—(1) Protection (2) Convenience and (3) Eye-Appeal. It presents a plea for the modernization of packaged goods, and pictorially illustrates the progress in packaging since the days of the country store and the "open cracker barrel."

The movie runs for approximately 35 minutes, and in the last 400 feet shows in full color, the 62 prize-winning packages chosen from among the 21,000 entries in the 1937 All-American Package Competition, sponsored by Modern Packaging magazine. It has been scheduled to tour the United States, Canada and abroad, for showings before various convention groups, chambers of commerce, schools of business, advertising and marketing, Kiwanis clubs, Rotary clubs, etc. Inquiries may be addressed to Modern Packaging Magazine, 425 Fourth Avenue, New York City.

Teacher-Made Films

Mr. Elwood Bancroft of Southeastern Junior High School, Battle Creek, Michigan, has produced two single reel 16mm silent subjects which he is offering to rent or sell to others in the field. His safety film, *Pedestrian Habits*, has had favorable reception by several people in visual education and safety work. It teaches some of the more important lessons in pedestrian safety. Mr. Bancroft has used the positive method of teaching since it has been his observation, after working in the safety field for several years, that pupils do not get a clear correct impression from a moving picture lesson when right and wrong methods of conduct are presented. The film is designed for classroom use in the 5th to 9th grades.

The other film ready for circulation is entitled *Michigan Winter Wheat*. It shows the preparation of the seed bed, planting, the wheat covered with snow, and then summer harvest scenes with the grain being harvested by the binder and thresher method and small combines.

Leroy Dennis Film Bureau

The 16mm. sound film library of the Leroy Dennis Film Bureau, Wabash, Indiana, contains features, comedy shorts, cartoons, travelogues, musical, sports and novelty subjects. Films are available for rental only. Although a comparative newcomer in the field of 16mm. films, this organization has been in continuous service as the Dennis Lyceum Bureau and the Dennis Film Bureau, since 1910.

Motion Pictures on Aluminum

The story of the production and uses of aluminum and aluminum products is depicted in two silent educational motion picture films recently produced by the Bureau of Mines, U. S. Department of the Interior. The films, two reels each, are entitled *Aluminum, from Mine to Metal* and *Aluminum: Fabrication Processes*. They are the latest addition to the film library of the Bureau of Mines, which now consists of over 4,000 reels. Applications for the films should be addressed to the Bureau of Mines Experiment Station, 4800 Forbes Street, Pittsburgh, Pa.

HERE THEY ARE

A Trade Directory
for the Visual Field

FILMS

- Akin and Bagshaw, Inc.** (6)
1425 Williams St., Denver, Colo.
- Audio-Film Libraries** (5)
661 Bloomfield Ave. Bloomfield, N. J.
(See advertisement on page 298)
- Bell & Howell Co.** (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Bray Pictures Corporation** (3, 6)
729 Seventh Ave., New York City
- Cine Classic Library** (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 298)
- Wm. H. Dudley Visual Education Service** (4)
736 S. Wabash Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.
- Eastin 16 mm. Pictures** (6)
707 Putnam Bldg., Davenport, Ia.
Burns Bldg., Colorado Springs, Colo.
- Eastman Kodak Co.** (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Co.** (4)
Teaching Films Division,
Rochester, N. Y.
- Eastman Kodak Stores, Inc.** (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures System, Inc.** (6)
330 W. 42nd St., New York City
- Erpi Classroom Films, Inc.** (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
- Films, Inc.** (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
(See advertisement on page 307)
- Garrison Films, Inc.** (3, 6)
1600 Broadway, New York City
(See advertisement on page 306)
- General Films, Ltd.** (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc.** (6)
35 W. 45th St., New York City
(See advertisement on page 303)
- Harvard Film Service** (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton, Travelettes** (1, 4, 5)
7936 Santa Monica Blvd.,
Hollywood, Calif.
- David B. Hill** (6)
First Natl. Bank Bldg., Salem, Ore.
(See advertisement on page 300)
- Howard Hill Motion Picture Service** (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- J. H. Hoffberg Co., Inc.** (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp.** (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 301)
- Leroy Dennis Film Bureau** (6)
Wabash, Ind.
(See advertisement on page 311)
- Lewis Film Service** (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 306)
- The Manse Library** (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 306)

- Pinkney Film Service Co.** (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp.** (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Pictures Co. Inc.** (2)
Rockefeller Center, New York City
(See advertisement on page 308)
- Visual Education Service** (6)
131 Clarendon St., Boston, Mass.
- Wholesome Films Service, Inc.** (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc.** (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau** (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago

MOTION PICTURE MACHINES and SUPPLIES

- The Ampro Corporation** (6)
2839 N. Western Ave., Chicago
(See advertisement on page 299)
- Bell & Howell Co.** (6)
1815 Larchmont Ave., Chicago
(See advertisement on inside back cover)
- Central Camera Co.** (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 302)
- DeVry Corporation** (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 301)
- Eastman Kodak Co.** (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc.** (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd.** (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Howard Hill Motion Picture Service** (5)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- Ideal Pictures Corp.** (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 301)
- International Projector Corp.** (3, 6)
88 Gold St., New York City
(See advertisement on inside front cover)
- RCA Manufacturing Co., Inc.** (5)
Camden, N. J.
(See advertisement on page 309)
- S. O. S. Corporation** (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers** (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp.** (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector** (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 305)
- Victor Animatograph Corp.** (6)
Davenport, Iowa
(See advertisement on page 284)
- Visual Education Service** (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc.** (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Colonial Art Co.**
1336 N.W. 1st St., Oklahoma City, Okla.

SCREENS

- Da Lite Screen Co.**
2717 N. Crawford Ave., Chicago
(See advertisement on page 303)
- Eastman Kodak Stores, Inc.**
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Williams, Brown and Earle, Inc.**
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

- Conrad Slide and Projection Co.**
709 E. Eighth St., Superior, Wis.
- Eastman Educational Slides**
Johnson Co. Bank Bldg.,
Iowa City, Ia.
- Edited Pictures System, Inc.**
330 W. 42nd St., New York City
- Ideal Pictures Corp.**
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 301)
- Keystone View Co.**
Meadville, Pa.
(See advertisement on page 307)
- Radio-Mat Slide Co., Inc.**
1819 Broadway, New York City
(See advertisement on page 306)
- Society for Visual Education**
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 305)
- Visual Education Service**
131 Clarendon St., Boston, Mass.
- Visual Sciences**
Suffern, New York
(See advertisement on page 306)
- Williams, Brown and Earle, Inc.**
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPIES

- Keystone View Co.**
Meadville, Pa.
(See advertisement on page 307)

STEREOPTICONS and OPAQUE PROJECTORS

- Bausch and Lomb Optical Co.**
Rochester, N. Y.
(See advertisement on page 281)
- Eastman Kodak Stores, Inc.**
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films Ltd.**
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Keystone View Co.**
Meadville, Pa.
(See advertisement on page 307)
- Spencer Lens Co.**
19 Doat St., Buffalo, N. Y.
(See advertisement on page 304)
- Williams, Brown and Earle, Inc.**
918 Chestnut St., Philadelphia, Pa.

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- (1) indicates firm supplies 35 mm. silent.
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- (3) indicates firm supplies 35 mm. sound and silent.
- (4) indicates firm supplies 16 mm. silent.
- (5) indicates firm supplies 16 mm. sound-on-film.
- (6) indicates firm supplies 16 mm. sound and silent.

EDUCATIONAL SCREEN

The Magazine Devoted Exclusively
to the Visual Idea in Education

DECEMBER, 1938

Public Library
Kansas City, Mo.
Teachers Library

T.L.
VOLUME XVII, NUMBER 10
WHOLE NUMBER 167

Index

IN THIS ISSUE

*Facts and Fiction About
the Educational Values
of the Cinema*

*The Candid Camera in
Safety Teaching*

*Selecting the Right Type
of Visual Aid*

*Vitalizing a Photoplay
Club Program*

*Motion Pictures —
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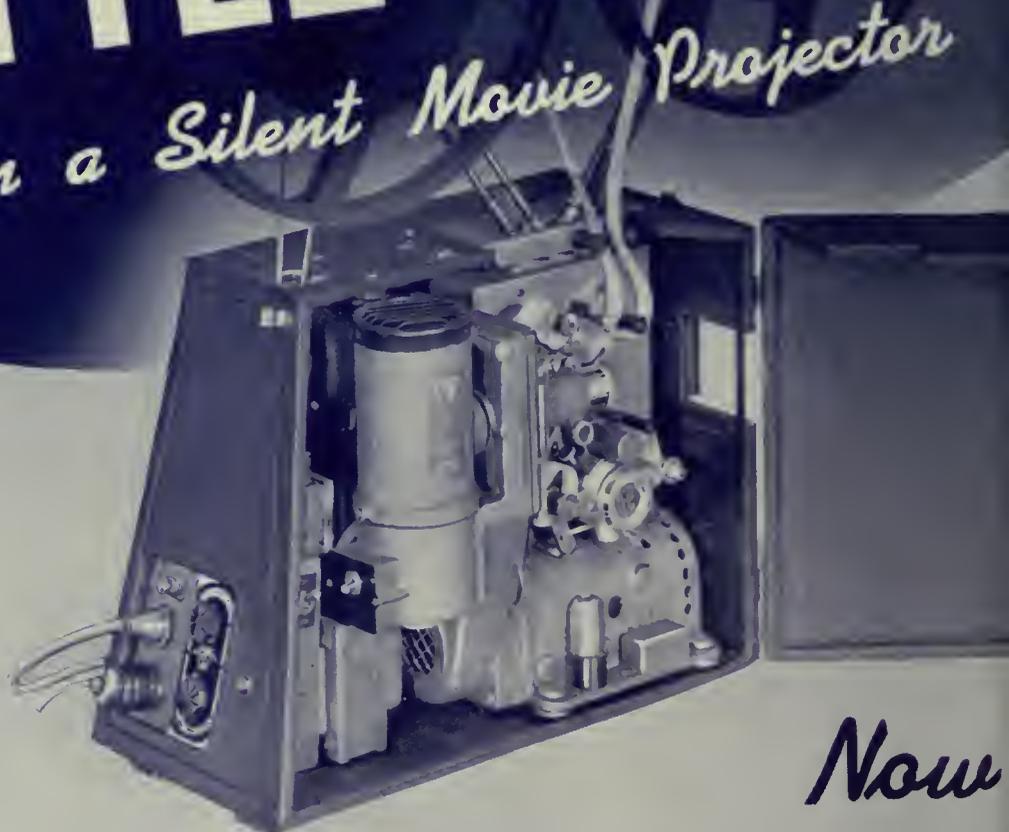
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DECEMBER, 1938

VOLUME XVII

NUMBER TEN

Contents

Facts and Fiction About the Educational Values of the Cinema. Joseph Mersand.....	319
The Candid Camera in Safety Teaching. Charles W. Hoffman.....	322
Selecting the Right Type of Visual Aid. F. Marshall Worrell.....	323
Motion Pictures — Not for Theatres. Arthur Edwin Krows.....	325
Vitalizing a Photoplay Club Program Donald A. Eldridge.....	329
Among Ourselves — Notes from and by The Department of Visual Instruction. Conducted by The Editorial Committee.....	330
Among the Magazines and Books.....	332
News and Notes Conducted by Josephine Hoffman.....	334
Current Film Releases.....	339
In and For the Classroom Conducted by Wilber Emmert.....	340
Among the Producers.....	342
Film Estimates	344
Here They Are! A Trade Directory of the Visual Field....	348

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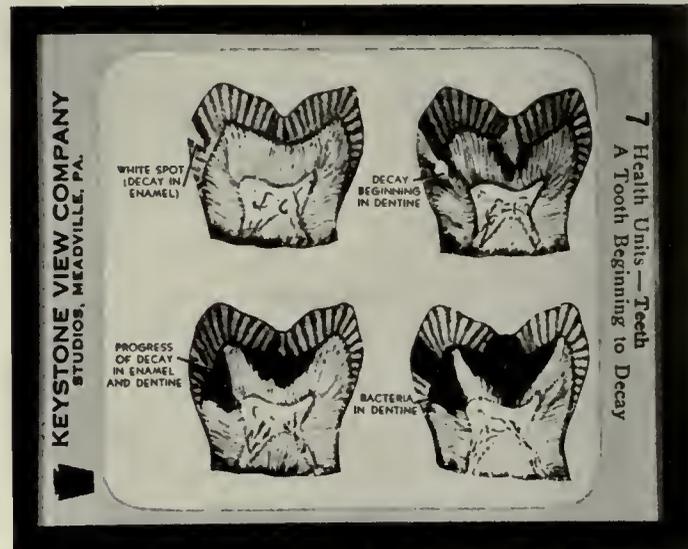
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Facts and Fiction about the Educational Values of the Cinema

A trenchant discussion on what we know and do not know about educational values in theatrical movies.

By JOSEPH MERSAND Ph.D.
Director of Institute of Adult Education
Brooklyn, N. Y.

“TO be concerned about educational movies when the schools and colleges are failing so miserably to give students an adequate liberal education is nothing short of farcical.” These were the words of Dr. Mortimer J. Adler, Professor of the Philosophy of Law at the University of Chicago, spoken before the National Board of Review of Motion Pictures on January 22, 1938.

Teachers of English in the high schools who have come to recognize the cinema as a powerful educational instrument for good or evil, depending on the vehicle, cannot ignore such a statement. The movies and the radio have the largest audiences of all agencies for artistic or social communication. To deny that an industry whose products are consumed weekly by about seventy million people has educational responsibilities seems to contradict the prevalent social philosophy of our time.

Disrespect for the type of education supplied by our colleges and universities is quite fashionable these days. Dr. Robert M. Hutchins, President of the University of Chicago, recently expressed his philosophy of education in a series of articles in the *Saturday Evening Post*. In the February, 1938 issue of *Scribners* Tom Whitecloud, an Indian college student, criticizes with bitterness the inadequacy of the education he is receiving. In the February, 1938 *Forum* George W. Alger laments the passing of the “gentleman’s education” which he received some thirty years ago. What educational conference held these days does not find faults with the “present system?”

Yet these strictures are hardly new. Is not the whole history of education a chronicle of dissatisfaction with the *status quo* and suggestions for its improvement? It is discouraging, to say the least, to be told that the efforts of such organizations as the National Council of the Teachers of English and the Progressive Education Association to incorporate movie and radio instruction in their new curricular suggestions, are useless.

As pedagogical realists teachers of English in secondary schools cannot ignore the influence of the cinema. Yet how many of us know the movies which our pupils see? What do they think of them? Why do they see one movie rather than another? What do they think of double features? The answers to these and other questions of educational significance should be of value to the teacher interested in establishing contacts with the emotional and mental experiences of his students outside of the school building. For a

teacher surely cannot believe that the young boys or girls before him are influenced to any great extent by *his* august presence for forty-five minutes a day. We may talk ourselves blue in the face explaining some point of etiquette, but no sooner does our student leave our room than he may be jostled and hustled into bad manners by a world which derives its code of behavior from the grim realities of the subway or the arena.

How can we be certain that our fine phrases about culture and restraint and discipline mean anything to a youngster who has just enjoyed a Marx Brothers comedy (and this is no derogation of their talent)? It is difficult for one observer, at least, to understand the behaviour of his pupils unless he knows the radio programs to which they have listened, the movies which they have seen and liked, and the newspaper items with which they are familiar.

The realization of the need for this information, both for understanding their apperceptive basis and their conduct, resulted in the formulation of certain questions relevant to their post-school entertainment. The answers—kept in the files for each student together with his reading record, his grades for past terms, his diagnostic tests in spelling, vocabulary, punctuation, and composition—help to fill in the case history which is indispensable for a sincere understanding of each child’s nature and capabilities.

Mr. George W. Alger, in the article on his college education in the *Forum* of February, 1938, mentioned above, spoke of a Professor of Latin who remembered the names of all his pupils in twenty-five years and knew their subsequent careers. Mr. Chips could do almost as much. Some teachers have the gift of perceiving readily the individual traits and capacities of each student and adjusting their instruction accordingly. Others must employ the more cumbersome, but perhaps more reliable, device of the case history carefully documented.

The value of ascertaining the titles of and the judgments held on movies seen can be illustrated by the following table compiled recently. The students were requested to list all the movies seen in the preceding two months, rating them with the star system, four stars being the highest award. It will be noticed that the most popular picture was *Dead End*, and the second choice was *Captains Courageous*. Certainly, teachers need not be pessimistic about the tastes of their pupils when the majority prefer such pictures. In the two months of September and October, 1937, 173 students saw 162 movies, for a total of 1346 student-viewings, an average of about 8 films per student for the

two months, or less than one film per week. The ten most popular were:

Number of students	Cinema
75	Dead End
69	Captains Courageous
67	Varsity Show
59	Topper
59	The Road Back
51	100 Men and a Girl
42	Wee Willie Winkle
37	Broadway Melody of 1938
37	A Day at the Races
37	Double or Nothing

The total list of movies seen and the ratings by each student follow: (The 11 films receiving the most "four star" votes



Scene from "Captains Courageous" (Metro-Goldwyn-Mayer)

are printed in bold type. These are not necessarily among the 22 films most largely attended.)

Name of Picture	No. who have seen picture	Four stars	Three stars	Two stars	One star
A Star is Born	11	6	2	2	1
After the Thin Man	1	1			
Ah! Wilderness	1		1		
Alcatraz Island	4		1	3	
Ali Baba Goes to Town	12		5	7	
Annapolis Salute	25	2	2	13	8
Another Dawn	2		1	1	
Artists and Models	26		15	10	1
Back in Circulation	3		1	2	
Bad Guy	4			2	2
Bat Whispers	1				1
Behind the Mike	1			1	
Between Two Women	13	1	6	4	2
Big City	1		1		
Big Shot	1			1	
Black Legion	1		1		
Blonde Trouble	4		2	1	1
Born Reckless	1			1	
Born to Dance	5	1	2	2	
Born to Gamble	1	1			
Borneo	3		2	1	
Bride Walks Out	1			1	
Broadway Melody of 1938	37	2	18	15	2
Bulldog Drummond Comes Back	10	1	2	4	3
Californian	1				1
Captains Courageous	69	49	19	1	
Case of the Stuttering Bishop	2		1	1	
Chan at the Olympics	5		2	2	1
Chan on Broadway	13		2	8	3

Chapeyev, Red Commander	1				1
Confession	4	1	2		1
Damaged Lives	2	1			1
Dance Charlie Dance	2				2
Day at the Races	37	6	26	4	1
Dead End	75	55	15	5	
Devil's Squadron	1				1
Double or Nothing	37	2	18	14	3
Mr. Dodd Takes the Air	16	1	4	11	
Easy Living	9	1	2	5	1
Elephant Boy	2		1	1	
Emperor's Candlesticks	11	3	5	1	2
Empty Holsters	1			1	
Exclusive	5		2	3	
Fifty Roads to Town	1			1	
Fire Over England	3	1	1	1	
Flight From Glory	4			1	3
Footlight Parade	1			1	
Footloose Heiress	1			1	
Frameup	1			1	
The Game That Kills	3			3	
Gangway	2			2	
General Hospital	1			1	
Girls Can Play	4	1	2	1	
The Golem	8	1		2	5
Good Earth	31	25	5	1	
Great Garrick	5	3	1	1	
Great Hospital Mystery	1			1	
Great Ziegfeld	1	1			
Green Light	1		1		
Hideaway	1			1	
High, Wide and Handsome	2	2			
Hit Parade	4	1	1	1	1
Hot Water	1			1	
I Covered the War	1				1
I Have Sinned	1				1
I Am a Fugitive From a Chain Gang	1	1			
Internes Can't Take Money	1			1	
It Happened in Hollywood	1				1
Juggernaut	2			1	1
Kid Galahad	4	1	2	1	
Kid Millions	4	1	1	2	
King Solomon's Mines	4		2	2	
King of Gamblers	1				1
Knight without Armor	1			1	
The Lady Escapes	1				1
Last Train From Madrid	2		2		
League of Frightened Men	1		1		
Les Miserables	1	1			
Let Them Live	1				1
Life Begins in College	15	3	11		1
Life of the Party	13	2	4	7	
Life of Pasteur	1	1			
London by Night	15		2	10	3
Lost Horizon	27	25	2		
Lottery Bride	1			1	
Love Under Fire	13	1	6	3	3
Magnificent Obsession	2		2		
Make a Wish	3			3	
Man Who Cried Wolf	5		3	2	
Maytime	1		1		
Midnight Madonna	3		1		2
Mountain Music	10	2	4	2	2
Motor Madness	1				1
My Dear Miss Aldrich	17		2	11	4
New Faces	3	2	1		
Night Must Fall	2	1			1
On Again, Off Again	1			1	
On Such a Night	1			1	
On the Avenue	1		1		

One Hundred Men and a Girl	51	22	24	5	
Over the Goal	2			2	
Parnell	1		1		
Pick a Star	2			2	
The Plainsman	1				1
Prince and the Pauper	1	1			
Prisoner of Zenda	23	19	4		
Private Worlds	1	1			
Riding on Air	2		1	1	
Road Back	59	23	29	7	
Roaring Timber	1				1
Romeo and Juliet	2	2			
Rhythm In the Clouds	4	1	2		1
San Quentin	14	3	6	5	
Saratoga	7		4	2	1
Saturday's Heroes	2			1	1
Shall We Dance	1		1		
Sheik Steps Out	1			1	
Silent Barriers	2				2
Singing Marine	12	1	7	2	2
Slave Ship	11	2	6	3	
Slim	3	1	2		
Small Town Girl	1		1		
Soldier and the Lady	1		1		
Souls at Sea	11	4	5	2	
Speed to Spare	1				1
Sudden Death	1			1	
Supersleuth	2			1	1
Stella Dallas	21	6	13	2	
Strike Me Pink	1			1	
Tales From Vienna Woods	1			1	
Tale of Two Cities	1		1		
That Certain Woman	9		2	5	2
The Death Ray	1				1
They Gave Him a Gun	5		2	3	

Warned Before					
Breakfast	4		1	1	2
Walt Disney Awards	3	3			
Way Out West	2			1	1
Wee Willie Winkle	42	5	28	9	
What Price Innocence	1				1
White Bondage	1			1	
Wife Doctor Nurse	12	1	6	3	2
Wild Money	2			2	
Wild and Woolley	1				1
You Can't Have Everything	35	7	21	4	3
Zola	10	10			

Total Student Viewings and Judgments	1346	378	524	336	108
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The largest number of four star ratings was awarded to *Dead End*. Second was *Captains Courageous*. Such a table involving 1346 student judgments is very helpful not only as an indication of the variety of films selected but of the opinions of the students about them.

Other encouraging signs are indicated. Thus, out of 162 films 69 were seen by only one student.* As the list is constituted at present, its greatest value is as an indicator of preferences. Many additional questions might have been asked which would have made the case records more complete. Thus the power to recall names of actors, plots, bits of dialogue could be tested. There is a fruitful source of inquiry in the language used in different pictures. How much of the dialogue and what elements of the dialogue do our students recall and retain? Certain expressions—regrettedly—are taken up only too readily. Thus in *Double Wedding*, starring William Powell and Myrna Loy, the expression "Umph," as describing what John Beal lacked to make him an eligible suitor, was quickly taken up by the populace and we heard it applied to countless situations.

The exact effect (if it can ever really be determined) of movie dialogue upon our speech habits deserves serious investigation. Occasionally some professor of English or speech vents his indignation with the poor speech he hears and gets into the headlines with his request for a "Speech Dictator" in Hollywood. Aside from such petty personal outbursts of grievances, serious study of this problem or phenomenon (depending upon what one thinks of Hollywood's English) to achieve a really reliable body of information is yet to be done.

Another fruitful field of investigation is the effect of movies upon behaviour and upon ideas. Any num-

(Concluded on page 324)



Scene from "One Hundred Men and a Girl" (Universal)

They Won't Forget	18	10	6	1	1
Thin Ice	34	6	17	11	
Think Fast Mr. Moto	29	2	8	15	4
Thirteenth Chair	1			1	
This Way Please	1		1		
Three Men on a Horse	1			1	
Thunder in the City	1				1
Topper	59	12	32	12	3
Toast of New York	23	6	12	5	
Trader Horn	1			1	
Under the Red Robe	1			1	
U. S. S. R. In Review	1				1
Varsity Show	67	15	38	12	2
Virginian, The	1			1	
Viva Villa	1	1			
Vogues of 1938	30	2	19	8	1
Wake Up and Live	5	3	2		

*Editor's Note—Another 48 films were seen by less than 6 students, and another 23 films by less than 17 students. This means that 140 of the 162 pictures were seen by only 10% of the 173 students. Therefore 90% of the students confined their viewing to 22 out of the 162 pictures, and 19 of the 22 were pictures definitely recommended by the most discriminating reviewing services in the country. Again the fact that over 25% of the total ratings are "four star" would seem to show a tendency toward unduly optimistic verdicts by the young judges. Bearing in mind however, that 90% of the judgments are based on 14% of the films, and these largely the cream of the theatrical product, the high proportion of "four stars" becomes less startling. On the whole, such evidence of sane selection and judgment by students is encouraging. The age of the students ranged between fifteen and sixteen years old.

The Candid Camera in Safety Teaching

Practical use of the miniature camera to enhance effectiveness in the teaching of Safety in schools.

By CHARLES W. HOFFMAN

Director of Safety and Visual Education
Public Schools, Palmyra, N. J.

THE problem of visualizing safety effectively lies not in the repeated showing of commercial safety pictures, nor the telling of horrible accidents, but in the actual portrayal of these as they occur *near at hand*.

A child is not very much impressed when told "not to play with matches," but he *is* impressed when a brother, sister, or even himself, is severely burned. The teacher who is honestly and conscientiously interested in driving home a point or two in safety can apply to advantage visual aids that not only show accidents and safety methods, but from a source "right at home."

If a miniature camera is available, purchase some of the most sensitive film the camera will use, and keep the "loaded" camera on hand at all times. A highly sensitive film is recommended because the lighting for the pictures may not be sufficient for ordinary film.

Then contact the town police force, or any agency at hand, whose aim is the protection of human life. A fire company, first aid squad, ambulance squad, (from the local hospital) safety patrol, highway patrol, are all excellent cooperating agencies. Arrange with them for immediate notification of any accident in the vicinity of your town, school, or home. Visit promptly the scene and photograph whatever you may think helpful. Make a permanent record of such essential facts as cause, location, time, number injured, number saved, arrival of help.

Taking the Picture

The advent of the "candid" or miniature camera, with its popular appeal (as seen through the rapid growth of new magazines, showing candid pictures) has paved the way for this type of work. Now is the time to act—not later.

Your success will depend, to a large extent, first, on how well you know the construction and manipulation of the candid camera to be used; and second, on the actual set-up of the scenes, whether "posed" or "natural."

The candid camera is like any ordinary camera. It is simple to operate and necessitates only one "loading" for 36 or more exposures on 35 millimeter motion picture films. Shutter speeds are fairly accurate and may be set for 1/100th to 1/25th of a second, with appropriate settings of the diaphragm opening from F/16 to F/6.3. Time exposures and bulb exposures which require the use of a tripod, are used mostly for indoor pictures. An appropriate sighting device, which requires no focusing, is fitted to the camera. The instruction booklet supplied with the candid camera should be carefully read and the directions followed.

In making the pictures for a course in automobile driving, the author used an Ansco Memo camera

with an F/6.3 anastigmatic lens.

The negative strips made by the candid camera may be printed on positive motion picture films for projection on a screen. Pictures may also be enlarged on printing paper for poster work or class study.

The set-up for the pictures, if they are to look "actual," will require being on hand at the scene of the accident. Speed is imperative to photograph the accident before a large crowd gathers, or before the wreckage is removed. In small communities where neighbor knows neighbor, child knows child, this picture-taking method may have some drawbacks. Actual names should not be mentioned at showings unless they are the names of non-residents, for the accident itself will already have been talked about. Tact and consideration must be observed. In most cases the teacher can devote one set of pictures just to local automobile accidents, local hazards, or to show local driving requirements.

In order to avoid any embarrassment through gossip, the teacher may choose another method which need not be so serious yet will ultimately gain good results. This method is to have the students pose for make-believe accidents. This can be carried out with cooperation of the local agencies previously mentioned and if presented right will lead to a common interest in safety procedures. The planning of such scenes may take a great deal of time, patience, and skillful mental work to avoid "amateurishness" as far as possible, but the rewards will be greatly enhanced by the fact they have been produced and made by "local talent."

Projecting the Pictures

After the pictures have been successfully taken, positive films are printed from them for projection purposes. In order to protect these for class study or group work, a still-film projector, or film-slide attachment to the regular stereopticon, is needed. For safety teaching it is essential that each picture be retained on the screen for detailed study and strain on the eyes prevented. The individual pictures on this film, called "frames," are projected one at a time, by the turn of a lever.

Effective safety teaching with this visual aid is at once apparent. If the teacher has been careful to select the exposures so that they give unity of thought, (such as accident prevention), the teaching will be effective. Random exposures and lack of continuity of thought in the picture will destroy effectiveness.

Data can be supplied for each picture by the teacher making the photographs. The effect may be enhanced by the presence of the chief of police or some other well-informed official.

Correlation with Safety Methods

Projection of the pictures should be followed by a

follow-up program. There are several ways to accomplish this.

One method of correlating the pictures with safety teaching is to make a survey of the hazards portrayed. Each pupil may be assigned to a certain section of the town. Over a period of time set by the teacher, the student records on his or her map just how many accidents occurred in a certain territory. Students should list the causes of the accident with suggested remedies. At the end of this time interval the studies may be grouped together into a composite map of the whole town. This composite map can then be permanently located in the lecture room for study. Colored pins or crayon markings may be added to the map to show the increase,

from year to year, of accidents in that region.

Another method is to make a model of the section of the town where the pictures were photographed with scenes of accidents reconstructed in model form. For students interested in modeling or plastic work, this is most interesting. For the rest of the class the model is highly instructive. The completed model may then be kept in the lecture room for further study.

The "class journey" is a most effective visual aid in safety teaching. Take the pupils to the actual scene of the accident and then hold class study at the location. Wherever possible, this method is highly recommended and may follow the showing of the picture.

(Concluded on page 331)

Selecting the Right Type of Visual Aid

A brief but comprehensive review of fundamental considerations that should govern the selection of specific visual aids for specific purposes.

BY F. MARSHALL WORRELL

Director of Visual Education
Public Schools, Englewood, N. J.

I HAVE noticed very frequently that teachers are inclined to use that type of visual aid which happens to be most readily available without giving much consideration as to its ability to do the work for which it was selected.

For example—Films are used when static aids such as the slide, map, model or stereograph might better have been chosen. On the other hand, materials, incapable of showing motion, have been employed to teach problems in which *motion* was the most important factor being considered. Slides have been used when the stereograph, with its ability to picture in three dimensions, would have brought much better results. Groups have spent much time and money in visiting some place which might have been studied, through the medium of a motion picture, just as advantageously and with a great saving of school time and money. On the other hand, classes have been shown films and similar materials, rented or purchased at some cost, which might have been substituted for more real and valuable aids to be found in a local field trip, to the disadvantage of all concerned.

Instance after instance might be mentioned where teachers, thinking that they are "visualizing the curriculum," are content to use just any kind of aid without due consideration of its ability to present the factors involved. In visualizing his problem the teacher may have in mind one or more of the following objectives—

1—The forming of correct mental images of objects, either as a whole or in detail, in order that verbal discussion may have meaning.

Examples—Parts of a flower, a cotton boll, a carburetor.

2—An understanding of the environment of an object or situation.

Examples—a growing plant, bees in the hive, an eskimo fishing.

3—To clarify concepts of geographical formations, divisions and sub-divisions.

Examples—volcanoes, rivers, glaciers; continents, islands and oceans.

4—Relative location of political divisions and sub-divisions.

Examples—Nations, states and cities.

5—Study of social conditions.

Examples—Slums, crime, immigration, reconstruction and conservation projects.

6—Study of social institutions, structural and functional.

Examples—banks and banking, post office and its functions, the Senate, etc.

7—Clarify and vivify some event.

Example—Westward movement, signing of the Declaration of Independence, scientific discoveries.

8—Teach a skill.

Example—typewriting, sewing, drawing.

9—Study of forces, natural phenomena, chemical activity.

Example—problems in physics, chemistry and similar sciences.

10—Motivation for future study. Study for appreciation.

Example—art, music, literature, drama.

11—Bring about a change of attitude.

Example—respect for other races or religions, elimination of class prejudices, patriotism.

- 12—Develop or change habits of conduct.
Example—health, safety, social deportment.
- 13—Clarify concepts of the processes of
a—Growth or development.
Examples—plant growth; social, industrial or political changes.
b—Manufacture or construction.
Examples—industrial processes:—production of raw materials, manufacturing, building.
c—Functioning or operation.
Examples—circulation of the blood, movement in an engine.

The list is not complete, but it illustrates the many purposes for which visual aids may be used. Frequently the teacher may have available materials from one or more of the following types—

1—Objects 2—Specimen 3—Model 4—Globe 5—Relief map 6—Map 7—Chart 8—Graphic material 9—Picture 10—Slide 11—Stereograph 12—Silent film 13—Sound film 14—School Journey 15—Exhibits, commercial and museum. 16—Demonstration equipment 17—Dramatization—with auxiliary aids—sand table, blackboard, bulletin board, radio, victrola.

Each of these aids has its own values and limitations. All are not equally suitable for use in any one teaching situation. Our use of them is determined, somewhat by—

- a—The degree of *reality* needed in a given situation.
b—*Outcomes* to be realized.
c—*Methods* to be used in presentation.
d—*Cost, safety and time* factors.

The degree of reality needed is determined, to a large extent, by the age of the pupil and his previous experience. It has been found that the younger the pupil the more real his visual experience must seem to him if the most good is to come from using the aid. A dull pupil is also better able to understand facts presented realistically. Even the more intelligent child needs the impression of realism, especially when approaching a new subject.

The following qualities contribute to the "reality" of an aid and should be included when they will add to the pupil's experience or are important factors to be studied: (1)—Motion (2)—Sound (3)—Color (4)—Odor (5)—Feeling (sense of touch) (6)—Three dimensions (7)—Plot or continuity. Upon reflection, the teacher will note that the various aids, previously mentioned, vary considerably in their ability to present these qualities. Frequently it may be necessary to use various types in combination.

The outcomes to be attained also have a direct bearing on the kind of materials needed. Certain types, such as the film and drama, are better able to appeal to the emotions and are, therefore, more likely to bring about the consumation of objectives involving emotional change. Factual information may often be presented more efficiently through the use of static types which may be studied, in detail, at leisure.

The method to be used in presenting the material must also influence our choice. Certain types, such as the stereograph, picture, object or model, lend themselves to individual study while the film, slide and field trip are more suitable for group work.

As we cannot escape the cost factor, it must also be given consideration. If there is no appreciable difference in the educational value of the types of aids from which we are making our selection, the least expensive should, naturally, be chosen. Example: 1—In choosing between the rental or purchase of sound or silent films; 2—Determining the relative value of a school journey as opposed to the use of a film picturing the place to be visited.

Finally, the safety and time factors must also have a bearing on our choice. This is particularly true when we are choosing between a school journey, involving problems of traffic, conveyance and accident hazard, and the use of more mechanical devices such as the film, exhibit, pictures, etc. Such suggestions as have been given are general in nature and are intended to provoke a thoughtful approach to the problems involved in selecting the right type of aid.

Educational Values of the Cinema

(Concluded from page 321)

ber of generalizations have been made about these aforementioned effects, but of scientific study there has been little so far. One hears such charges as that Germany was being prepared for the acceptance of the Nazi philosophy by pictures produced by Hugenberg's Ufa and other companies. Certainly today the totalitarian countries see in the movies a powerful agency for propaganda. *Chapayev* coming from Soviet Russia was obviously designed to encourage a reverence for revolutionary folk-leaders, which in Russia went to such an extent that another movie represented little school-children playing the game of *Chapayev*.

Many dilettantes in the study of movies will say quite definitely that certain pictures will have one influence or another. The liberals and pacifists will deprecate the showing of such news-reels as that of the *Panay* and such pictures as *Annapolis Salute* and *Devil Dogs of the Air* because they encourage militaristic sentiment. Statistics have been compiled which seem to indicate that there is a positive correlation between the incidence of such pictures and the rate of enlistment in the armed forces. It has been stated by Miss Theresa Helburn, a director of the Theater Guild, after her stay in Hollywood, that Great Britain has ordered that no pacifist pictures be made because she may have to resort to conscription in the event of a war.

Dozens of such generalizations have been made and are easily accessible for the curious-minded. Their reliability is questionable. In the last analysis each teacher must know his own group and must seek the information of his own students. In a city high school *Dead End* will be significant because our youngsters know what slums are. Would the students of a rural school have the same attitude? Nobody can pretend to answer with authority unless he has investigated personally.

Although a critic like Professor Mark Van Doren of Columbia University may state that "movies should have but one purpose—entertainment," the teacher knows that they mean much more to his students. They entertain, yes, but they teach, they may inspire; they often, unfortunately, degrade. They may spur to action. Above all, they deserve scientific study because they are definitely an instrument of education.

Motion Pictures — Not For Theatres

By ARTHUR EDWIN KROWS
Editor of "The Spur," New York City

A USEFUL member of the party which made the Rainey pictures had been Edmund Heller, naturalist of the Smithsonian Institution and just the year previously in the same capacity with the Smithsonian African Expedition headed by the redoubtable Theodore Roosevelt. This already much-traveled scientist who, although still in his mid-thirties, had distinguished himself in professional surveys in the Galapagos Islands, Alaska, Mexico, Guatemala and some other out-of-the-way places, was not only to adorn his subsequent record with studies for Yale and California Universities, the National Geographic Society and the American Museum of Natural History in Peru, Burma, Tibet and down to the mouth of the Amazon, but he was to rejoin Rainey in Siberia in 1918 as a member of the photographic staff of the Czechoslovakian army. Today, I believe, he is director of the Milwaukee Zoölogical Gardens.

There must be many other survivors of that African safari who reminisce about their experiences with Rainey for the entertainment of the young. It was a highly pretentious expedition for its day, and must have literally teemed with small adventures of the sort which makes ideal stuff for a grandfather's fireside tales.

THE SCOTT PICTURES

THE second notable real-adventure picture to catch public fancy was "The Undying Story of Captain Scott and Animal Life in the Antarctic," released by Gaumont and shown in New York at the Lyric Theatre in 1913. It was "shot" by the explorer, war correspondent and travel photographer, Robert George Ponting, F.R.G.S.; and he, himself, being given the responsibility of exhibition because Scott was gone, received the distinction, then rare for cameramen, of credit on the screen. At that time even stars and authors were only just beginning to be identified in the opening titles.

This picture was a record of one of the most dramatic stories in all the history of exploration—Commander Robert Falcon Scott's personally promoted, fatal, 1911-1912 trip to the Antarctic. Scott had made an earlier trip in 1901-1902 for the Royal Society and the Royal Geographical Society, at which time he had discovered and named King Edward Land.

When Ponting died in 1935, aged 65, it was said that he had lectured on the Scott expedition more than a thousand

times. In 1926 the famous film was placed on sale; and Ponting is said to have declined an American museum's offer of quarter of a million dollars for it, accepting instead a much lower figure from his own countrymen that it might become the permanent property of the English nation.

The films made on the Antarctic expedition of Douglas Mawson, who had assisted in locating the south magnetic pole, were exhibited in New York during the winter of 1914-1915 at \$1.50 "top," public interest in them being stimulated on their reopening the following season, by the addition of two reels of new material.

One of Scott's chief assistants on his first visit had been Ernest H. Shackleton; and Shackleton subsequently, in 1908-1909, made a personally financed voyage to the same inhospitable region, with results so notable that the British Government contributed £20,000 toward his expenses and gave him a knighthood. Sir Ernest conducted the Trans-Antarctic Expedition in 1914, and went to the South polar country again in the autumn of 1921, this time to lose his own life.

In the meantime, pictures of one of his intervening trips became a popular theatrical attraction. They were called, if I remember aright, "With Shackleton at the Bottom of the World." They were first shown publicly in New York in May, 1920; and they were still on view there when the world was shocked by news of the explorer's death. Frank Hurley, who was the official photographer of the Shackleton expedition, had exhibited his own films of Australia's hardly known "Never-Never Land" in New York in January, 1916.

Of course, motion pictures of this character were the occasional geographical films resulting from combinations of circumstances in which photography was not the prime purpose. But virtually every major exploration party going forth from any civilized country, from about 1910 on, had a cinematographer in-

In 1915 a rising Machine Age was forcing American standards of living rapidly upward. From that height the entire nation became eager to learn of the outside world. Lecture films became increasingly popular and gave impetus to the visual education movement. Part Four of the new history.

cluded as member. I doubt not in the slightest that the chief producing causes of all this anxiety to make expedition films were the outstanding successes of the Rainey and the Scott pictures.

I see before me references to Vilhjalmur Stefansson's Arctic exploration pictures being shown in successive issues of the "Mutual Weekly" in April, 1914. This was at about the same time that that courageous leader, with two companions, was making his remarkable, 600-mile sledge journey over broken, shifting ice from the mainland of Alaska to beyond Banks Island; I see more, about a five-reeler called "Hunting Big Game in the Arctic," made by "Lucky" Scott and Harry Whitney (the same who in 1909 and 1910 had become involved in the Peary-Cook dispute over discovery of the north pole), for a concern called Northern Ventures, Ltd., and offered for state rights release in the spring of 1913.

On a date close by it says that Carl M. Gregory, who has gone his kindly way through this nefarious business as writer, director, photographer and camera technician these many years, "has made a 9,000-mile trip through the West, making scenics for the Majestic Com-

pany, which now proposes to send him to South America for the same sort of thing"; in December, 1913, word leaked to the press that J. C. Hemment, a New York photographer, was *en route* to Africa to make wild animal films; and in the same month, motion pictures of "Around the World in the Steamship Cleveland" opened at Carnegie Lyceum in New York, Elmer Dwiggin lecturing.

In January, 1914, the feature at a banquet given by the New York Zoölogical Society at the Waldorf, was the film taken by the Society's expedition to Cape Hatteras; April, 1914, brought exhibitors the privilege of booking Worcester's "Native Life in the Philippines" through a concern called the Pan-American Film Company, it being stated that Mr. Worcester, the bearded gentleman



Burton Holmes, noted lecturer, cranked the first travel film cameras in the Orient

whose face appeared on the trade mark, intended to make more films in that lately-troubled and much-publicized part of the world; in August, 1913, Beverly B. Dobbs, "who obtained the first motion pictures of wild life in Alaska" called "The Top of the World in Motion," announced that he had established a film studio and laboratory at Seattle, on the shores of Lake Washington.

In the winter of 1913, a certain Robert J. Flaherty, then quite unknown to fame, had begun photographing some 30,000 feet of scenics in Baffin Land, which he was to bring back to civilization and lose accidentally in a fire; in the summer of 1913 another unknown, a small rancher in the State of Washington, named Robert Cameron Bruce, failing in his first plan to bring dudes to his ranch and deciding in some way to bring his ranch to the dudes, was climbing Mount Adams to find the idea which was, a few years later, to make him one of the notables in scenic photography.

September, 1913, saw the return of a party including Emerson Hough, the novelist; E. K. Miller, Milwaukee scientist and explorer; A. Lupetrie, Essanay cameraman from Chicago; George Fraser, newspaperman, and James K. Cornwall, president of the Northern Transportation Company and leader of the expedition, from a trip of 4,000 miles into the wild parts of upper Canada with films depicting native flora and fauna; November, 1913, George J. Gould is remarked as "another millionaire" who is taking a motion picture cameraman with him on his fishing and hunting trips; and in the spring of the following year, Arthur Payne, wealthy San Franciscoan, confirmed the habit by employing film men on his Oregon hunt.

Theodore Roosevelt's South American expedition, one of the more sensational results of which was the tireless ex-President's discovery of the "River of Doubt," set forth from New York in October, 1913, with one of the most picturesque figures in modern exploration as the official photographer, Anthony Fiala; and the films brought back were released theatrically the following February as a three-reel feature by the Mutual Company. Fiala, by the way, had been photographer for the Baldwin-Ziegler Polar Expedition in 1901-1902.

December 7, 1914, at the Casino Theatre, New York, World Film Corporation, the William A. Brady-Shubert organization, presented Edward S. Curtis's Indian film, "In the Land of the Head Hunters," a remarkable four-reel presentation of aboriginal life on the shores of the North Pacific. It was the more notable in being accompanied by phonograph recordings of actual tribal music. Curtis had spent three years producing this film, but twenty-five years studying the red men.

He was already celebrated as the author of a monumental ethnological work, *The North American Indian*, for which the elder J. P. Morgan had financed the million-dollar research, and Theodore Roosevelt had written the introduction. Eighteen volumes of it have

been published. Curtis had been the official photographer for the E. H. Harriman-Alaska expedition in 1898. Proof of great public interest in "The Land of the Head Hunters" induced the International Screen Service to commission Curtis at once to make some travel pictures of the Yellowstone and Yosemite for theatrical release; and he duly returned with those in the autumn of 1916.

This plan, of financing a celebrated lecturer to produce theatrical travelogues, had long been an accepted practice. William L. Selig thus had backed, in 1905-1906, an expedition led by Frederick K. Starr of the University of Chicago—the same who shortly afterward wrote that glowing tribute to films in education—to the interior of Africa, Korea, Japan, the Philippines, and the interior of Africa; also another commanded by Dr. B. McDowell, to India and China and, in 1912, the trip of Emmett O'Neill to the Amazon.

In the spring of 1915 came the films of Lady MacKenzie's big game hunt in Africa, ballyhooed, of course, as "the saga of a modern Diana"; and in December, 1915, there were Roy Chandler's pictures of life in the Argentine, with a lecture by Mrs. Spring Byington Chandler.

This history cannot hope, nor does it intend, to name all of the contemporaneous motion picture expeditions—any more than it may list all of the pioneers in any other department of non-theatrical supply. But, if some young Master of Arts, aspiring to become a Ph. D., wishes to undertake this labor for his thesis, his best beginning will be to note those museums and educational institutions most generously supported by wealthy sportsmen, and then to find those lecturers on the church, chautauqua and lyceum circuits who previously had depended on lantern slides to illustrate their talks—for these men (and a few women), had been obliged to initiate themselves quickly into the art of still photography, from which it was only a step further to the mysteries of the spinning reel.

The survey, if it is complete, will cover an unexpectedly large mass of material. I believe that there are a couple of thousand and important museums in America, and many more small ones not listed in the membership rolls of the national organization; and the lecture centers, temporarily checked in their flourishing quantity by the World War, are springing to life again in these days of encouragement to adult education.

The first American lyceum is supposed to have been established by Joseph Holbrook at Derby, Connecticut, in 1826 and, in only eight years, the number totaled a thousand; the Sunday School Teachers' Assembly organized by John Heyl Vincent and Lewis Miller at Lake Chautauqua, N. Y., in the summer of 1874, implanted an idea which grew, partly from within and more by imitation, to approximately 13,000 "chautauquas" before the circuits were stifled by the events precipitated at Sarajevo. Students of the chautauqua movement have seen in its "reading circles" the

real start and stature of the modern Federation of Women's Clubs. Certainly the old lantern-slide picture shows, so popular on the chautauqua and lyceum circuits and in the churches, were ancestors in the direct line of many present day non-theatrical gatherings.

George C. Edwards, Canadian-born in the year of Chautauqua's origin, editor of *The American Projectionist* from 1923 to 1929, and lately a master screenman for Warner Brothers, claims to have introduced motion pictures to travel lectures for the first time. Whoever did it, the practice spread rapidly. One of the first examples I remember was the not-too-impressive novelty vaudeville act of the "protean actor," Henry Lee, in 1910. Lee impersonated various historical characters and, while he made up for each appearance in full view of the audience as was his wont, he lectured with lantern slide and motion picture illustrations showing the countries where the characters belonged. My recollection is that the primary trouble was too much mixing of the media. But that's something else again.

LECTURERS

I REMEMBER Frederick T. Burlingham, the Alpinist who was the first to film the Matterhorn from near the summit, but not as much for his achievement, at first, as for his fantastic red beard which in 1914 or thereabouts, made him conspicuous in the Times Square crowd as he passed from booking office to booking office in search of a theatrical release for his pictures. Doubtless in the same course of people were many other traveling lecturers, less easily noticed, trying to do the same thing.

Certainly among the established lecturers caught in the new enthusiasm for motion pictures was the New Englander, Dwight L. Elmendorf, an acknowledged authority on the making of lantern slides. His new picture material was so attractive that A. H. Woods, the Broadway theatrical producer at whose Eltinge Theatre Elmendorf was lecturing, undertook to manage him and, in the spring of 1917, engaged other speakers to tour with additional prints. But, even more than the Broadway managers, the picture distributors were on the lookout for likely travel films. That situation was what suddenly made a Broadway personage of Dr. George Amos Dorsey, curator of the Field Museum and associate professor of anthropology at the University of Chicago. His films of India, China and Japan were released with much *éclat* by Universal as a series of split reels, beginning in 1916.

One lecture specialist, who let no grass grow under his feet in keeping up with the times, was Ernest M. Newman of Chicago. In 1908 he had been a member of Theodore Roosevelt's party in Africa—a distinction which no doubt helped greatly to develop his long-maintained personal lecture circuits in fifteen leading American cities, and to establish the Newman Lecture Company in his home metropolis. He produced a number of one-reel tourist films called "Newman

Traveltalks." They were extensively shown in theatres and, in amplified form, were presented by himself on the speaker's rostrum interspersed with lantern slides. But still, in respect to that which most concerns us here, Newman scarcely met with the success of his fellow-townsmen Elias Burton Holmes.

In the spring of 1909 Burton Holmes was already so well started on lectures illustrated with motion pictures, that he was remarked as a shining example in the *Urbanora* catalogue issued in August of that year. It is said that Holmes cranked the first travel cameras in Italy in 1897, showing the result at a lecture in New York before the year was out; in Hawaii in 1898, and in China, Japan and the Philippines in 1899—and he has cranked them consistently ever since. His first formal lecture was at Chicago in 1890, and soon after that *début* he became well known as an entertaining speaker in chief cities throughout the country.

He quickly learned to capitalize his side interests and by-products. While disavowing particular talent as a business man—averring that "I lecture to travel, not travel to lecture"—he found the world of trade quite profitable. He contracted with commercial houses to sell prints of still photographs he had made in numerous countries; he published his lectures in fifteen generous volumes; he sold theatrical exhibition rights to the thousands of feet of motion picture film shot on his unending tours to Paramount, which issued 308 of the "Burton Holmes Travelogues" from 1916 to 1921, personally cutting, assembling and titling the subjects; and I believe that he even invented the word "travelogue" which has been so useful to others despite its exclusion by sensitive etymologists from the recognized dictionaries.

Holmes's film business grew to such proportions that he was able to establish in Chicago, where he was born in 1870, his own film-processing laboratories along with a lantern-slide factory. At the close of 1916 he appointed as his principal cinematographer and technical director, Herford Tynes Cowling, lately and since 1910 chief photographer of the U. S. Reclamation Service, and whose own films on the national parks were even then being released by Gaumont. The Holmes chief of staff at this time was Louis Francis Brown. Holmes and Cowling went off on their first summer tour together, in search of winter lecture material, in 1917.

Of course, there were hasty compilations, too, to catch the awakened public fancy—snippets of film originally exposed in places all over the world and spliced end to end to evolve such offerings as the six-reeler "How Animals Live." This production, advertised as having been six years in the making, was exhibited in European cities for the first few months of 1913 and, in the autumn, was brought to America. Exploitation in this country placed great stress on the educational character of the entertainment, and especial matinees were given for school children, who attended in groups with their teachers. The entire



H. E. Aitken, president of Mutual, contracted with Villa for film rights to a Mexican insurrection

show was enhanced with a lecture by Frederick Dean.

I did not know Mr. Dean, nor did I hear his lecture; but I strongly suspect, from the obviously miscellaneous character of the film, that he was a late comer on that particular scene—that he had had no actual part in the adventures or the studies which he no doubt feelingly described. If that was true, he was at a marked disadvantage, for the really successful adventure pictures of the day—those which were presented as whole programs unto themselves—made point of having their narratives spoken by authentic parties to the action.

Take, for instance, that robust young man who, in June, 1913, was lecturing at the Criterion Theatre in New York, on "Cannibals of the South Seas," first of the long list of splendid wild life films produced jointly with his wife, Mrs. Martin Johnson.

NEWS SPECIALS

THE Scott pictures, apart from their production merit in the light of their period, owed much of their appeal to their news value. The tragic story of the expedition's leader, and of his companions who perished with him, caught attention in a manner very different from that exercised by the Rainey hunt films. But that it did kindle interest was no particular surprise. It was just a natural development of an earlier form of appeal. And besides the accomplishment was already known. The expanded geographical items of the split reel had been matched in the same experimental spirit, by what may be called expanded news-reels. Before the spring of 1913, "news specials" had been made of "The Death of Madero" and "The Dayton Floods."

In November, 1911, public attention was called to a film entitled "The Mystery of the Maine." It consisted of about 1,000 feet showing the raising of that ill-fated American battleship which, by being sunk in Santiago Harbor, had precipitated the Spanish-American War.

The raising was to settle a moot question as to whether the fatal explosion had occurred from within or without, thereby attempting to establish responsibility for the war; but the picture left it to audiences to determine for themselves. However, that war, although it had won Uncle Sam his place among the world powers for the first time, was in 1911 losing interest in favor of larger happenings. Greater troubles were brewing overseas.

Besides, the United States already had, in a small, annoying way, a new war zone of its own; and motion picture producers wanted to capitalize public curiosity about that. The matter was of sufficient importance in January, 1914, for Harry E. Aitken, president of Mutual Films, to cross the Mexican border personally, and contract with the picturesque revolutionist Pancho Villa, for the right to place ten cameramen with his army to photograph all his battles. It is said incidentally, that a clause in the agreement, specifying that the battles were all to occur in the daylight hours when the photographers could benefit from the sun, was scrupulously observed.

Men on this assignment returned with some quaint stories. One was to the effect that by reporting a shortage of film, a cameraman, L. M. Burrud, saved the lives of about twenty prisoners who were to have been shot simultaneously by the photographer and a firing squad to help Villa pass an idle morning. On another occasion, Villa turned out his entire force of 20,000 men, and ordered Fritz Wagner, also a Mutual cameraman, to photograph the review just to prove to Villa's enemies that he had an army able to fight. Wagner sent in 3,000 feet of this event and a complaint of a sore arm. They didn't use motors to crank the field cameras then.

The bulk of the film which was returned to Mutual from this fantastic adventure, was released to the public in May, 1914, at the Lyric Theatre in New York, as a double feature entitled "The Battle of Torreon and the Life of Villa," seven reels in all. About two weeks later it was announced that the pictures would be shown at the Teatro des Hereos at Chihuahua, the so-called Constitutionalist capital of Mexico, for the benefit of the widows and children of Villa's slain soldiers.

News films were not, however, all of that sort. In November, 1912, Essanay issued "Football Days at Cornell" as a "photoplay de luxe." This was calling it something highly special, because the Essanay Company, in 1910, had paid Edgar Strakosch of Sacramento, a prize of \$100 for the new word "photoplay," trying vainly thereafter to make it exclusive for their product. A news special which started a long train of controversy still echoing, was the record of the Jeffries-Johnson prizefight for the heavy-weight championship of the world, produced in July, 1910.

The backers were said to have been the heads of three of the Licensed Companies who had formed the J. & J. Company to sponsor the pictures. When

the storm of protest burst upon them, an anonymous spokesman stated through the press that the film was not to be shown in regular motion picture theatres, but in vaudeville, burlesque and "combination" houses—theatres combining films and vaudeville. At the end of July it was finally announced that the pictures had been produced by the New York *Herald*.

The first really spectacular news special, amplified to fill a full evening's program, was probably the English Kinemacolor reproduction of the Indian Durbar and the coronation of King George V. It was shown to thrilled audiences in England first and, in the spring of 1912, was brought to America. The preliminary coronation films had been exhibited independently at the Herald Square Theatre in New York in the summer of 1911; but that was a mere passing wonder with much more to follow.

September 16, 1911, Charles Urban, acting by his warrant as chief cinematographer to His Majesty and the British Government, had dispatched from London to India a company of 125 persons, including 23 cameramen with color cameras, to film the Durbar. What they brought back was hailed as a photographic marvel, which in many respects it was; and Urban's reputation with his government was so enhanced that, when the World War began, he was given charge of the official British pictures.

LYCEUM ATTRACTIONS

THROUGHOUT this survey, with our omniscient point of view gained simply by our living a couple of decades later, we detect a host of signs that films in which entertainment is not the chief appeal do not find their highest favor in theatres. Here and there a particularly timely subject, such as the Scott Antarctic pictures, pries its way into a leading Broadway house; but it is the start of summer, when that temple of the spoken drama would normally be closed for the season. Or the place is an old theatre which is on the wane and would otherwise be demolished; or it may be an out-of-the-way little auditorium such as the old Berkeley Theatre, which was rarely booked by other than "crazy" ventures—Arnold Daly's was one of those when he presented there the figurative American bow of George Bernard Shaw in "Candida." Another was when Frederic Burt and Warner Oland braved contemptuous reviewers by acting in Strindberg's "The Father." No regular motion picture house would set aside its daily grind of comedies and dramas to make room for one of these "outlandish" productions.

On Sundays, when New York forbade "legitimate" performances in theatres, these "educational" pictures crept in, just as they had done in the heyday of Lyman Howe, because then the manager saw no competition with his weekday show of flesh and blood and could use the extra rent beside, while the sanctimonious guardians of public decency never suspected these strange, flickering, undra-

matic shadows of actual world events as being entertainment. Folly, perhaps—entertainment, no!

Carnegie Lyceum in New York, was a favorite starting-place for the authentic expedition films and long topicals of 1910 to 1914 or so. On the face of things they were in the exhibition class of concerts, readings and lectures. Indeed, as we have amply seen, most of the pictures of this extraordinary order depended on lecturers to put them over. C. H. Bolte, a Cincinnati butcher, apparently also noticed that fact for, in December, 1913, he was giving illustrated talks at a local theatre with pictures showing cuts of meat.

But, in the lyceums and in the more dignified Sunday shows in theatres, one noticed a growing suspicion, soon to crystallize into certainty, that films like those were more enjoyable by far away from the excitement of theatres, in surroundings which promoted thoughtful, not emotional, contemplation. This was still another of the many forces heading toward the exclusive non-theatrical show.

In remarking the travel pictures, in the 1910 "educational" film catalogue of George Kleine, attention was called to the preponderance of subjects on foreign lands, with a note that many of the American "scenics" probably had been made in coöperation with the railroads. The same observation may be made substantially about this later group which has just been brought to view. We do know that the railroads coöperated with the production companies on story locations. Their agents solicited such business, as they had long done with managements of the touring stage companies, and as they still do today.

As early as 1910 the Canadian Pacific Railway provided the Edison Company with an especial train, hotel accommodations and guides, for the director, cameraman, acting company, crew and their paraphernalia, to make dramatic subjects *en route* from New York to Vancouver. A 10,000-ton ocean-going steamship was added. Incidentally, it probably was no coincidence that later that same year, the C.P.R. had nine lecturers in the British Isles to talk with films on the advantages of Canada. In 1915 it no doubt was the same great transportation system which helped Essanay with its expedition from Toronto to Vancouver to make a series of 500-foot scenics.

Still, since 1910, the scenics are not all grouped around the railway lines. We see wealthy sportsmen going with cameramen into the remoter places within the boundaries of the continental United States; we see American producers aris-

ing to compete with a previously commanding flood of pictures from abroad and trying, just to be different, to find their scenics at home. Probably there was something here, too, of the awakening national consciousness, the realization that America also has an interest for Americans.

Notice the seeds thus being planted for a non-theatrical harvest in later seasons. The railroads, by their coöperation with the producers, are learning what films may do for them; and one day very soon they will essay the trick of making them themselves. Before 1913 the Northern Pacific Railway had spent thousands of dollars producing pictures showing the geography, natural resources, industries and other attractive phases of the land it traversed; and in the same year the Great Northern had begun making propaganda films of the same sort. Scientific institutions, by coöperating with the wealthy sportsmen anxious to give their expensive hobbies at least the look of usefulness, are seeing, at no particular cost to themselves, how motion pictures may be made to fit into their own schemes. Exploited areas—cities, states, national parks—all are beginning to understand that films may be more than entertainment and that theatres alone cannot give them their full scope.

THE WORLD'S FAIR AT SAN FRANCISCO

If there is doubt as to the accuracy of the immediately preceding statement, observe a pertinent phase of the Panama-Pacific International Exposition in 1915. At this great fair there were no fewer than sixty small picture theatres, many devoted to what later would be called non-theatrical films.

In the list of those maintaining such exhibition rooms were the Canadian Pacific Railroad, the Great Northern Railway, the Grand Trunk Railway, the Pennsylvania Railroad and the Wells-Fargo Company. The complete roster named also various nations, cities and American States, the American

Telephone and Telegraph Company, the National Cash Register Company, the Heinz Company, the United Shoe Machinery Company, the Collective Federation of Churches, the New York State Department of Education, the Wisconsin Schools and various divisions of the United States Federal Government. An outstanding member of the last-named group was the newly instituted Bureau of Mines of the Department of Commerce, whose theatre had been built to represent the interior of a mine. Surely there were visitors to that fair who went away pondering the probable usefulness of films in their own activities.

(To be continued)

Next Month

Part Five, the first installment of the New Year, offers an impression of social service films as they were in the days before Uncle Sam entered the World War. They were mainly propaganda subjects, but they had their points and rendered passing service in causes such as Votes for Women, Prohibition, Twilight Sleep, Suppression of Vice and the Making of a Soldier. Subscribe now to obtain this complete narrative. Back numbers will soon be unavailable.

The first installment appeared in the issue dated last September.

Vitalizing A Photoplay Club Program

How cooperative effort within a school, when well planned and directed, can make possible the showing of worthwhile films on a self-supporting basis.

By DONALD A. ELDRIDGE

Director of Visual Instruction
New Haven, Connecticut, Public Schools

WHEN the average public high school administrator sees portrayed in magazines and books the wonderful modern devices for audio-visual aids, he feels like the poverty-reared child who spends Christmas Eve with his nose flattened against a toy-shop window, watching the remarkable convolutions of an expensive electric train. Like the wistful boy, he is inspired to dream and envy—then to sigh with unhappy resignation to the fact that such marvels are not bought from budgets like his, where the mere installation of an electric current outlet holds the status of a major investment. When this is true of a school with an enrollment of 4,000 students, in which a meagre half-dozen classrooms are equipped with electric outlets, the inauguration of an extensive audio-visual program is a possibility almost beyond the bounds of hope, and a search for substitute measures begins.

In the New Haven High School an attempt has been made through the Photoplay Club to compensate in part for a vital lack. This club, since its organization in 1933, had sponsored many activities typical of similar groups in other schools, such as previewing and discussing current films, writing reviews of them, maintaining bulletin boards with displays based on outstanding films appearing in local theaters, participating in the annual symposium of the New Haven Motion Picture Councils,¹ filming news-reels of school activities,² and the like. Such work was of considerable value to the school in interpreting films, encouraging an improvement in cinematic tastes, and interesting the New Haven public in the possibilities of work in the visual field. But last year a plan was conceived which would broaden this service by developing a more vital program—one which would definitely fill a gap in the educational facilities of the school.

Whatever was done would have to pay for itself in some way; no subsidy could be expected. And it is not generally the easiest thing in the world to persuade high school pupils to pay for an educational plan for themselves. "How are you going to pay for it?" was indeed a dark question, but it was successfully erased by the following plan:

First of all, application for membership in the Photoplay Club had been mounting steadily during the past few years, due principally, no doubt, to the reduced-rate admission which the club members enjoyed when they attended any local theater in a body.

¹ The plan and purpose of these Symposiums have been described in "Motion Picture Appreciation in the New Haven Schools," *Journal of Educational Sociology*, November, 1937.

² For a practical account of this activity, see "High School Films Without Subsidy," *Movie Makers Magazine*, November, 1937.

Previously, however, membership had been limited to forty pupils, selected on the basis of competitive reviews of specified pictures, indication of familiarity with cameras and photography, or other special qualifications. But now it was determined to set no limits; rather to encourage as large a membership as possible at—and here was the trick—fifty cents a head membership fee. This fee would entitle each member to all privileges of membership, including the reduced theater rate and free admission to all club meetings. Membership cards listing these privileges were printed in the local trade school. Little calculation was required to discover that the saving during the course of a year would far exceed fifty cents. The proceeds from the membership drive totalled seventy-eight dollars—from one hundred and fifty-six boys and girls who joined and paid.

While this fund was being established, a program committee was designated to write for catalogues listing all available silent and sound sixteen millimeter pictures of all types and on all subjects. (The school had just acquired a sixteen millimeter sound projector—the gift of the last two graduating classes.) As the catalogues arrived, the committee pored over them and indexed films which seemed to have potentialities and appeal in various fields: current affairs, travel and foreign language, science, music, and films of general entertainment value which would also illustrate points of cinematic and dramatic technique, or literature read in high school. These would be appropriate for use in connection with courses taught in the school—history and problems of democracy, languages, natural sciences, English, music appreciation, art, and others.

Soon the actual scheduling of programs began. The school auditorium was engaged for several dates, and it was advertised that any non-member would be admitted to any meeting for a ten cent fee. In advance of each meeting all teachers of courses to which the scheduled films might have some pertinence were notified, by means of a mimeographed blank on which was recorded a general description of the program proposed. These teachers were requested to encourage their pupils to attend. (Incidentally, to promote "good-will" in anticipation of this, a complimentary season ticket had been presented to every teacher.) Information was also sent to student organizations whose work coincided with the theme of each program planned. Thus, for example, when several reels on "Germany—New and Old" were shown and lectured upon by a college professor who had filmed them, all students of German, as well as those studying Prob-

(Concluded on page 339)

AMONG OURSELVES

Notes from and by the Department of Visual Instruction, N.E.A.

Conducted by the Editorial Committee

Etta Schneider, Chairman

OFFICERS

THE officers for 1938-9 have been proceeding so diligently in behalf of the Department, since their election last June, that they have neglected to look up and introduce themselves to our membership. We take pleasure in presenting them to you:

President: Miss Rita Hochheimer, assistant director in charge of the Bureau of Visual Instruction, 128 East 52nd Street, N. Y. C. Miss Hochheimer has been president at the birth of many of the visual instruction babies, and brings with her a wealth of experience which affiliation with the largest school system in the world has made possible.

First Vice-President: Mr. J. E. Hansen, director, Bureau of Visual Instruction, Extension Division, University of Wisconsin, Madison. Mr. Hansen has had much experience in initiating the effective use of films and slides in the rural and urban schools of his and neighboring states. He is at present working in collaboration with the American Council on Education in its efforts to establish an Association of School Film Libraries.

Second Vice-President: Miss Marian Evans, director of visual education, San Diego Schools, San Diego, California. Miss Evans is one of our greatest promoters on the west coast. For many years, she has been working toward developing materials of instruction especially suited to the San Diego schools.

Secretary-Treasurer: Mr. Don Carlos Ellis, Films of Commerce, Inc., 21 West 46th Street, N. Y. C. One of the earliest books dealing with the educational film, and still valuable as a reference book, is Ellis and Thornborough's *Motion Pictures in Education*, which indicates the foresight and vision of Mr. Ellis as early as 1923. He has worked these many years in an effort to make educational films which would be worthy of inclusion in school curricula. The fact that Mr. Ellis is a business man makes him an admirable choice for treasurer.

Executive Committee:

Dr. Edgar Dale, assistant professor of education, Ohio State University, Columbus, Ohio.

Dr. Charles F. Hoban, Jr., associate in charge of the Motion Picture Project of the American Council on Education, Washington, D. C.

Miss E. Winifred Crawford, director of visual education, Montclair Schools, Montclair, N. J.

Miss Etta Schneider, associate in curriculum and teaching, Teachers College, Columbia University, N. Y. C.

Mrs. Grace Fisher Ramsey, assistant curator, Department of Education, American Museum of Natural History, N. Y. C.

Mr. Nelson L. Greene, editor, *Educational Screen*, Chicago, Ill.

COMMITTEES

We are indeed proud of the above roster of names which constitute our officers and executive committee. No less important to the Department, however, are the active committees which are continuing the excellent work inaugurated under Dr. Dale's presidency last year.

Editorial Committee: Chairman, Etta Schneider, Teachers College, Columbia University, N. Y. Members: Mary Beattie Brady, director of the Harmon Foundation, N. Y.; Elizabeth Golterman, assistant curator of the Educational Museum, St. Louis, Mo.; Abraham Krasker, assistant professor of education, Boston University; F. Dean McClusky, director of Scarborough School, Scarborough, N. Y.; James E. Mendenhall, editor, *Building America*, N. Y.; Elias Katz, teacher, in New York City; Florence Taylor, teacher, Horace Mann School, Teachers College, Columbia University, N. Y.; S. B. Zisman, assistant professor of architecture, Texas A. and M. College; Annette Glick Byrne, assistant director, in charge of visual education, Los Angeles, Cal.

Briefly, it is the function of this committee to bring visual instruction activities to the attention of every alert educator who subscribes to a professional journal. The members plan to cooperate with the staff of *Educational Screen* in securing articles and information in the field. They plan to issue pamphlets or brochures, clarifying the credo of the Department, and suggesting ways of developing the field. Teacher experience will be solicited for publication. An active campaign to have reviews of current educational films appear in many educational journals is well under way. A survey has recently been completed, in collaboration with the National Council of Teachers of English, with respect to the use of visual aids in that area of learning. One of the most important activities being contemplated by the committee, is the publication of a yearbook, under the leadership of Dr. McClusky.

Constitution Committee: Chairman, William H. Dudley, Dudley Visual Education Service, 736 S. Wabash Ave., Chicago, Ill. Members: H. E. Childs, director of visual education, Providence, R. I.; and Don Carlos Ellis, director of Films of Commerce, N. Y. C. *

The Committee has promptly and efficiently complied with the request of the membership, in preparing for approval at the Cleveland meeting, a new and up-to-date constitution for the Department of Visual Instruction. A copy of this document has already been mailed to our members.

Teacher Training Committee: Chairman, Paul C. Reed, director of radio and visual education, Rochester, N. Y. Member: W. Gayle Starnes, in charge of audio-visual aids, Extension Division, University of Kentucky, Lexington.

This Committee recommends an intensive campaign to promote and improve course offerings in this field. Pertinent material which Mr. Starnes compiled in connection with the American Council on Education's Motion Picture Project in 1936, should be brought up to date for figures on enrollment, methods, and outcomes of summer courses in 1938. Further, the committee recommends an analysis of winter courses for undergraduates and teachers-in-service in visual education. A study of instructional aids now used by visual education instructors should be made in order that satisfactory material may be made generally available. Cooperation from instructors in visual education and from the general membership is solicited in carrying out these recommendations.

Clearing House Committee: Chairman, Wilber Emmert, director of visual education, Indiana State Teachers College, Indiana, Pa. Members: Nelson Greene, editor, *Educational Screen*; J. E. Hansen, director, Bureau of Visual Instruction, University of Wisconsin, Madison, Wis.; William M. Gregory, director, Educational Museum, Cleveland, O.; Mrs. Edna Richmond; Miss Lillian Heathershaw; Mr. James S. Kinder.

The recommendations of this Committee are: that the Department publish evaluations and possible uses of new materials, that it cooperate with other agencies in working out this project; that it be equipped to provide information for beginners in this field, as well as for the advanced worker; and that it clear ideas on new methods, new materials, and new uses of old materials.

Publicity Committee: Chairman, Samuel B. Zisman, assistant professor of architecture, Texas A. and M. College, College Station, Texas. Members; Elias Katz, teacher in New York City; Hazel Gibbony, Ohio State University, Bureau of Educational Research, Columbus, Ohio.

The responsibility for planning a three-day Institute on Visual Instruction under the sponsorship of the Department of Visual Instruction has been placed in the hands of this Committee. A report, based on the conscientious efforts of its chairman, will be submitted to the membership at the February meeting. Suggestions regarding the theme of such a conference, possible speakers, a convenient place of meeting, and the like are earnestly requested from our members. Communicate with Mr. Zisman at once, in order that your proposal may be considered for inclusion in the report.

Current Activities of the Department of Visual Education

The important "next steps" of the Department are here listed. In the next issue, we may be able to elaborate further on each of the undertakings. It is hoped, however, that members will communicate with our President, Miss Rita Hochheimer, in suggesting ways and means for making each of the following most satisfactory:

1. *Annual Winter Meeting*, Department of Visual Instruction, in conjunction with the meeting of the Department of School Administrators of the N.E.A. in Cleveland, Ohio on February 27, 28, March 1, and 2, 1939. The chairman for this meeting, or series of meetings, Dr. William S. Gregory, reports many interesting plans which give promise of making the convention a very worthwhile experience for our members. Details will be reported next month.

2. *First Yearbook* of the Department of Visual Instruction. The prospectus for such a publication, which was authorized by our membership at the June meeting, will be presented shortly by the chairman of the Yearbook Committee, Dr. F. Dean McClusky.

3. *First Institute* on Visual Instruction, Department of Visual Instruction. To be held in the spring of 1939, during which time there will be opportunity to discuss the problems in the field, prominent speakers will be invited, new materials will be evaluated, and—what is most important, active workers in visual education will have an opportunity to exchange experiences and make personal contact which hurried meetings at N.E.A. conventions make rather difficult. The chairman for planning this institute, Mr. Samuel B. Zisman, as has already been mentioned, will welcome your proposals.

The Candid Camera in Safety Teaching

(Concluded from page 323)

Reaction-time, judgment, and depth-perception tests should be administered and the students made to realize how certain defects contribute to accidents. The eye testing devices can be constructed by the students through the cooperation of the mechanical arts department of the school.

No tricks or special devices are used to carry out these suggestions. Anyone would find it advantageous to have a camera ready for taking pictures, as accidents are always occurring and they furnish an unlimited source of visual aids. Or scenes may be created, without injury. The pictures thus obtained may be projected for class study. Pupils will be receptive and the impressions gained will last. Visualize safety effectively and you will have succeeded in gaining a foothold in the war against preventable accidents.

References. Ross, Kip, *Candid Photography*: Fomo Publishing Company, Canton, Ohio.—Buxbaum, Edwin C., *Pictorial Photography With the Miniature Camera*: Fomo Publishing Company, Canton, Ohio.—*Leica in Science*: E. Leitz, Inc., 60 East 10th Street, New York, N. Y.

AMONG THE MAGAZINES AND BOOKS

Conducted by The Staff

School and Society (48:635-6, November 12, '38) "The Value of Slides in Teaching Social Studies in the Junior High Schools," by Joe Park, University High School, Ann Arbor, Mich.

To answer the question, "what are the values of slides," the author made a survey of the literature published on the subject during the past ten years. The result of this survey is published in a short, crisp little account which lists the 76 values assigned to slides by the various writers. Mr. Park classifies these into five summarizing statements.

Journal of Health and Physical Education (9:494-5, October '38) "Amateur Motion Picture Projects," by Laura J. Huelster, Assistant Professor, Physical Education for Women, University of Illinois.

This article is a plea for the promotion of good amateur sport films so that each school and college may begin a moving picture collection of its own Physical Education activities. Miss Huelster lists five types of instructional films needed in this field with suggestions as to the contents of each type. An excerpt of a planned film on girls' speedball is reproduced. Both the game itself and the skills fundamental to it are shown.

High Points (20:44-8, September '38) "Motion Picture Appreciation in the Junior High School," by Jeanne N. Bush.

A course on the motion picture is given once a week as part of the English curriculum at Lew Wallace Junior High School, New York City, in recognition of the vital influence of the movies on youthful character. As the author puts it, "to ignore this influential force is a sign of mental

atrophy." She believes that the motion picture problem should be taken up in the school proper as it is the duty of the school to train the child in right thinking, behavior and living. Each week's lesson is divided into three parts—a preparatory talk by the teacher, the showing of an illustrative reel in 16mm, and student discussion afterward. Outside assignments and sets of stills from the film supplement the study. The course stimulated reading of good books and educated the class to higher standard of movie fare.

(20:55-8) "Visual Aids in Business Training," by Alexander Selwyn, in this same issue of *High Points*, reports a unique program developed by the Franklin K. Lane High School to show the valuable contribution of visual aids as teaching devices in elementary business training. Varying techniques were demonstrated in the use of the opaque projector, lantern slides, filmstrips, pictures and a school-produced movie. The article also includes a brief evaluation of these different media.

Nation's Schools (22:35-6, October '38) "Pointers on Daylight Projection," by Donald C. Doane.

Proper considerations of certain basic factors will increase the effectiveness of any projection equipment as an aid to teaching, particularly when the projector is to be used in a semi-darkened room. The writer explains the types of screens and their light reflective qualities. The problem of screen placement is an important one and different positions in the room should be tried out in order to insure the best possible results. How to determine the proper type of projection apparatus to use, in respect to the right amount of illumination, is illustrated. A table, showing the illumination supplied by various projectors, accompanies the article.

American Photography (32:685-8, October '38) "Amateur Slide-Making," by R. B. Boals.

Here are some original suggestions to amateurs on the use of simple photographic equipment in making 2x2 slides. The author tells how he converted an old 4x5 plate camera with long extension bellows into an up-to-date device. The making of negatives, positives, masks for the film, and other essential materials is also described.

Building America (Vol. 4, No. 1) "Aviation" begins the fourth volume of this pictorial series. The topic is thoroughly covered, from the early inventions of the Wrights and others, to the modern aircraft of today. The unit gives interesting information on the theory of flying, training of pilots, care and maintenance of planes, safety devices used, air traffic control, uses of aircraft, markets, and problems of the industry.

(No. 2) "Crime." This unit points out that crime

WANTED

The following back issues
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- 1928: April, October
- 1929: April, May
- 1930: February, March, October
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- 1932: January, February, March, April, May, June, December
- 1933: February, May, September, October, November, December
- 1934: January, February, May, June, September
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- 1937: January, October

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first appeared with the development of large cities, and in the frontier towns during the westward expansion. Causes of juvenile delinquency, methods of treatment and results are discussed, as well as problems of prison conditions, parole systems, and adult offenders.

Book Reviews

■ **A GUIDE TO THE LITERATURE OF THE MOTION PICTURE**, by Frances Christeson. Published by the University of Southern California (Cinematography Series Number 1) 1938. 78 pages, Paper.

A valuable piece of work for all students of the visual field, done by the Reference Librarian of the University of Southern California. It is not a "bibliography" but an expert, highly selective compendium of the best publication on the subject to date. A fourteen-page chapter reviews critically the trend of thought from the beginning (1824), as evidenced in more than a 100 volumes, most of which, unfortunately, are long since out of print. The author then selects twenty-five books, as those outstanding since 1915, and summarizes and annotates them rather fully in a twenty-five page chapter. Following comes an Alphabetical List of one hundred significant books on the field, including the twenty-five preceding. The practical little volume concludes with reference lists of ten periodicals more or less related to visual education, some thirteen motion-picture scripts available in printed form, five other "sources" of general bibliographic information, and an Index.

■ **THE ADMINISTRATION OF VISUAL AIDS**, a mimeographed booklet, by a Committee of Nine Graduate Students at Ohio State University, under direction of Edgar Dale and Roy Wenger. Published by Ohio State University, 1938. 45 pages, Paper. 50 cents.

Here are presented, in attractive and very readable form, results of research by a class in Visual Aids during the summer quarter of 1938. The Committee of nine was composed of school administrators and supervisors interested in achieving a practical program for administration and use of visual materials in their own schools. Each member of the Committee wrote one of the nine chapters constituting the book. The composite aims of the book are (1) to assist in selection of equipment and materials, (2) suggest techniques, (3) propose training program for teachers, (4) present records and forms already tested, and (5) set up criteria for evaluating visual education material. Contents, with Committee authors, are as follows:

- I Visual Aids Equipment.....Clinton C. Roberson
- II Source of Visual Aid Materials.....H. H. Palmer
- III Technique of Selecting Motion Pictures for Use in the Classroom.....Robert R. Stillwell
- IV Fitting the Film into the Curriculum....O. M. Welch
- V The Technique of Using Motion Pictures as a Teaching Device.....James A. Chilcote
- VI In-Service Teacher Training....Ross W. Stooksberry
- VII The Organization and Training of Operators.....Clyde K. Miller
- VIII The Evaluation of Educational Films.....Harold C. Everett
- IX Records and Forms Used to Facilitate the Visual Education Program.....Harley Carnicom

The 8½ x 11 inch page-size allows ample margins, permits abundant foot-note references throughout, and presents its lists, tables and forms in particularly legible style. It should prove suggestive and valuable to many administrators of visual instruction, in individual schools as well as school systems. A Bibliography of twenty-two titles concludes the book.

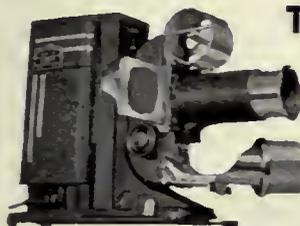
■ **OPTICAL AIDS**—Board of Education Educational Pamphlet, No. 115. An official publication of the British Government issued by His Majesty's Stationery Office, London, England. 96 pages, paper bound.

In recognition of the growing use of optical aids in schools and the importance of efficient handling of apparatus, this pamphlet has been prepared primarily to convey suggestions

(Concluded on page 339)

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NEWS AND NOTES

Being brief notations on significant doings and events in the visual field.

Conducted by Josephine Hoffman

Southern Conference on Audio-Visual Education

The second annual Southern Conference on Audio-Visual Education was held at the Henry Grady Hotel, Atlanta, Georgia, November 10-12, 1938, with registered attendance of 652 state, county, and city superintendents, principals, teachers, officials of Parent-Teacher Associations, civic, social, and religious education groups. The official registration includes the names of representative men and women from ninety-eight cities in sixteen states, including every state in the Southeast. J. C. Wardlaw, Director of the Division of General Extension of the University System of Georgia, and a group of able and experienced leaders in the practical utilization of modern media in classroom and laboratory had prepared a varied and compensating program, which included addresses by recognized national leaders in the field of audio-visual education and demonstrations of the practical use of many of the newer teaching tools in aural and visual instruction, with showings of new releases of educational motion pictures. An interesting exhibit of audio and visual equipment attracted much attention.

Among the guest speakers on the conference program were Honorable E. D. Rivers, Governor of Georgia; Mrs. James A. Gordy, President Georgia Congress of Parents and Teachers; Mrs. J. K. Pettengill, President, National Congress of Parents and Teachers; Chancellor S. V. Sanford, of the University System of Georgia; Dr. James Rowland Angell, Educational Counselor, National Broadcasting Company, formerly President of Yale University; Honorable L. L. Perry, Assistant State Superintendent of Schools of Georgia; Mr. George E. Hamilton, Keystone View Company, Meadville, Pennsylvania; Mr. Herbert S. Walsh, Technical Supervisor, Objective Teaching Materials and Techniques, New York City Board of Education; Mr. Stanley M. Hastings, Principal, O'Keefe Junior High School, Atlanta; Mr. Lambdin Kay, Director, Atlanta Journal Radio Stations; Mr. John Paschall, Associate and Managing Editor, and Mr. Wright Bryan, City Editor, of the Atlanta Journal; Mr. Fanning Hearon, Executive Director, Association of School Film Libraries, New York, formerly Director, Division of Motion Pictures, United States Department of the Interior; Dr. V. C. Arnsperger, Vice President, Erpi Classroom Films, Inc., New York; Mr. R. L. Ramsey, Secretary, Georgia Education Association and Editor Georgia Education Journal; Honorable M. D. Collins, State Superintendent of Schools of Georgia; Mr. Ellsworth C. Dent, Director, Educational Department, Radio Corporation of America Manufacturing Company;

Mr. Donald P. Bean, Director, University of Chicago Press; Dr. Charles F. Hoban, Jr., Director, Motion Picture Project, American Council on Education, and Mr. Floyde E. Brooker, Assistant Director, Washington, D. C.

Among the topics discussed by various speakers were: "The Contribution of the Screen to Social Aspects of Education"; "The Possible Contribution of Radio to Education in a Democracy"; "Using Lantern Slides vs. Showing Lantern Slides"; "Objective Materials and Techniques via W. P. A.—An Audio-Visual Program"; "The Association of School Film Libraries—A Solution of the Educational Motion Picture Problem"; "Introducing the Film in the Curriculum," with demonstration of the use of film in the classroom, with teacher and second grade before the audience; demonstration radio broadcast of the Atlanta Journal Editorial Hour; "Educational Uses of Audio Aids," with demonstration of sound systems for schools; "The Responsibility of the School for Producing Films and Radio Programs"; "New Uses of Films in the Modern Curriculum"; "Records, Transcriptions and Instantaneous Recording as Audio-Aids," with demonstrations; etc.

Throughout the Southeast there is widespread and intelligent interest in the practical utilization of modern teaching tools in classroom and laboratory procedures in the colleges and the schools at all levels. Already plans are being made for the third annual Southern Conference on Audio-Visual Education, which will be held in Atlanta in the fall of 1939.

New Film Service

Pennsylvania College for Women, Pittsburgh, is now offering a 16mm. film rental service to schools, clubs and other educational organizations within their service area at a reasonable library maintenance and service cost. The films have been selected to meet the needs of educational levels from the primary to the college and unclassified adult education groups. Some of the films are recreational in character and suitable for short auditorium programs. A catalog describing the available films may be had on application to James S. Kinder, Director PCW Film Service.

Government Film Strip Prices Lower

Prices for film strips issued by the United States Department of Agriculture for the fiscal year 1938-39 are lower than those that were in effect during the past fiscal year, according to an announcement recently made by the Extension Service of the Department. Photo

(Concluded on page 336)

WHEN
WORDS Fail..

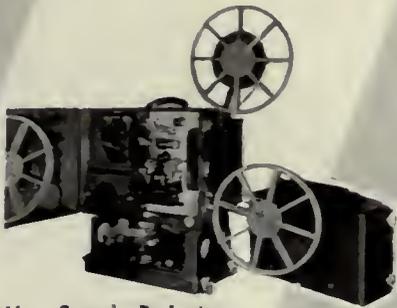
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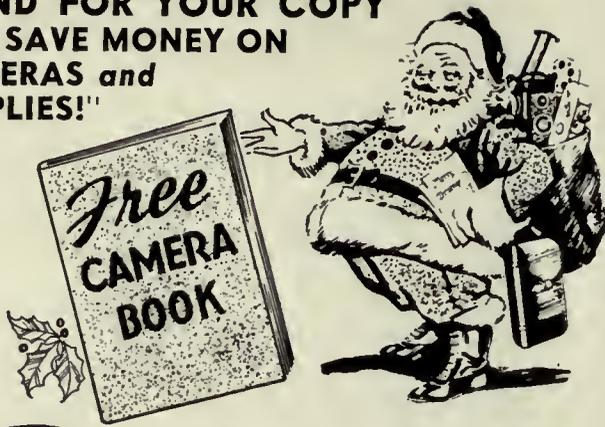
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Lab., Inc., 3825 Georgia Avenue, NW., Washington, D. C., was awarded the contract for film-strip production. The prices for film strips until June 30, 1939 will range from 45 to 65 cents each, depending upon the number of illustrations in the series.

A list of available film strips and instructions on how to purchase them may be obtained by writing to the Extension Service, United States Department of Agriculture, Washington, D. C.

Lantern Slides of Canada Parks

During the past six months the National Parks Bureau of the Department of Mines and Resources, Ottawa, has prepared and made available for circulation to schools, universities, service clubs and other organizations in Canada and abroad more than four thousand artistically coloured lantern slides, depicting scenery and development in the Dominion's nineteen national parks. Carefully prepared lecture notes accompany the slides, which are usually made up into sets of sixty or seventy slides each according to the particular subject covered. A wide range of subjects relating to the varied resources of the park areas, including herds of buffalo and elk, and all wild animal life indigenous to the parks, is included. All sets of slides are lent free of charge, except for express charges one way.

International Federation of Film Archives

An international organization has been formed to effect cooperation among countries for the purpose of preserving important historical, educational and artistic films of the world for the use of its members in exchange, as well as insuring the preservation of the films for posterity. Charter members of this International Federation of Film Archives are the Cinematheque Francaise, Paris; the Reichsfilmarchiv, Berlin; the National Film Library, London, and the Museum of Modern Art Film Library, New York. Mr. John E. Abbott of the Museum of Modern Art, is the first president. The central office of the Federation will be in the Palais Royal in Paris. It will act as a clearing house for the members and will also serve as a source of information for any similar organization not yet members of the Federation. The organization will hold an annual congress, the first to be in New York in August 1939.

Illinois Education Association Visual Aids

A new two-reel, 16mm silent motion picture, *High School Opportunities*, has been released recently by the Illinois Education Association. The film shows the desirable educational opportunities offered by the more favored high schools of Illinois in contrast to the meager opportunities offered by the poorly financed schools. Other films produced by the Association are *Modern Schools at Work*, showing modern teaching practices in Illinois schools from the kindergarten through the senior high school, and *Our Children's Opportunities*, which presents the inequalities existing in the elementary schools of the state. These movies may be obtained on a loan basis from the central office

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of the IEA at Springfield. They are also offered for sale, together with a set of general slides and a film strip on the Association program, now being revised. In preparation is a traveling exhibit of photographs showing inequalities in Illinois schools, which can be displayed at Division meetings and other group conferences.

Visual Progress Abroad

India. The Visual Education Society of India was inaugurated in Bombay last summer at a meeting of the teaching profession. Some of the aims of the Society were stated as follows: To promote child and adult education by means of visual aids; to encourage experimental work and research in educational films; to arrange lectures and demonstrations to illustrate the potentialities of educational films; to encourage production and exhibition of educational films by the film industry; to encourage teachers to produce films; to organize short courses for the training of teachers in the technique of visual instruction.

South Africa. Rapid development made by the Film Division of the Education Department of the Union of South Africa is indicated by the fact that during the first few months of 1937, shortly after the creation of the Division, an average of 20 films a month were circulated among school members of the National Film Library, whereas today the number has increased to 2,000 films a month.

Poland. The Polish Government Institution PAT, the official news, newsreel and information agency at Warsaw, has placed an order for 200 American-made 16mm sound film projectors, according to a report to the U. S. Department of Commerce. These machines are to be resold to small communities for visual instruction in agriculture and livestock raising, to labor camps and training schools for instruction and entertainment, and to military camps for visual instruction, as well as for Government purposes. American educational films are to be purchased later, it was stated.

A School Reports on Visual Program

The Central Junior-Senior High School at Parkersburg, West Virginia, is enthusiastic over visual education, according to Miss Milred H. Hiehle, chairman of the Faculty Visual Education Committee. Over eighty films were used last semester, both educational and entertainment. The latter were shown in assemblies and at noon recesses, when a small admission charge was made and the proceeds used to secure educational films for classroom work. Besides their classroom use, motion pictures found a welcome place in the programs of such extra-curricular activities as the Bible club, Good Drivers, and Journalism clubs. A number of these after-school clubs also prepared exhibits for display in the corridors throughout the year. An even bigger visual program is being planned for 1938-39 and each department will be entitled to twenty films annually.

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Current Film Releases

The Ohio Travelogs

State Department of Education,
Columbus, Ohio

This is a notable and unique series of sound motion-pictures, in the form of scenic-travelogs, which portray the whole State of Ohio as no State was ever portrayed before. In unity of conception, planning, supervision, direction and editing, the series represents outstanding achievement by B. A. Aughinbaugh, Director of State Visual Instruction Exchange in the Department of Education at Columbus. Some 60,000 feet of film, shot by professional cameramen, on carefully selected schedules covering every significant nook and corner of the state, are being issued in single-reel travelogs, each an independent unit, usable singly, in groups, or in any order. Eighteen reels are ready, and more coming. They are available to any Ohio school without rental or even transportation, and to Ohio theatres on established terms. Never was a State revealed to its own eyes so vividly and completely!

Animated Buckeye seeds scud into place to form the title for each reel. A map and moving pointer indicate the

route to be covered in the reel, and the audience is away on its vivid journey which, by the end of the full series, will have covered every spot of historic significance and scenic charm, every aspect of Ohio life in city, town and country. Scenic elements are included with historical or industrial subject-matter to attain pleasing variety in each reel. Continuous vocal accompaniment constantly supplies explanation and historical highlights. Appropriate musical background replaces the voice at intervals, affording welcome opportunity for enjoying visual values to the full.

The beauties and commercial activities of the Ohio River are shown, and smaller rivers such as the Scioto and Muskingum. Sports at Indian Lake and Buckeye Lake, State fish hatcheries at St. Mary's Lake, Big Bottom State Park; Ohio caverns and Hocking County caves; waterfalls like Hayden, Clifton and Cedar; Blackhand Gorge, Cantwell's Cliffs, the great Lake Erie waterfront; the coalmine that has been on fire for years—these are a few of the scenic elements.

Historically and industrially, we are shown Indian mounds at Newark, Miamisburg and Mound City; cities, potteries, Wright Flying Field; conservation projects with the great Griggs and O'Shaughnessy Dams; monuments to famous men and events like Morgan's Surrender, George Rogers Clark, Perry, Indian Hunter, and nationally famous Johnny Appleseed; memorable Forts such as Ancient, Laurens, Amanda, and Meigs; the military routes and deeds of Harmer St. Clair, Wayne; the universities of Ohio State, University of Ohio, Miami, Kent, Bowling Green; the homes and haunts, tombs and monuments, of Ohio's brilliant roster of native sons—Edison, Emmett, Harrison, Harding, McKinley, Landis, Putnam, McPherson, Sheridan, Sherman—and so on through the 36 reels of the full series.

The Ohio Travelogs are free of "propaganda" save as they must needs enhance the rising Ohio generation's knowledge and pride in its own State. The aim in creating the series was, in Mr. Aughinbaugh's own words, to "merely tell the story of Ohio truthfully and sympa-

thetically." They do that. They are a healthy challenge to every other State to go out and do a better series on itself.

N. L. G.

Garrison—"Professor Mamlock"

Professor Mamlock, notable feature film currently showing in leading theatres throughout the United States, is now available on 16mm and 35mm sound film from Garrison Films, Inc., 1600 Broadway, New York City. *Professor Mamlock* has received critical acclaim because of its stirring and powerful drama. The film, a Russian production, is based on the play by Friederich Wolf and deals with the Nazi persecution of a German war veteran who has become an outstanding surgeon-scientist, but who does not "go along" with the Nazi regime. His supremacy in his field is brought out with telling emphasis when a prominent Nazi leader, suddenly stricken and requiring an emergency operation, refuses all Nazi surgeons and recalls the great Professor Mamlock to the hospital. But even the lifesaving service he renders does not spare him from continued persecution under a relentless regime. The Film Estimates gives a review of this absorbing film on page 344 of this issue.

Research Films in Biology

Six remarkable films—produced by Dr. Lora Ilse at the Zoological Laboratories, Cambridge, England, with E. M. Wagner, as cameraman of long experience in scientific film productions—are striking evidence of the unique value of colored motion pictures in scientific research.

Two of the films record convincing experiments on the color sense of bees. The pictorial contents consist merely of a rectangular table top covered with about a dozen vari-colored square cards, photographed from above and filling the entire screen. Food is dabbled on a single blue card. The bees cluster there and the process is continued until the bees are "trained." All trace of food is then removed, the blue card is repeatedly shifted to different positions in the rectangle, but the bees follow it unerringly in fruitless search for food. They learn a yellow card with equal ease. The color sense of bees is shown to be like our own in susceptibility to complementary colors, simultaneous color contrast, and the relative position of color groups in the spectrum. Startling evidence also appears that bees, unlike humans, can actually distinguish the ultra-violet beyond the spectrum, by similar manipulation of two white cards, identical to our eyes, but one containing ultra-violet emanations and the other none!

Four films portray vividly the life cycle, activities and struggles of butterflies. The differing life habits of various species—in feeding, courting and mating, egg-laying, cocoon weaving, pollenization, etc.—are clearly shown. One species, led by smell as well as sight, feeds on fruit, trees, flowers. Another, led mainly by sight, alights as readily on artificial flowers of same color and doggedly persists in unrolling and re-coiling its watch-

(Concluded on page 343)

CHRISTMAS SEALS



**Help to Protect Your
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Vitalizing a Photoplay Club Program

(Concluded from page 329)

lems of Democracy and History, received special invitations. During Lent, "The King of Kings" was booked at a special price through a Yale Divinity School student, and was sponsored in collaboration with the Hi-Y and Tri-Y clubs of the school.

Early in the year, capitalizing upon newspaper headlines on the Spanish War, a program was devoted to Spain. Films were shown, and a talk was given by a teacher who had travelled through most of the war-torn area. In similar fashion, films on China and Japan were supplemented by remarks of a missionary who had just returned to New Haven from China. For a study of technique in a purely "entertainment" feature, "The Thirty-Nine Steps" was played, and then discussed. Several of Chaplin's films were also studied. Films dealing with recent developments in various fields of science attracted many embryo scientists, while the musicians of the school were appealed to with a bill of varied short musical subjects. A fitting final program was the showing of the school newsreel which the Cinema Club, a division of the Photoplay Club, had been recording throughout the year.

For every meeting an attempt was made, through posters and other publicity, to sell many tickets to nonmembers, including parents. Then the original fund produced by the club's own membership dues was used to make up the difference between the "gate receipts" and the rental cost of the films used. Due largely to the enthusiastic support of the newsreel, a considerable balance remained in the treasury at the end of the year with which to launch a new and enlarged program the following September.

The worthwhileness of this plan can hardly be questioned. The fact remains, of course, that most of the films thus used would have been many times more effective if coördinated directly with each teacher's class-room projects. However, it is equally true that when circumstances prevent the eating of a whole pudding, a taste is better than none at all.

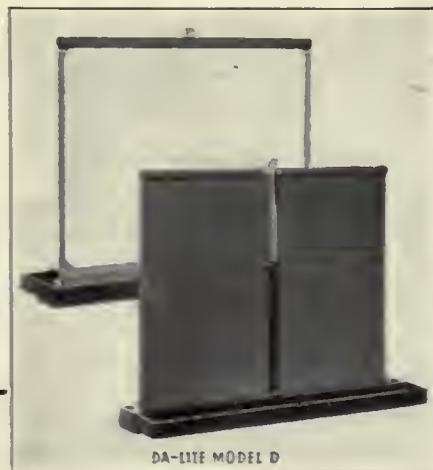
Book Reviews

(Concluded from page 333)

and information on the technical aspects of projection. It describes the available projection apparatus—standard and sub-standard lanterns, film strip and motion picture projectors, episcopes (for opaque projection) and epidiscopes (combining the episcopes and diascope)—and types of films, setting forth the advantages and disadvantages of each. Suggestions are given as to suitable projection equipment for auditorium and class-room and how such apparatus can be made to serve as many needs as possible. The technique of classroom projection is discussed with detailed directions as to proper placing of projector and screen, control of daylight, and electricity supply. A chapter deals with the planning and adaptation of buildings, and another with the local organization of optical aids, including various plans for teachers' courses.

For those planning a visual education program, *Optical Aids* should be definitely helpful as it so thoroughly covers all questions pertaining to the purpose and performance of the various projection machines. It is obtainable in this country from the British Library of Information, 270 Madison Avenue, New York City, for 50c.

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IN AND FOR THE CLASSROOM

Conducted by Wilber Emmert

Director Visual Education, State Teachers College, Indiana, Pa.

Composing With A Camera

By ORVAL KIPP

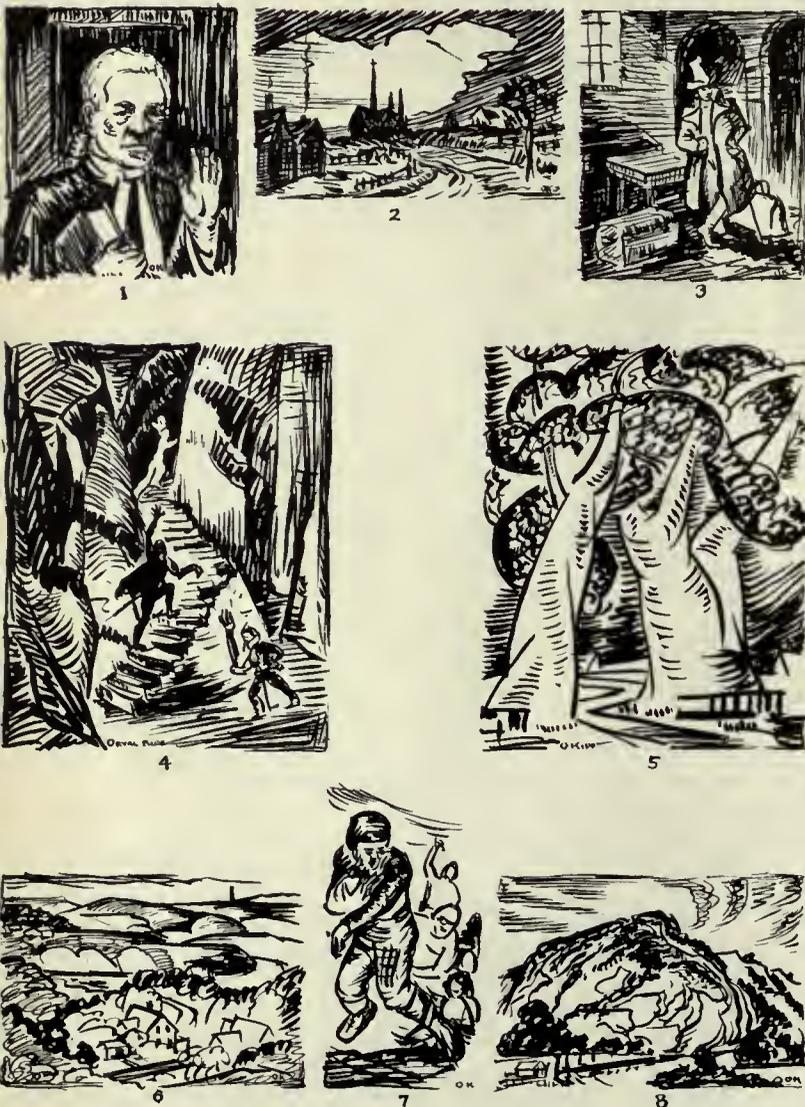
Instructor, Art Department,
State Teachers College, Indiana, Penna.

SO YOU'RE going to snap a picture! Composition is important to you, then, because your picture is going to say something whether you mean it to or not. Consequently you should compose your pictures in such a way that they say what you intend to have them say. It is often the thing you didn't intend to do that upsets all your plans. Disappointments may be avoided by thinking of the effect that your picture will convey.

A picture of any single object is necessarily a portrait, whether it is a close-up or a distant view, (Fig. 1 and 3). The view from a distance places the

portrait in a relationship with its surroundings, while the near view establishes relationship with the observer. You, as the observer, become intimate with the subject in this latter case. You are conscious of its delicate harmonies and the beauty of its harmonious detail. In either case the subject is the most important thing in the picture and, as such, must be prominent in one way or another. The central area of the picture becomes your field of action, but the geometric center (Fig. 3) is not the proper position for the subject because such placement makes monotonous areas around the subject. In a beautiful composition the areas around the subject are proportionate to each other and to the most important areas. The Greeks considered two-thirds to one a good proportionate relationship. In the close-up, *size* is used to make the subject appear important. In the distant view, *contrast* is needed to draw attention to the subject of the picture. A small black spot on a large white field or a small white spot on a black field (Fig. 2) becomes the center of attention because it is so different from the area in which it is placed. The object may be emphasized also by a contrast in line, or by lines which lead the eye from various parts of the picture to the center of interest. To make interesting and successful photographs you should remember the principle of camouflage and do just the opposite in your pictures. The subject must stand out from the background. It must not fade into the surroundings as it does in the camouflage technique. Contrast is useful in focusing attention on the subject, but the camera artist must be careful to have the accessories harmonize with the subject. A dainty young girl in a fluffy dress would not harmonize with the severe lines of a business office. The business man should not be posed before frilled curtains.

In a picture of more than one object the foregoing examples apply, but there are other important considerations. If you have two objects they should be combined by an action which makes one of them dominant and the other an important complement to the group. Your group should be knit together in meaning like the words better and best. A good idea for more than two in a group is to think of the words, good, better, and best; and to compose the objects on three related levels (Fig. 4). The Japanese compose flowers in this fashion by thinking of the lower levels as earth and sea, and the higher level as heaven. Mathematical precision is fine for a line of soldiers, but groups arranged like bunches of grapes, or like irregular triangles, circles, or rectangles are much more interesting from the art



Figures 1 to 8 as discussed in the text

standpoint. No matter what abstract shape or scheme of arrangement you use, you must have a center of interest. This center of interest is a portrait of an action, and the lines must lead your eye without fail to the center of attraction. In a football picture (Fig. 7) the line of fallen heroes are lines which lead the eye to the ball carrier as the center of action. If blocking is the subject of the picture, those who missed lead the eye to the main actor or the climax of a successful block.

The question as to point-of-view might well be considered here. If you want to show speed, strength, and force of the football player, take a position close to the ground (Fig. 7) and let the player loom over you like a wave about to engulf you. The person looking at the photograph will be forced to assume the mental attitude of one who looks up to an overwhelming force. He will be dominated by your idea. To make the observer dominate, snap the picture from a higher point. Let him feel a mastery of the situation. A high position (Fig. 6) gives one an expansive feeling. Objects on the earth are minimized and appear unreal. Notice the attitudes of people on top of a tall building or on a mountain top. Often they draw in deep breaths and literally drink in the view, because they feel themselves in a commanding position.

The view from a high point often contains a road or a stream (Fig. 8) which carries your eye from side to side, allows you to pause momentarily on interesting groups of objects, and carries you onward and upward to a climax silhouetted against the sky. Rembrandt van Rijn used dykes, roads, and rows of trees in this fashion. The diagonal lines of such a composition suggest movement, and the repeated angles give one a sense of rhythm. Edges of objects which are vertical or horizontal give stability to a photograph. The picture in which verticals and horizontals predominate (Fig. 5) suggests quiet and rest rather than movement. Another type of static composition, a wall, or a gate, may seem uninteresting to you at first thought, but, in fancy, think of a lace shawl or a wrought iron gate. This kind of beauty rises vertically like a rose covered wall. Here again you should say in your photograph that there are important groups among the roses, and that there are thrilling spaces in the lace and iron patterns. A class picture could be much more interesting if it gave the beauty of the lace rather than the stolid, static pattern of line on line of faces.

Snap your pictures from far and near, from high and low. Let them be dynamic or static, depending upon the message to be conveyed. Bowl us over, or give us strength supreme. Make your picture dramatic, or make it beautiful. But make it. Do not let this discussion of composition factors deter you from picture taking. We all learn by doing. Conscious attention to the art principles discussed will improve your photographs. From a study of your photographs, an analysis of your successes and failures, and a determination to succeed the camera will prove to be a delightful companion.

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AMONG THE PRODUCERS *Where the commercial firms announce new products and developments of interest to the field.*

Victor Continuous Projector

A new 16 mm portable Continuous Projector, which is being placed on the market in both silent and sound models by Victor Animatograph Corporation, Davenport, Iowa, embodies a patented "advance-feed" principle which insures trouble-free performance, and protection against film destruction, the common "bugaboo" of continuous projection because of the eventual tightening up of the film. The backbone of the "advance-feed" principle is the positive regulation of the amount of film fed to the intermittent film-moving member of the projector. The film is wound loosely around two large wheels which are driven synchronously by an endless belt, which also acts as a conveyor for the film. Size and revolving speed of these wheels have been so calculated that the film is fed off slightly faster than it can be taken up by the intermittent. Slack in the film is automatically controlled by alternate starting and stopping of the drive wheel with a film-slack lever.

Of equal importance is the fact that usability of the film is greatly increased by a considerable reduction in surface rub or friction between layers of film. The film literally winds and unwinds itself by dropping into place as it passes over the arc of the wheel. Except where it hangs by its own weight over the upper arc, the film is in an almost entirely "free" state, with air between the individual layers. As a consequence, wearing and scratching of the film surface are minimized by this "free," floating action. Added protection against film damage is provided by the automatic film trips which automatically stop projection and film movement in event film loops are lost.

The picture is projected onto the surface of an enlarging prism, which in turn projects at right angles to a rear projection screen. This screen is brought into position for use in much the same manner as the lens and bellows of a folding kodak. Victor's spira-draft ventilation is another feature of the unit. The film capacity of standard models of the unit will be 500 feet.

Substantial price reductions on their 16mm silent projectors have been announced by Victor Animatograph Corporation. Model 11 Master Projector, formerly listing at \$148 complete with case and with 500 watt lamp and F1. 85 lens supplied as standard equipment, is now priced at \$125. Model 22 (1600 feet film capacity) has been reduced from \$187.50 to \$175. Standard equipment includes 750 watt lamp and 2" F1.85 lens.

New Case for Miniature Slides

A new Miniature Slide Library case for 2" x 2" slides, simulating beautiful old Florentine hand-tooled leather, is now being offered by Bausch & Lomb Optical Co., Rochester, New York, in either red, green or blue. Resembling a fine old volume, this slide library is eminently suited to grace the desk or bookshelf in the classroom or the library table in the home. It carries 100 slides in arranged cubicles and is indexed on the inside cover. It is a handy size, the measurements being 6½" x 10" x 2¼". The sturdy



Book Style Slide Library

frame and tough cover affords full protection to the slide collection.

Argus Contest for Students

High School students have an opportunity to win national distinction in photography and substantial cash prizes during the next five months in a contest just announced by International Research Corporation, Ann Arbor, Michigan, the producers of the Argus Candid Camera. Each month for five months, December 1938 to April 1939, inclusive, they will award a first prize of \$25, a second prize of \$10 and three additional prizes of \$5 each for the best photographs taken with any model of Argus camera by high school students. The photographs winning first prizes in the five monthly contests will qualify to compete for the final grand prize of an additional \$100 which will be awarded May 1st. Any high school student may call at an Argus dealer's and get a contest entry blank.

The contest is made particularly attractive because of the low price of the Argus camera. Model A at \$12.50 is claimed to be the world's lowest-price candid camera with the lens speed, shutter speeds and other features required for taking fast action shots. It has an f:4.51 lens and shutter speeds of 1/25

to 1/200 of a second. In addition to the Model A, Argus also produces a Model C precision speed camera with an f:3.5 lens and 1/5 to 1/300 of a second shutter speeds selling for \$20.

By its use of inexpensive 35mm movie film, 18 to 36 exposures to one loading, the cost per negative is extremely small. With the Argus Speed Printer, the student may still further reduce picture costs by making his or her own prints.

Argus also has a wide range of accessories. Their new all-purpose Copying-Bench, called The Techniscope, provides the convenient facilities required for taking pictures through the microscope, for making or copying stereoptical slides, for making close-up photographs of small objects, for copying letters, manuscripts and book pages. It is particularly useful in reducing projection slides of old standard sizes and X-Ray films to the new 35 mm. miniature standard size.

For making color photographs and showing them on the screen, the Argus-Dufaycolor Kit makes all the essentials available in one unit, including a Model A Camera, a 100-watt CP Projector material for making glass slides and Dufaycolor film for eighteen pictures.

S. V. E. Presents Model AA

A new, larger S.V.E. Tri-Purpose Projector, the Model AA, with three times the illumination of the present Model CC, has just been announced by the maker—the Society for Visual Education, Inc., Chicago. It has a 300 watt lamp to provide greater power for long throws in large classrooms and auditoriums. Like the Model CC, the AA serves three purposes. It shows (1) single frame film strips; (2) double frame film strips or (3) individual frames (color or black and white) mounted between 2" x 2" glass slides. The greater illumination of the AA makes this model especially efficient in showing Kodachrome natural color film, which of course should be mounted between 2" x 2" glass slides for best results. Lenses of various focal lengths will be available to take care of all projector needs.

The new SVE Rewind Take-Up, which rewinds in the proper sequence, each roll or strip of film as it is being shown, is standard equipment for the Model AA. The film, instead of dangling on the floor, goes into a special Take-Up can and is thus fully protected against gathering dust, lint or finger marks.

The Model AA is not intended to replace the CC. Each meets a distinct need. The AA will serve wherever pictures are to be shown to large audiences, while the 100 watt CC will continue to meet economically the projection requirements of the masses of amateur photographers where long throws are not necessary.

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Complete with lens, lamp, Rewind Take-Up, double slide carrier, and carrying case, the Model AA retails for \$57.50. The Model CC, complete with lamp, lens, double slide carrier, and case, but without the Rewind Take-Up, retails for \$35. For further details write the Society for Visual Education, Inc., 327 South LaSalle Street, Chicago, Illinois.

DeVry Development

The DeVry Corporation, Chicago, announces a new projector development which enables the handling of new “green” film without processing. It is stated that the film now literally “floats” through the entire picture and sound mechanism, due to two recent developments known as dual stabilizer and automatic loop control and that the above changes represent distinct departures from conventional projector design, and have been shown in exhaustive tests to eliminate difficulties previously encountered in projecting untreated film.

Current Film Releases

(Concluded from page 338)

spring tongue in hopeless search for food from the cloth and paper. Butterflies laying their eggs on leaves will select only green or blue-green leaves and invariably test the leaf by “drumming” with the forelegs before ovipositing. One species, preferring tree bark as its egg depository, selects its green leaf, “drums,” then flies to nearest tree to lay, thus insuring the coming caterpillar the shortest possible trip to its first meal. Strange variations in courtship among different species are shown. The dangers from the butterfly's enemies are pictured in the attack of the dragonfly upon the Imagoes.

A particularly grim bit is the vicious onslaught of the big parasitic wasp that lays its fatal eggs in the body of the Swallowtail caterpillar as the latter frantically but vainly defends itself by desperate tosses of forked tubes protruded from its head like horns.

Significant material, these films, as examples of the potentialities of color-movies in recording and clarifying the results of the laboratory. For the present, they are being shown only in connection with Dr. Ilse's lectures before science departments at the University of Chicago, Cornell University, University of Illinois and elsewhere. The New York Natural History Museum has booked the films for showings next spring. It is to be hoped that adequate distribution arrangements can be made to make them available to the general educational field, for the subject-matter, with its adequate titling, is informational and illuminating for less scholarly audiences, quite apart from its significance as scientific research.

N. L. G.

Virginia Produces More Subjects

Four new educational motion pictures about Virginia subjects have been added to the film library of the Virginia Conservation Commission, Richmond, for distribution on a free loan basis.

George Washington's Virginia and *George Washington's Mount Vernon* are companion pictures and are distributed together. They have a combined showing time of about forty-five minutes. The first shows the principal places in Virginia associated with the life and varied activities of the first president. The second is confined to Washington's beau-

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tiful home overlooking the Potomac River. These films are sound productions, available in both 16mm and 35mm. *The Beautiful Caverns of Luray* is the title of a 16mm sound film of two reels. The picture is done partly in natural color. Narration in these three productions is by Mr. Havrilla. The historic and scenic attractions of Lexington and nearby Natural Bridge are embodied in a new 16mm silent reel, including scenes of Washington & Lee University and the Virginia Military Institute, at Lexington. *The Colonial National Historical Park*, now in production, portrays Jamestown, the nation's birthplace; Colonial Williamsburg, restored to its setting in colonial days, and Yorktown, the American Revolutionist's surrender grounds. It will be a reel and a half in length, and will be available in 16mm silent and sound.

Gutlohn Releases French Pictures

Walter O. Gutlohn, Inc., national distributors of 16mm. sound films, announce the creation of a separate department for the release of French films in co-operation with the French Cinema Center, headed by Andre Heymann who will be in personal charge. Mr. Heymann who has founded the French Cinema Center has obtained exclusive rights to many important French educational films. Among them are several that have been awarded the First Grand Prize at the Paris Exposition of 1937. Some of these pictures are now available; others are to be released shortly.

A list of them is available from Walter O. Gutlohn, Inc., 35 West 45th St., New York.

THE FILM ESTIMATES

Angels with Dirty Faces (Cagney, O'Brien, Dead Enders) (Warner) Finely produced and acted, but mere glorified gangster film. Slum toughness made very amusing, with heartless killer-hero as its idol. Grim climax, with utterly futile "gesture" by hero, further distorts values. Bad ethics and misdirected sympathy. 11-29-38
(A) Good of kind (Y) (C) Unwholesome

Broadway Musketeers (M. Lindsay, Ann Sheridan, Marie Wilson) (Warner) Three Broadwayites, pals since orphaned childhood, show dubious loyalty amid murders, suicide, kidnapping, stabblings, etc. Cafe singer, jailed for indecency, wins friend's husband while friend goes for cheap, fortune hunter. Social ethics terrible. 11-15-38
(A) Crude (Y) (C) Definitely no

Cipher Bureau (Leon Ames, Joan Woodbury) (Grand Natl) Pleasantly puzzling, not over-violent spy-melodrama, showing government defense methods against foreign spies, even to deciphering code message broadcast by piano music. Heroine betrays her spy-pals to be worthy of marrying Bureau Chief's brother. 11-29-38
(A) Depends on taste (Y) Fair (C) Hardly

Cowboy and the Lady (Gary Cooper, Merle Oberon) (UA) Artificial social-contrast comedy. Sheltered, inhibited heiress breaks from selfish father and marries, incognito, a benighted cowboy. Complications end as expected. "Action" slight and character values suffer from narrow-gauge acting. Fine role by Davenport. 12-6-38
(A) (Y) Fairly amusing (C) Little interest

Dark Rapture (A. Denis-Lelia Roosevelt Expedition) (Univ) Impressive, informative African travelog. Sincere, authentic study of native tribes in Belgian Congo. Dances of giant race of Watusi, bridge building by Pygmies, capture and training of wild elephants. Fine narration, photography and backdrops. 11-15-38
(A) (Y) Very good (C) Good but strong in spots

Dark Sands (Paul Robeson, Henry Wilcoxon) (Record Pictures) Amateurish film of little interest or merit save Robeson's fine singing. Clumsy yarn about troop ship during the Great War and Sahara thereafter. Seeks thrills from torpedoed ship, courtmartial, escapes, crude fight scenes, and countless camels. 11-15-38
(A) Crude (Y) (C) No value

Exposed (Otto Kruger, Glenda Farrell) (Univ) New candid-camera-reporter aerie. Super-clever heroine finds brilliant lawyer, now slum drunkard, snaps him, prints it, and he starts suit. Complications lead to romantic finale. Glenda should learn camera-handling. Kruger wasted amid poor acting in crude story. 12-6-38
(A) Mediocre (B) Hardly (C) No

Flight to Fame (Charles Farrell, Jacqueline Wells) (Columbia) Spectacular pseudo-scientific "power ray" invention by old war-ace is seized by villain to destroy planes flown by old comrades. Air thrills, sudden deaths, until young army-captain hero solves all with bombs, and wins girl. 11-29-38
(A) Mediocre (Y) Little value (C) No

Forbidden Territory (Binnie Barnes, Lyle Talbot, Ratoff) (Hoffberg) Second-rate in all but cast, this limping story purports to center in remote Siberian prison-camp but travels all over by train, sleigh, hayload, with the Gestapo always shadowing. Harmless adventure stuff, comically unconvincing. 11-29-38
(A) Crude (Y) Perhaps (C) No

Freshman Year (Ernest Truex, Dixie Dunbar) (Univ) Three student chums are leading spirits in very silly "college." Vacuous fun-hunting student body, ridiculous "trial" before Board, variety show put on to pay fine, a burlesque professor the butt of all, are features. Uninspired acting and dialog. 12-6-38
(A) Stupid (Y) (C) No value

The Great Waltz (Gravet, Rainer, Korjus) (MGM) Gorgeous musical of gay Vienna under Franz Joseph, historically fine in background and spirit. Rich in Strauss music, dancing and Korjus' notable singing. Spectacle and sound dwarf romantic life-story of Johann Strauss glorifying the waltz. Rainer disappoints. 11-15-38
(A) (Y) Notable of kind (C) Beyond them

Hard to Get (Dick Powell, Olivia De Havilland) (Warner) Thin, light, lively little yarn about filling-station hero with big idea and big financier who won't buy it, until his daughter, posing as maid, smooths way for hero. Hilarious role by Winninger and less singing than usual by Powell. 11-29-38
(A) Fair (Y) (C) Fairly good

Being the Combined Judgments of a National Committee on Current Theatrical Films
(A) Discriminating Adults (Y) Youth (C) Children
Date of mailing on weekly service is shown on each film.
(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Just Around the Corner (Shirley Temple, Farrell, Robinson, Pangborn) (Fox) Shirley, busy and prankish in gay comedy, coaxes prosperity around corner for father and friends, delights rich, crusty old man, father's foe, by mistaking him for "Uncle Sam", and organizing gala benefit to solve his troubles. 11-29-38
(A) Pleasing (Y) (C) Very good

Little Tough Guys in Society (Boland, Horton, Auer) (Univ) Fake psychiatrist induces wealthy widow to import young ruffians to country estate to give indolent, spoiled son an interest in life. Rowdies smash everything, effect cure and are finally reformed themselves! Rather burlesque treatment of social problem. 11-22-38
(A) Amusing of kind (Y) Amusing (C) Doubtful

Listen Darling (Bartholomew, Garland, Pidgeon) (MGM) Simple, engaging, human, sufficiently probable little comedy about two 12-year-olds earnestly trying to keep their adored widowed mother from marrying wrong man. Bumpy trailers, Judy's songs, Freddie's forensics and understanding grown-ups are story ingredients. 11-22-38
(A) Pleasing (Y) Good (C) If it interests

A Man to Remember (Edward Ellis, Ann Shirley) (RKO) Strong, honest, utterly human story of courageous horse-and-buggy doctor's struggles and triumphs in lifetime of service. Notable role by Ellis. Expert direction and acting make "film to remember." Intelligent and thought-provoking. 12-6-38
(A) Excellent (Y) Very good (C) Beyond them

Mars Attacks the World (Larry Crabbe, Jean Rogers) (Univ) The fantastically absurd "Flash Gordon" newspaper strip-thriller, made more vividly preposterous by motion and trick photography, tries to cash in on recent radio scare. Wooden acting, clumsy dialog, meaningless mechanics, absurd "science." 11-22-38
(A) Stupid (Y) (C) Very doubtful value

Men with Wings (MacMurray, Milland, L. Campbell) (Para) Absorbing chronicle of development of aviation, stirring in action, beautifully photographed in Technicolor. Held together with episodic but interesting, human story of three childhood playmates. Sweep of film belongs to planes themselves as chief actors. 11-22-38
(A) Notable (Y) Very good (C) Exciting

Mysterious Mr. Moto (Lorre, Wilcoxon, Mary McGuire) (Fox) Grim, crime thriller with the usually sinister Lorre as smiling, suave-spoken detective running down the arch-villainous head of the League of Assassins. Devil's Island and London's Limehouse are the locales for perilous situations and impossible heroics. 11-22-38
(A) Hardly (Y) No (C) No

Professor Mamlock (Russian, very full English titles) (Amkino) Strong, vivid, well-acted story of growth of anti-Semitic outrages by Nazis. Powerful arraignment by Soviet Russia of Fascist doings in Germany, likely to stir any audience that sees it. Decidedly startling documentary film. 11-29-38
(A) Notable of kind (Y) Mature (C) No

Road Demon (Henry Armetta, Joan Valerie) (Fox) One of new sports-thriller series. Noise, speed, and struggle between two young auto-racers, hilariously helped by Armetta and family, and unscrupulous veterans of Indianapolis Speedway classic. Amusing "big-hearted" role by Armetta. Laughable excitement. 12-6-38
(A) Depends on taste (Y) Fairly good (C) No

Road to Reno (Hope Hampton, Scott, Farrell, Broderick) (Univ) Flippant, burlesque story of thrice-married opera star and cowboy using many tricks to escape divorce which neither really wants. Impressive ranch scenery, stam-pedes, airplane stunts, songs, travestied divorce proceedings, combined in frothy futility. 11-29-38
(A) Depends on taste (Y) (C) Decidedly not

Service de Luxe (C. Bennett, V. Price, Ruggles, Auer, Broderick) (Univ) Fine direction and supporting cast redeem extremely silly comedy of errors and absurd disguises. Inventor-hero, fleeing petticoat rule, loves decorative head of super-service bureau, posing as "clinging vine." False roles exposed, happy ending barely achieved. 11-15-38
(A) Depends on taste (Y) Mostly amus. (C) Hardly

Shadows over Shanghai (James Dunn, Linda Grey) (Fine Arts) Melodramatic war-thriller. American cameraman finds heroine trying to reach America with token that will release millions for China, protects her through weird adventures, outwits Russian and Jap villains, till both make boat despite bombs and bullets. 12-6-38
(A) Hardly (Y) Perhaps (C) No

Stablemates (Wallace Beery, Mickey Rooney) (MGM) Strong, appealing picture of low-level life with racetrack purses as sole aim. Drunken veterinary, of crooked past, regenerated by affection of boy pal whose discarded racehorse he saves for victory. Human and convincing despite some false notes. 12-6-38
(A) (Y) Mostly fine of kind (C) Doubtful

Storm Over Bengal (P. Knowles, R. Cromwell, R. Hudson) (Repub) Just another thriller of English army life among mountain tribes in India. As regiment fights bloodthirsty fanatic's rebel troops, two brothers are rivals for heroine's hand. Heroic death of one gives girl to other and victory to England. 11-22-38
(A) Hardly (Y) Little value (C) No

Submarine Patrol (Richard Greene, Nancy Kelly, Preston Foster) (Fox) Glorifying supposed "Navy life" on wooden sub-chaser in Great War. Painfully smartaleck hero, one of motley crew of freakish characters, is cured by grim, thrilling experience fighting submarines. Too much frantic "comedy" and bawled dialog. 11-22-38
(A) Hardly (Y) Doubtful value (C) No

There Goes My Heart (Fredric March, Virginia Bruce) (UA) Expensive cast plays tiresome doings of bored, headstrong heiress (Bruce) seeking adventure as clerk incognito in department store, but discovered by sleuthing reporter (March). Greatly enlivened by hilarious antics of Patsy Kelly. 12-6-38
(A) (Y) Inane amusement (C) No interest

Time Out for Murder (Gloria Stuart, Michael Whalen) (Fox) Average murder mystery, fast and involved, the obscure solution based on telephone time signal. Amateur detectives—reporter-hero and bill-collecting heroine—more credible than usual as well concealed killer fools even them. 11-15-38
(A) Ordinary (Y) No value (C) No

Vacation from Love (Dennis O'Keefe, Florence Rice) (MGM) Hilarious, crazy comedy of madcap saxophonist snatching bride from socialite wedding on promise of "marriage and fun". He, absorbed in radio business, forgets anniversaries and she misjudges his past. Narrow escape from divorce after wild slapstick adventures. 11-22-38
(A) Prob. enjoyable (Y) Amusing (C) Little int.

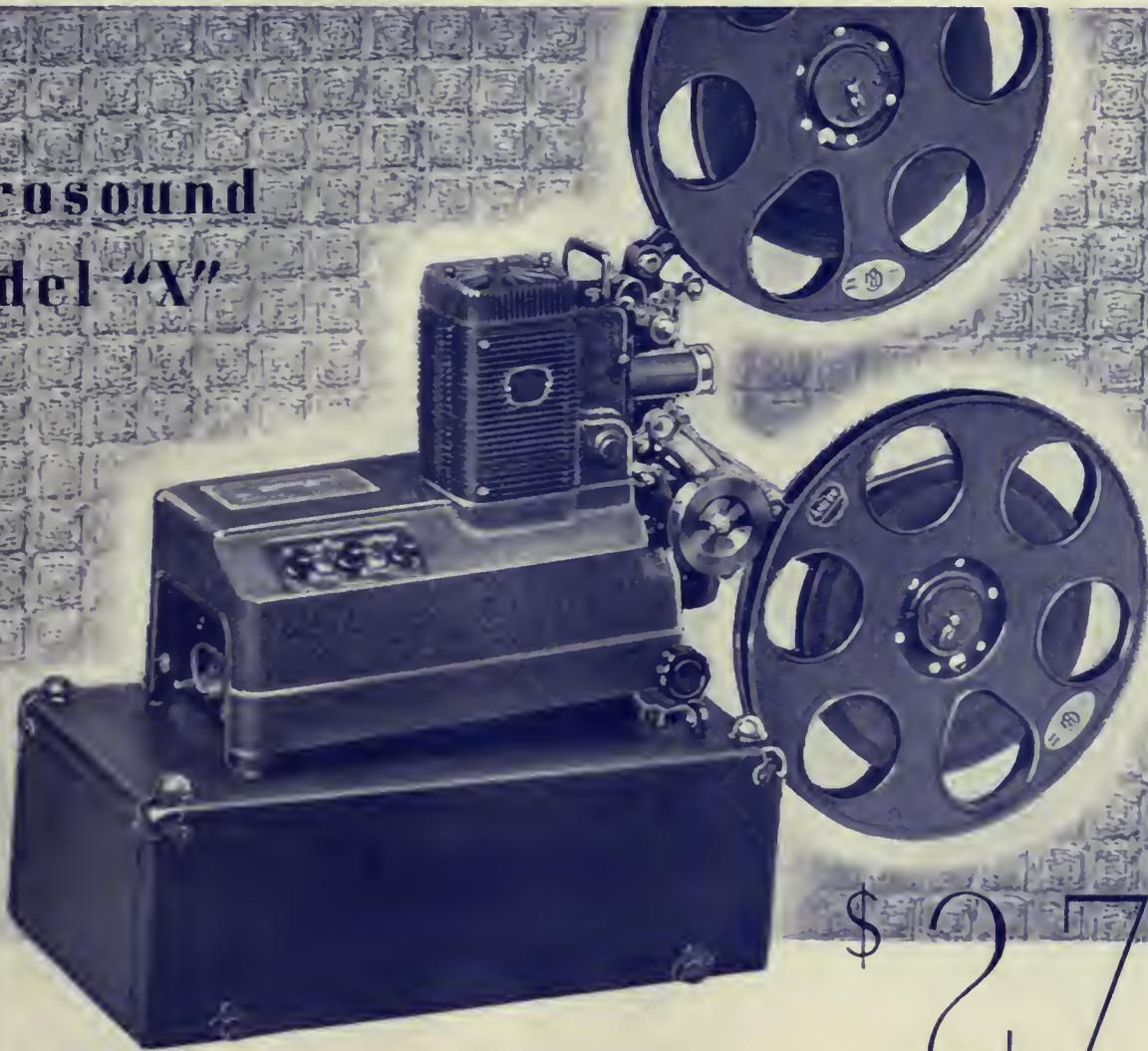
Mr. Wong, Detective (Boris Karloff) (Monogram) Karloff as thoroughly human, suave-spoken Chinese detective solves nicely complicated little puzzle in crime quite uniquely. Good suspense, reasonable thrills, pleasantly sinister atmosphere without being greswome or gory. (Based on James Lee Wong stories). 11-15-38
(A) Rather good (Y) Good (C) Good of kind

Young Doctor Kildare (Lew Ayres, L. Barrymore) (MGM) First picture of very promising series. Realistic human story of medical ambitions and ideals of fine old country doctor's son. His sturdy performance as interne wins favor of crotchety but great doctor (notable role by Barrymore). Convincing, appealing, dramatic, dignified. 11-15-38
(A) (Y) Very Good (C) Doubtful interest

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for the Visual Field

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- Bell & Howell Co.** (6)
1815 Larchmont Ave., Chicago
(See advertisement on page 317)
- Bray Pictures Corporation** (3, 6)
729 Seventh Ave., New York City
- Cine Classic Library** (5)
1041 Jefferson Ave., Brooklyn, N. Y.
(See advertisement on page 343)
- Wm. H. Dudley Visual Education Service** (4)
736 S. Wabash Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.
- Eastin 16 mm. Pictures** (6)
707 Putnam Bldg., Davenport, Ia.
Burns Bldg., Colorado Springs, Colo.
- Eastman Kodak Co.** (1, 4)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Co.** (4)
Teaching Films Division,
Rochester, N. Y.
(See advertisement on inside back cover)
- Eastman Kodak Stores, Inc.** (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Edited Pictures System, Inc.** (6)
330 W. 42nd St., New York City
- Erpi Classroom Films, Inc.** (2, 5)
35-11 35th Ave., Long Island City,
N. Y.
- Films, Inc.** (6)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
925 N. W. 19th St., Portland, Ore.
- Garrison Films, Inc.** (3, 6)
1600 Broadway, New York City
(See advertisement on page 343)
- General Films, Ltd.** (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Walter O. Gutlohn, Inc.** (6)
35 W. 45th St., New York City
(See advertisement on page 337)
- Harvard Film Service** (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.
- Guy D. Haselton, Travelettes** (1, 4, 5)
7936 Santa Monica, Blvd.,
Hollywood, Calif.
- David B. Hill** (6)
First Natl. Bank Bldg., Salem, Ore.
(See advertisement on page 336)
- Howard Hill Motion Picture Service** (3)
280 Scenic-Piedmont, Oakland, Cal.
Chamber of Commerce Bldg.,
Los Angeles, Cal.
- J. H. Hoffberg Co., Inc.** (2, 5)
729 Seventh Ave., New York City
- Ideal Pictures Corp.** (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 336)
- Leroy Dennis Film Bureau** (6)
Wabash, Ind.
(See advertisement on page 338)
- Lewis Film Service** (6)
105 E. 1st St., Wichita, Kan.
(See advertisement on page 343)
- The Manse Library** (4, 5)
2439 Auburn Ave., Cincinnati, O.
(See advertisement on page 336)
- Pinkney Film Service Co.** (1, 4)
1028 Forbes St., Pittsburgh, Pa.
- United Projector and Films Corp.** (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Pictures Co., Inc.** (2)
Rockefeller Center, New York City
(See advertisement on page 316)
- Visual Education Service** (6)
131 Clarendon St., Boston, Mass.
- Wholesome Films Service, Inc.** (3, 4)
48 Melrose St., Boston, Mass.
- Williams, Brown and Earle, Inc.** (3, 6)
918 Chestnut St., Philadelphia, Pa.
- Y.M.C.A. Motion Picture Bureau** (1, 6)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.

MOTION PICTURE MACHINES and SUPPLIES

- The Ampro Corporation** (6)
2839 N. Western Ave., Chicago
(See advertisement on page 347)
- Bell & Howell Co.** (6)
1815 Larchmont Ave., Chicago
(See advertisement on page 317)
- Central Camera Co.** (6)
230 S. Wabash Ave., Chicago
(See advertisement on page 336)
- DeVry Corporation** (3, 6)
1111 Armitage St., Chicago
(See advertisement on page 335)
- Eastman Kodak Co.** (6)
Rochester, N. Y.
(See advertisement on outside back cover)
- Eastman Kodak Stores, Inc.** (6)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films, Ltd.** (3, 6)
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156 King St., W. Toronto
- Howard Hill Motion Picture Service** (5)
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Chamber of Commerce Bldg.,
Los Angeles, Cal.
- Holmes Projector Co.** (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 341)
- Ideal Pictures Corp.** (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 336)
- RCA Manufacturing Co., Inc.** (5)
Camden, N. J.
(See advertisement on page 314)
- S. O. S. Corporation** (3, 6)
636 Eleventh Ave., New York City
- Sunny Schick National Brokers** (3, 6)
407 W. Wash. Blvd., Ft. Wayne, Ind.
- United Projector and Films Corp.** (1, 4)
228 Franklin St., Buffalo, N. Y.
- Universal Sound Projector** (5)
1921 Oxford St., Philadelphia, Pa.
(See advertisement on page 337)
- Victor Animatograph Corp.** (6)
Davenport, Iowa
(See advertisement on inside front cover)
- Visual Education Service** (6)
131 Clarendon St., Boston, Mass.
- Williams, Brown and Earle, Inc.** (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES and PRINTS

- Colonial Art Co.**
1336 N.W. 1st St., Oklahoma City, Okla.

SCREENS

- Da Lite Screen Co.**
2717 N. Crawford Ave., Chicago
(See advertisement on page 339)
- Eastman Kodak Stores, Inc.**
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- Penn Camera Exchange, Inc.**
126 W. 32nd St., New York City
(See advertisement on page 333)
- Williams, Brown and Earle, Inc.**
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

- Eastman Educational Slides**
Johnson Co. Bank Bldg.,
Iowa City, Ia.
- Edited Pictures System, Inc.**
330 W. 42nd St., New York City
- Ideal Pictures Corp.**
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 336)
- Keystone View Co.**
Meadville, Pa.
(See advertisement on page 316)
- Radio-Mat Slide Co., Inc.**
1819 Broadway, New York City
(See advertisement on page 336)
- Society for Visual Education**
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 333)
- Visual Education Service**
131 Clarendon St., Boston, Mass.
- Visual Sciences**
Suffern, New York
(See advertisement on page 343)
- Williams, Brown and Earle, Inc.**
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

- Keystone View Co.**
Meadville, Pa.
(See advertisement on page 316)

STEREOPTICONS and OPAQUE PROJECTORS

- Bausch and Lomb Optical Co.**
Rochester, N. Y.
(See advertisement on page 313)
- Eastman Kodak Stores, Inc.**
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.
- General Films Ltd.**
1924 Rose St., Regina, Sask.
156 King St., W. Toronto
- Keystone View Co.**
Meadville, Pa.
(See advertisement on page 316)
- Spencer Lens Co.**
19 Doat St., Buffalo, N. Y.
(See advertisement on page 335)
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918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

- (1) indicates firm supplies 35 mm. silent.
- (2) indicates firm supplies 35 mm. sound.
- (3) indicates firm supplies 35 mm. sound and silent.
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Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y., for further information on Eastman Classroom Films.

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