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# The Development of the Visual Education Program in the Omaha Elementary Schools

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A THESIS

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THE DEVELOPMENT  
OF THE VISUAL EDUCATION PROGRAM  
IN THE  
OMAHA PUBLIC ELEMENTARY SCHOOLS

Submitted by  
Ruth Alcorn Hamilton

In Partial fulfillment of the requirements  
for the Degree of Master of Arts  
Department of Education  
University of Omaha  
Omaha, Nebraska

1946

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# C O N T E N T S

	Page
CHAPTER I: THE PROBLEM . . . . .	1
The Problem of This Historical Survey. . . . .	1
Delimitations. . . . .	1
Definitions. . . . .	2
Methods Employed in This Survey. . . . .	3
Need or Timeliness of This Study . . . . .	4
CHAPTER II: PREVIOUS INVESTIGATIONS IN THIS FIELD . . . . .	14
Study of the Development of a Visual Education Program. . . . .	14
The Payne Fund Studies . . . . .	14
Eastman Kodak Company Survey . . . . .	15
Knowlton and Tilton's Studies. . . . .	16
The Motion Picture Project . . . . .	17
Study at South High School, Omaha, Nebraska. . . . .	18
Illinois Study . . . . .	20
The Author's Interest in the Field . . . . .	22
CHAPTER III: PERIOD OF ORIGIN. . . . .	26
CHAPTER IV: PERIOD OF ORGANIZATION. : . . . . .	30
First Visual Education Committee . . . . .	30
First Elementary School Equipment. . . . .	30
Institute at Omaha University. . . . .	30
Demonstrations for Omaha Teachers. . . . .	33
CHAPTER V: PERIOD OF ORGANIZATION (CONTINUED) . . . . .	38
Second Visual Education Committee. . . . .	38
Schools Buying Equipment . . . . .	40
Ak-Sar-Ben Gift. . . . .	41
World Herald Gift. . . . .	41
First Catalogue. . . . .	42
Nellie Orme Gift . . . . .	42
Second Iowa-Nebraska Audio-Visual Institute. . . . .	43

	Page
Totals From the Central Film	
Library, June, 1946 . . . . .	45
Other Film Libraries in Omaha. . . . .	48
 CHAPTER VI: COORDINATION OF THE SCHOOL LIBRARY AND VISUAL AIDS . . . . .	51
The History of the Program at Druid Hill School . . . . .	51
 CHAPTER VII: CONCLUSION. . . . .	73
Summary . . . . .	73
Suggestions for Further Study. . . . .	74
Recommendations for the Administration of the Program. . . . .	75
 BIBLIOGRAPHY. . . . .	80
 APPENDIX	

## Chapter One

### THE PROBLEM

#### The Problem of this study:

The main purpose of this study was to trace the origin and gradual growth of the visual education program through the use of motion pictures in the public elementary schools of Omaha. This involved the following problems:

1. To show the early, casual beginnings and period of unorganized use of films in the elementary schools.
2. To show the period of formative growth of an organized program.
3. To describe the first year of administration of that program.

A second, and incidental purpose, was to describe the development of the program within a specific, typical school, and to show how the school library can be instrumental in co-ordinating available films with units of study in the various grades. Druid Hill School was chosen because of the author's participation in the program at this particular building.

#### Delimitations:

This study makes no attempt to describe the program as developed and operated in any of the high schools, except to report the findings of a study made

in this field in one of these schools, which may be significant for visual aids in education in general. Each high school has its own program, administered by and under the guidance of its own faculty.

Although visual education implies the use of two types of visual aids, projected and non-projected, this study is limited to the discussion of the use of one of the projected aids; the motion picture. The school museum, a non-projected aid, should be considered an integral part of the visual education program but is not discussed in this report. The Omaha Children's Museum was established during the superintendency of Dr. Hobart Corning, and is being directed by Miss Marion Reed and Mr. Lytton Davis. The importance of the use of other visual aids in the schools is not minimized by the failure to consider them in this study.

### Definitions

Considerable print has been used discussing what terms are the most descriptive and appropriate to use in this field of education. Some object to the term "Visual education," and suggest the use of "visual aids to education." G. Lester Anderson (1:198) of the University of Minnesota, suggests that neither be used. He contends that visual materials are the raw materials of education and should be so called.

Hoban (2:9) defines "visual aids" as "Any picture, model, object or device which provides concrete visual experience to the learner for the purpose of building up, enriching, or clarifying abstract conceptions; developing desirable attitudes; and stimulating further activity on the part of the learner."

Dent (3:1) says, "Audio-visual aids are all illustrative materials, visual and sound, used in teaching situations, to facilitate the understanding of the spoken or written word."

As used in this study, the term, "visual aids" will carry Dent's definition; "visual instruction" will connote the use of visual aids in the act of teaching; "visual education" will imply the use of illustrative materials in any phase of education.

#### Method employed in this survey

Data for this report were gathered by direct letters to eleven school superintendents, to determine whether representative cities and small towns maintained visual education departments and to what extent.<sup>(a)</sup> Information obtained in answer to these letters is used

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a. Chicago, Illinois  
Cleveland, Ohio  
Philadelphia, Pa.  
Kansas City, Missouri  
Wichita, Kansas  
Council Bluffs, Iowa

Gothenburg, Nebraska  
Des Moines, Iowa  
Sioux City, Iowa  
Hastings, Nebraska  
Topeka, Kansas

in this report. Other data were secured from the Supervisor of Documents, Treasury Department, Washington, D. C., monographs and reports, general publications, records of the commercial company which supplied the first educational films used in the Omaha elementary schools, thesis studies of graduate students, by active participation on the Visual Education Committee of the Omaha Public Schools, and by use of films for classes in the elementary grades.

In writing this report, the author has followed the advice of Almack (4:191); "No anxiety for the reader should be felt; the sole object should be to give the truth."

#### Need or timeliness of this study

Although the earliest form of communication was visual--primitive man having used signs, gestures, hieroglyphics and picture writing; yet organized, conscious visual instruction is comparatively recent. Great strides have been made in this area, since the establishment of the first large city educational museum in St. Louis in 1905.

During the St. Louis' World Fair, educational exhibits were on display in Forest Park. Superintendent of Schools, F. Louis Soldan and Assistant Superintendent Carl G. Rathman recognized the educational possibilities of this exhibit and asked for donations of parts of the

displays to the schools. Many exhibitors willingly consented, and with these displays as a nucleus, the Educational Museum opened on April 11, 1905. In 1943 the name was changed to The Division of Audio-Visual Education. In 1917, the first teaching films were acquired through a gift from the Ford Motor Company. Today, there are 2,300 teaching films; 39,995 photographs; 1,500 filmstrips; 12,772 booklets; 8,360 lantern slides; and other visual aids. (5:202)

In 1942, St. Louis, through a committee of classroom teachers and principals, who made a survey which revealed the growing interest of teachers and the urgent need for additional visual education equipment and materials for the schools, set up a long range program for post war expansion, calling for the expenditure of \$135,000 over a four-year period, to equip each building adequately and to acquire a sufficient supply of material.

Philadelphia, Pennsylvania published its first catalogue of lantern slides in 1905, and, according to Sigman, (6:58) "it was an event of great interest to the schools, and one of striking moment to the present day historian of visual education." The first appropriation for a department was made in 1928, and from 1929 to 1932, an average of \$50,000 each year was spent on the division of visual education. Philadelphia now has three central circulating libraries for visual

materials; one for lantern materials which includes glass slides, filmstrips, and stillfilms; one for motion pictures, in which there was not one film in 1929, but in which there were 520 by 1930; and one for pictorial materials which includes stereographs and historically valuable prints. In 1943, the division printed three catalogues; one for glass slides, stillfilms, and filmstrips, containing fifty-three pages; one for sixteen millimeter silent films, containing sixty-four pages, and one for sixteen millimeter sound films, containing seventy-six pages. (a)

McKown and Roberts (7:14) said:

Modern audio-visual instruction is not a fad or a frill, but a most significant educational development.

That many cities have adopted this idea as a policy is evidenced by the forming of departments of visual education in their school systems.

Chicago, Illinois has been using films since 1921. Films are selected to correlate with the courses of study by a special curriculum committee. From 1940 to 1944, (8) this city spent about twenty-five cents

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a. No totals are given, but at an average of about 13 films per page, silent films would total around 690. At an average of 10 per page, sound film would total around 760. Supplements are issued frequently with lists of recent additions.



per pupil for its visual aids program. Figures as of July 1945 (a) reveal that approximately forty-five cents is appropriated per pupil, with a total appropriation for its 283,399 elementary pupils of \$131,660. For the city's 347 elementary schools, there are 200 sound and 250 silent projectors with a library of 7,000 sound prints and 3,000 silent.

Kansas City, Missouri (b) with an elementary enrollment of 44,876 pupils has twenty-four sound projectors with others on order; one-hundred silent projectors and a library of 567 sound films and 1448 silent films.

Smaller towns and cities, too, have joined the ever increasing number of school systems which are establishing separate departments of visual education. Among these are Council Bluffs, Iowa, (c) which has five sound projectors, and others ordered, and four silent projectors to serve an elementary enrollment of 6,000. Sioux City, Iowa, (d) with twenty-three elementary schools and an enrollment of 7,516, has eight projectors with 250 films in their library. Des Moines, Iowa (e) has a Visual Aids Library which has four projectors to be loaned where needed, and for their twelve elementary schools,

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a, b, c, d, e. Figures sent in reply to letters to school heads in these cities.

which contain the first to sixth grades, there are twelve additional projectors and 150 films in their library. Topeka, Kansas (a) appropriates \$2,500.00 annually for their Visual Education Department, which does not include the salary of the director. There are sixteen projectors for their elementary enrollment of 6,469, and thirty-nine films in the film library.

Cleveland, Ohio, in its 1943-44 Circulation Report of Visual Aids and a Survey of Service of the Division of Visual Education, states that 7,420 miles of film were shown in 120 Cleveland schools. During this year, 8,819 silent and 4,954 sound films were booked by the eighty-nine Elementary and Special schools. Cleveland estimates the cost per pupil per showing of a silent film was three-eighths of a cent and the cost per pupil of a sound film was approximately three-fourths of a cent.

Many other cities, large and small, have departments. The larger cities usually maintain their own film libraries, while many of the smaller obtain their films from outside sources. Among these are Rochester, Buffalo and New York City, New York; Madison, Wisconsin, which aims to spend fifty cents per pupil for visual instruction; (b) Denver, Colorado; Wichita, Kansas;

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a. Figures sent in reply to letters to school heads in these cities.

b. Walter A. Wittich, letter to author, July 12, 1945.

Los Angeles, San Francisco and Oakland, California;  
Detroit, Michigan; Atlanta, Georgia; San Antonio, Texas;  
Newark, New Jersey and others.

School systems are not alone in their recognition of the value of films in education. In fact, the stress placed on these media by the armed services, has pointed the way to many school organizations. The Official Navy booklet, (a) "More Training in Less Time" states: "Films afford every man a front seat in navy experiences."

"The Treasury Department, (b) War Finance Division, announces the following figures:

	<u>Screenings</u>	<u>Total Audience</u>
Fifth War Loan Drive . . .	25,000	10,000,000
Sixth War Loan Drive . . .	86,913	23,500,000
Mighty Seventh Drive . . .	141,615	33,402,950
Victory Loan Drive . . .	146,037	32,249,408

Other organizations maintaining visual education departments or bureaus, include national and local museums, the United States departments of Agriculture, Commerce, Interior, and Labor, and the United States Department of Education, the Pan-American Union, the

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a. Prepared by Lt. Com. Francis Noel, 1942

b. Letter from Treasury Department, United States Savings Bonds Division, Washington, D. C.  
March 21, 1946

Canadian and Australian Government Picture Bureaus and the British Information Services.

Many universities and colleges are making a fine contribution by their services through bureaus. Notable among these are the University of Chicago which has just recently opened a center for the study of audio-visual instructional materials. Others maintaining libraries for the rental of films, in the middle west, include the Universities of Indiana, Wisconsin, Nebraska, Kansas, Iowa and Minnesota.

Several state departments of education have created divisions. Among these are Pennsylvania, Texas and Virginia. California has just instituted their division in the state department of education. Superintendent Dexter is urging that the state legislature appropriate \$166,000 for the support of this division for the next two years. (9:254)

The National Education Association created a division of Audio-Visual Instructional Service during 1945.

The ever increasing number of Audio-Visual Institutes across the country where leaders in the field contribute the results of their knowledge and experience, give evidence to the recognition of the value of these aids to instruction. One of the first in this section of the country was held at Lincoln, Nebraska in 1941, sponsored by the Lincoln Public Schools and the University

of Nebraska Extension Division and Teachers' College. Madison, Wisconsin held its third annual institute in 1945. The Midwest Forum on Visual Aids meets in Chicago annually. Omaha University held its first institute in October, 1944, and the second one in October, 1945.

Teacher training institutions are offering more and more college courses in these aids to teaching. In the April and May, 1946 issues of Educational Screen, 132 colleges in thirty-eight states, listed 176 courses. This listing is very probably incomplete as it is compiled only from those schools reporting. In 1938, the United States Office of Education stated that only seven schools had reported courses for training teachers in the use of visual aids, (a)

Vocational and technical schools and industry are using more and more film for training and advertising. The United States Department of Education has produced and is distributing a film called, "Drilling a Hole in a Pin": Borden and Busse's salesmanship films are used in sales meetings. Weyerhaeuser's "Trees and Homes" was widely used for lumber dealers, real estate salesmen, and for potential home owners, General Electric, Westinghouse, Ford Motor Company, Coty, DuPont, and Heinz, all presented their products to the

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a. Cook, Katherine M. U. S. Office of Education letter to author. September 27, 1938.

public in an appealing and forceful manner, via the sound film.

With this data in mind on the use of films in schools, industry and government, it seems that we can agree with Rogers when he says: (10:56)

This is a most propitious time for planning and setting up a comprehensive program for audio-visual education.

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## Chapter Two

### PREVIOUS INVESTIGATIONS IN THIS FIELD

While only one study was found that paralleled this one, several were found dealing with the effectiveness of the use of visual aids in education. One was found which dealt with the trends of visual education within a specific locality.

#### Study of the development of a visual education program

In 1932, Sigman (1) wrote the history of the development of the visual education program in the public schools of Philadelphia, Pennsylvania. This traced the development of the program from its inception in 1905 to the well-organized unit now operating in the schools.

#### The Payne Fund Studies

The Payne Fund Studies were a series of twelve studies investigating the effects of theatrical motion pictures on the learning of ideas, on the development of attitudes, and to some degree, the effect on children's sleep, conduct and morals. These investigations extended through four years, 1929 to 1932, and were reported by Charters. (2) By testing three-thousand individuals, it was found that the amount of information



acquired by children of all age groups was very high. The investigators found that children remembered a surprising amount about a picture six weeks and three months later. They concluded that the "curves of retention are considerably higher than those obtained by previous investigators (using other materials) and motion pictures appear to make a greater contribution to visual education than was previously suspected." (2:9) Educationally significant was the finding that "children of all ages tend to accept as authentic what they see in the movies unless it is flagrantly incorrect." (2:10)

The author concludes that "All of these considerations lead inevitably to the increasing strength of the conclusion that the motion picture is an extremely powerful medium of education." (2:40)

#### Eastman Kodak Company Survey

Wood and Freeman (3) in 1928, sponsored by the Eastman Kodak Company, used films in twelve large city school systems, with eleven thousand children; and, in three tests, measured the effectiveness of the use of films in teaching Geography and General Science. They found that the films instructed groups were greatly superior to the non-film groups; the average gain in factual knowledge being thirty-three percent.

Knowlton and Tilton's Studies (4)

From 1928 to 1930, Knowlton and Tilton used the Yale Chronicles of America Photoplays, which are American History silent films, and are in the Omaha Public School Film Library, in high school history classes in seven eastern cities.

They concluded that:

1. Initial learning of factual material was increased from seven to thirty-five percent.
2. Films develop greater thought and reasoning ability.
3. The children learned social and moral relationships more readily.
4. They remembered ideas twenty-seven percent better.
5. They developed desirable habits and skills.
6. They developed greater descriptive and explanatory power.
7. Children were more interested in their work.
8. The films increased childrens' imaginations.
9. Children of low intelligence and poor reading ability were particularly benefitted.
10. Children did forty percent more reading after viewing the films.

Since the advent of sound-on-film and finer dramatic technique, the author doubts if these findings would stand under scientific investigation today.

### The Motion Picture Project

From 1936 to 1941, a study was made by the Committee on Motion Pictures in Education of the American Council on Education, through a \$150,000 grant from the General Education Board. In his report, Hoban (5:16) states that the motion picture "is the most revolutionary instrument introduced in education since the printing press."

At first the committee set out to:

1. Define the functions of motion pictures in general education.
2. Facilitate the development of general education through the use of motion pictures (5:forward)

Their early activities resulted in:

1. A compilation of a catalogue of films available to schools
2. A publication of a directory of motion pictures and other audio-visual equipment available to schools.
3. A summary and publication of the literature on motion pictures in education.

Later (the last three years of the project) the committee carried on a film evaluation program. They asked, "For what purpose, with whom, and under what circumstances is this film good?" (5:vi foreword)

The results of the project have been published as follows:

A School Uses Motion Pictures, by the staff of Tower Hill School, Wilmington, Delaware.

Films on War and American Policy, by Blake Cochrane. Ways in which the films may be used are suggested.

Projecting Motion Pictures in the Classroom, by Francis W. Noel. Projection experiences of the public schools in Santa Barbara, California, are related.

Motion Pictures in a Modern Curriculum, by Reginald Bell, Leo F. Cain, Lillian A. Lamoreaux, et al. This is a report of the use of films in the Santa Barbara Public Schools.

Students Make Motion Pictures, by Floyd E. Brooker and Eugene H. Herrington. This describes how Denver High School produced its own films and the educational values of the experience.

The Other Americas Through Films and Records, prepared by the Motion Picture Project with the assistance of the Pan American Union. To help teachers locate and use films dealing with relations to and understanding of the other Americas.

Selected Educational Motion Pictures, A Descriptive Encyclopedia. Approximately five-hundred sixteen mm. films rated good or excellent by the cooperating centers. All film content is described in detail: the running time, range of grade usefulness, and most of the sources from which they are available are listed.

Study at South High School,  
Omaha, Nebraska.

The only study found which was made in Omaha, was that of Jalas. (6) She states: (6:3)

The main purpose of this study was to determine whether the use of black and white talking motion pictures in addition to regular classroom procedure resulted in greater comprehension of a unit of work and reduced the number of failures in Elementary Biology at South High School for the second semester, January to June, 1945.

She used thirteen teaching sound films with three experimental groups and compared the results with those of three control groups with whom no films were used.

This thesis concerned itself mainly with these four questions: (6:4)

1. Was there an increase of comprehension in initial learning?
2. Were the number of failures reduced?
3. Who benefitted most by the addition of films to regular classroom procedure?
4. Were the students ready to accept films as classroom work?

The experimental method revealed the answers to the first three questions, while questionnaires disclosed the answer to the last.

She reports (6:76) that sixty-seven percent of the experimental group received grades that were higher than those received by the control group; the experimental group made average grades which were from 4.09 to 7.31 higher than the control group.

There was a sixty-four percent reduction in failures for the experimental group. (6:81)

She found that the students with low Intelligence Quotients and those with low reading abilities benefitted most from the use of films. (6:97)

By questioning the 191 pupils in the experimental groups, she found that 175 of them said that

films had helped them understand their work.

This seems to be a very scientific and significant study.

### Illinois Study

A recent study was made of the trends of visual instruction in Illinois by Roberts. (7) He had made a similar study five years before, and the purposes of this second study were:

1. To see how the trends that were evident five years ago had developed
2. To determine, if possible, new trends
3. To determine what can be done to promote a wider and more efficient use of audio-visual materials.
4. To determine the effect of the training program of the armed forces upon the audio-visual program of the public schools.

He found, in answer to problem 1, that (7:228)

1. More school boards are making annual appropriations for audio-visual materials.
2. More and more schools are designating one teacher as director of the audio-visual program. However, only a few schools allow the director sufficient time to devote to the development of the program.
3. More schools are using good classroom films than was the case five years ago.
4. Much objectionable advertising has been eliminated from commercial films, making them more usable for class instruction, and therefore, are being used more.

5. There is still a wonderful opportunity for further development in special uses for films, such as vocational guidance and promotion of general health.
6. Five or more teacher training institutions in the state are giving formal courses in audio-visual instruction, and one is offering a course in extension.
7. More teachers know how to operate projectors.
8. More schools are providing training programs for students.

New trends apparent that were found were:

(7:229)

1. More definite trend toward the production of 2 x 2 colored slides.
2. Trend toward a better balanced audio-visual program, since many schools are considering buying still picture projectors.
3. The Superintendent of Public Instruction has encouraged school boards to give more consideration to audio-visual aids and to make appropriations for them.

Suggestions to promote a wider and more efficient use of audio-visual materials included: (7:229)

1. There is a definite need for the creation of a State Department of Audio-Visual Instruction. This department could provide the following services:
  - a. Assist schools in setting up well-balanced audio-visual programs.
  - b. Assist schools in the selection of audio-visual equipment.
  - c. Establish a library of visual materials.
  - d. Provide information and suggestions on the establishment of small film libraries.

- e. Give assistance to schools in designing new buildings so that audio-visual aids can be used more effectively.

In studying what effect the training program of the Armed Forces has had upon the audio-visual training in the public schools, he found (7:237)

1. It has been proved that audio-visual materials are valuable aids to teaching.
2. It has aroused the interest of most teachers, even many of the most conservative.
3. It has helped create a more favorable attitude on the part of the general public.
4. It has given considerable impetus to the whole audio-visual movement, and it is up to the school men to keep the ball rolling.

While this study involved a specific, limited area, yet the findings are significant and applicable to many situations.

#### The author's interest in the field

The writer's interest in visual aids to education was awakened in 1936 when the film program in the Omaha schools was furnished by a commercial dealer, with little or no thought to curriculum correlation. The value of the film as an aid to instruction was apparent to the author, as was the general lack of teacher concern. There was little or no pre-teaching in preparation for the film showing; many teachers did not know what film was to be shown, and there was little or no follow-up after the pupils had seen the film.



This seemed to the writer to be a wanton waste of the pupils' time. In reading material in the field, this idea was corroborated frequently as in this statement of Noel. (8:508)

If there is any one thing that has been proven by the armed forces, it is that these materials (visual) must be chosen in terms of curriculum needs--they must serve definite and legitimate educational objectives, must be used in terms of good instruction techniques or you are liable to come out definitely with a negative product.

Because this program was already set up before selling it to the schools, films to correlate with the existing course of study were not always included. For purposes of experimentation the writer chose units of study for her grade to fit in with the films to be shown. The results were gratifying enough to convince her that here was a technique that was definitely worth-while. As a member of the Film Evaluation Committee of the Educational Screen, a critical record of the films shown was kept and reported to this magazine.

During the school years of 1944-45, and 1945-46, there came to the author the opportunity to select and show films correlating with the curriculum for grades one to eight in one of the Omaha Elementary schools. Continued interest prompted attendance at Visual Education Institutes at Lincoln, Nebraska and Madison, Wisconsin, at Omaha University in October, 1944,

at the demonstrations for Omaha teachers in January, 1945; and finally, membership on the Visual Education Committee for the Omaha Public Schools, gave an opportunity to help select the first films to be purchased for the Omaha film library.

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### Chapter Three

#### PERIOD OF ORIGIN

Before 1936, there was, as far as is known, no conscious, organized attempt at a visual education program in the public elementary schools of Omaha. At the Professional Library, where Omaha teachers have access to professional books and magazines, there was a cabinet of lantern slides and stereographs which occasionally were checked out by teachers seeking some visual aids for their teaching. These materials were old then; many of them copyrighted in 1906.

In 1936, Mr. Arthur E. Eaton offered a program of teaching films to the schools; furnishing projectors, films and operators. In the fall of 1937, the Modern Sound Picture Company was incorporated by Mr. A. E. Eaton, Mr. F. H. Hamilton and Mr. John Gillies. The purpose of this organization was to entertain, advertise and educate, by means of the non-theatrical motion picture. (1:1)

At the beginning of every semester, this company offered a series of six programs, each one of which usually consisted of three separate teaching films; one for the primary grades, one for the intermediates, and one for the upper grades. These programs

were submitted to Dr. A. J. Foy Cross, Director of Curriculum for the Omaha Schools, for approval. They were then sold to the individual schools, who financed them by their own particular methods. In general, each family in a school was charged a nominal sum (twenty cents at Belvedere), permitting all the members of that family to attend all six programs. At Belvedere School, if any family was unable to pay the twenty cents jobs were found for the children to do around the school that would net them the necessary admittance fee. In some instances the Parent Teacher Associations underwrote the expense of the whole program, so that all children in the school might attend.

A program sheet for 1942 (see appendix) reveals that such programs as these were offered:

Program No. 1  
The Day is New  
Birds of Canada  
Ring of Steel

Program No. 5  
An Airplane Trip  
Manhattan Waterfront  
Mount Vernon

Program No. 6  
The Goat Family  
The Wheat Farmer  
The Saar

These programs of films were usually shown in the school auditorium or in a room large enough to accommodate several classes and one which had the

proper facilities. In most instances, one showing was made for all the lower grades at one time, and one for all the upper grades.

Descriptive lists (See Appendix) of all films to be shown in any semester were sent to the subscribing schools, so that teachers might know what were to be shown, and avail themselves of the opportunity to preview any of the films to make effective preparation for the showing to the children.

The number of schools buying this service varied from semester to semester, but in general, before schools began acquiring their own equipment, the average was around forty. (2) If a school had its own projector, it could rent films from other sources which correlated with the units of study much more closely than in a prearranged series of programs. Accordingly, as the number of schools owning their equipment became greater, the number using Modern Sound Picture Company's service, became smaller, although this service was still available in 1945-46.

While this method of presenting teaching films was far from ideal, yet it served as a pioneer wedge in a field in this area, and, in the opinion of the writer, hastened the day when the administration made an attempt at an organized program.

REFERENCES TO CHAPTER THREE

1. Hamilton, F. H., Secretary, Articles of Incorporation, Modern Sound Pictures Corporation, Omaha, 1937. p. 1
2. Hamilton, F. H., Secretary, Records of Modern Sound Picture Corporation. 1938.

## Chapter Four

### PERIOD OF ORGANIZATION

#### First Visual Education Committee

In 1939, the first Visual Education Committee <sup>a</sup> for the Omaha Schools was formed under the chairmanship of Dr. A. J. Foy Cross, who was Director of Curriculum. This committee met several times, devoting most of its time to inspection of various projectors on the market at that time. Its chief contribution was a recommendation as to the type of equipment to buy. Since no funds were then available, no definite action was taken, and the time and efforts of the committee were of no avail.

#### First elementary school equipment

In 1941, Central Park School, by purchasing a projector and screen, became the first elementary school in Omaha to acquire its own equipment. Miss Stella Holmes, the principal, had been convinced of the value of visual aids to education for some time, and had taken college work in the field at Boulder, Colorado.

#### Institute at Omaha University

The visual education movement in the Omaha

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a. Records of this committee destroyed



Public Schools received a great impetus from the first visual education conference held at Omaha University in October, 1944. Charles Hoff, business manager of the University, was the originator of the idea and promoter of the conference. Convinced that visual aids were to play a prominent part in the educational system of the country, he designed the institute "to show educators and community leaders the wide range of opportunities in the field of visual education and to teach them the techniques of using these aids in their present jobs." (1)

Invitations were sent to church school and youth leaders, elementary, high school and college teachers of Nebraska and Iowa and to Audio-Visual equipment manufacturers and dealers.

Among the leaders in the field present were V. C. Arnsperger, vice-president of Encyclopedia-Britannica Films Inc.; Floyd E. Brooker, director, visual aids for war training, United States Office of Education; Lt. James W. Brown, officer in charge of training aids, Ninth Naval District Headquarters, Great Lakes, Illinois; Margaret Carter, director non-theatrical distribution in the United States, National Film Board of Canada; C. R. Crakes, educational consultant, DeVry Corporation and lecturer on visual education at

Northwestern University, Chicago, Illinois; Dean E. Douglas, regional manager educational department, Radio Corporation of America; Bruce Allyn Findlay, supervisor visual education, Los Angeles public schools; John L. Hamilton, film division, British Information Services, Chicago, Illinois; Anatole Winsay, director of Catholic section, Films Incorporated; Oscar Sams, director of domestic distribution, Office of Inter-American Affairs; and Walter A. Wittich, head of the department of Audio-visual education at the University of Wisconsin, Madison, Wisconsin.

This conference, known as the Iowa-Nebraska Institute on Audio-Visual Aids to Teaching, consisted of lectures, demonstrations, discussions and exhibits. Lecturers were Floyd Brooker, Lt. James Brown, Bruce Findlay, Dean Douglass, Walter Wittich, V. C. Arnsperger. The demonstrations were under the leadership of Dr. Wittich. Friday morning he used the film "Pioneers of the Plains" with a group of fifth grade children. Saturday, he demonstrated the use of films in teaching with an eighth grade and a college class. Panel discussions were held Friday evening and Saturday afternoon. Twenty-one commercial exhibits were set up in the library on the second floor of the university. These were exhibits of national firms, rather than of local dealers, and were intended primarily for edification

of registrants as to equipment possibilities in this area of instruction, rather than for sales promotion.

While the effect of this institute on the advancement of a visual education program in Omaha or any other locality cannot be measured accurately, yet the report of the registrations may be an index of the interest it aroused. Total registrations numbered 640. Of the ninety-three registrations from outside of Omaha, fifty-three were from Nebraska and twenty-four from Iowa, and sixteen from seven other states.

An Institute Summary Panel formulated recommendations reflecting the reports made by the contributors to the Institute program, which were presented at the final session of the conference. (See appendix)

A further recommendation, affecting the Omaha Public Schools, was made by Mr. W. C. Cumming to Superintendent Corning. He proposed that the Omaha School board hire Dr. Wittich to give a series of demonstrations in the use of visual aids for Omaha Public School teachers.

#### Demonstrations for Omaha Teachers <sup>a</sup>

The Omaha School Board brought Dr. Walter A. Wittich, Director of Visual Education at the University

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a. "Visual Education Demonstrations for Omaha Teachers," by the author, appearing in Educational screen, March 1945 is a more comprehensive report.

of Wisconsin, to Omaha, the second week in January, 1945, for a series of demonstrations in teaching with Audio-visual aids.

Every teacher in the city system was given the opportunity to observe at least one demonstration. Because of the scarcity of available substitute teachers, children of the public schools were dismissed for the session their teacher was to attend. Present, too, were Parochial school staffs; representatives from the National Dairy Council; some of the faculty from the University of Omaha; P. T. A. members who were interested in these aids to education; the director of the Visual Education Bureau of the University of Nebraska, who is building a library of films; and some commercial dealers.

Demonstrations for elementary school personnel were held each morning; for high school, each afternoon. Monday and Tuesday mornings, first, second and third grade teachers attended, seeing a demonstrational lesson using the film "The Policeman" with third grade children. Wednesday and Thursday, Dr. Wittich used the film, "The Honey Bee" with fifth graders for teachers of fourth, fifth and sixth grades. Friday morning he demonstrated for the seventh and eighth grade teachers how effective the film can be to teach social understandings by using the film, "The Cattleman" with a group

of eighth graders. In addition to the films used in the demonstration lessons, the teachers were shown parts of others appropriate to use in the areas of Natural Science, Social Science, History and Music. The afternoon demonstrations, which were held in a different high school each afternoon, invaded the fields of Physiology, Physics, and Political Science, in addition to those used for the elementary classes.

Dr. Wittich talked at the Principal's club dinner on Thursday evening, when presidents of the local Parent-Teacher Associations were guests. He emphasized that

1. Films will never replace the teacher, but will rather increase his or her opportunity to guide students into more vivid learning experiences.
2. Films should never supplant, but supplement other teaching.
3. Films should not be used unless they make a definite contribution to the subject being studied.

Evidence that the film is a fascinating tool was apparent by the groans of disappointment when only a part of a film was shown at the demonstrations. Many parents remarked that now they could see how the children could learn more in less time. The children who participated in the demonstrations wanted to see the films again to catch any details they missed on the first showing. In response to a questionnaire sent to

several groups of teachers, many said that they were stimulated to use this method as soon as equipment was available. One wrote, "I will do a lot of it to make up for lost time." Another said, "All the children in the class will gain a fuller and richer experience than could possibly be gained through one excursion."

The administration arranged a meeting of the Visual Education committee with Dr. Wittich, at which general plans were laid for the establishment of a central film library for the Omaha Public Schools. Dr. Wittich pledged the cooperation of the Visual Education Bureau of Wisconsin University in aiding Omaha to set up its program, as did David McCulley, Director of the Visual Education Bureau of the University of Nebraska.

REFERENCES FOR CHAPTER FOUR

1. Hoff, Charles. Preliminary Announcement of First Iowa-Nebraska Audio-Visual Institute.  
Bulletin, September 30, 1944

## Chapter Five

### PERIOD OF ORGANIZATION (CONTINUED)

#### Second Visual Education Committee

The second visual education committee, formed in 1944, under the chairmanship of Mr. W. C. Cumming, who was then Vocational Director of the Omaha Public Schools, consisted of the following members: Mrs. Margaret O'Brien, Principal of Druid Hill School; Mrs. Ethel McConney, Principal of Rose Hill School; Miss Mabel Carlson, a science teacher from Benson High School; Mr. LeRoy Smith, a science teacher from South High School; Mrs. Mary A. Steele, Director of Radio, Omaha Public Schools; and Mrs. Ruth Hamilton, Library teacher at Druid Hill School.

One of the first activities of this committee was to make a survey (see appendix) of the projection facilities in the schools. This revealed that thirty-eight schools had dark curtains in auditoriums or kindergartens; ten had dark curtains in classrooms; thirty-four schools had electric outlets in auditoriums or kindergartens; thirty-seven had electric outlets in at least one classroom; twenty-nine schools asked for dark curtains; fourteen asked for electric outlets, and three asked for screens. It was apparent that most of the schools could use projected aids in some way, if they so desired and equipment could be secured.



Another early activity of this committee, as has been stated before, was a meeting with Dr. Wittich, in January, 1945, at which time general plans were discussed for the establishment of a film library to serve the Omaha schools.

Early in 1945, this committee set up an evaluation sheet (see appendix) for the selection of films, and chose films to be previewed by the committee and others for selection and possible purchase.

In May of 1945 this committee assisted by teacher and principal representatives from each school, previewed, evaluated, and selected eighty-five films to be ordered on a lease-to-own basis as a nucleus for the first film library of the Omaha Public Schools.<sup>a</sup>

In the selection of films for this first library, care was exercised to choose films to correlate with several different subject matter areas, and which were suitable for the various grade levels. For instance; the Social Studies in the primary grades can be served by such films as "Mexican Children" or "Children of China"; in the intermediate grades by "Early Settlers of New England" or "Westward Movement" for American History. In like manner, films chosen for use in the sciences, included "Robin Redbreast", "Thrushes and Relatives", "Spiders", "The Earth in Motion" and "Heart and Circulation".

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a. Lease-to-own--Films leased to school system, one-fifth of purchase price to be paid as lease rental each year. Any of the films may be returned at the end of any year, but if kept for five years, they become the property of the Omaha Schools.

These films are housed in the Vocational Office at the Joslyn Castle, under the supervision of the Director of Vocational Education. One clerk in the office books the films, keeps records of films ordered, the number of showings, the total audience, and the condition of the films. Mr. Cumming and Miss Evelyn Myers, the clerk, drew up and printed all forms used for this purpose. Mr. Baggs, a co-ordinator in the Vocational Department, helps in the upkeep of equipment, and assists in the instruction of the mechanics of operation.

Representatives from this committee, visited the government film library at Fort Omaha, at the invitation of Captain Falke, in July 1945, and studied the general procedures for film distribution as used by the army, to help in the establishing of effective techniques for distribution of films to the schools.

#### Schools buying equipment

During the years of 1944-45, several elementary schools placed orders for motion picture projection equipment to be delivered as soon as available. Included in this group were Monroe, Druid Hill, Washington, Monmouth Park, Miller Park, Beals, Rose Hill, Minne Lusa, Clifton Hill, Kellom, and Park. In every case the school, either through its own fund, created from paper sales and/or other money-making activities, or through complete

or partial financial backing by its Parent Teacher Association, paid for this equipment.

#### Ak-Sar-Ben Gift

Ak-Sar-Ben, a civic organization composed of business and professional men of Omaha and Nebraska, presented twelve motion picture projectors<sup>a</sup> to the public schools, during the summer of 1945. These were delivered in February, 1946. One of these projectors is to be placed in each of twelve zones of the general school district, at a school centrally located within each particular zone. Schools within each area will have access to that machine.

#### World-Herald Gift

At about the same time, the city's newspaper, the Omaha World Herald, made another significant contribution to the visual education program in the Omaha schools, by donating set of the Yale Chronicle of America Photoplays, which consists of fifteen silent motion pictures (three or four reels each) on American historical subjects. In addition, three sets of the Pageant of America Lantern slides (one thousand slides in each set), a twenty-one volume set of illustrated books, and two sets of supplementary volumes called the

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a. Eastman Projectors

Chronicles of America, were also given. These are housed at the Board of Education Central Library, where any teacher may secure them for use in her classroom. This whole contribution is valued at approximately \$12,000.

#### First Catalogue

Under Mr. Cumming's direction, a catalogue of films in the central library was prepared. This was distributed to the various schools in the fall of 1945. (see appendix) This then, was the first catalogue for the Visual Education Department of the Omaha Public Schools and marked a milestone in achievement. Shortly thereafter, a list of the one-thousand lantern slides that had been presented to the schools by the Omaha World-Herald, was printed and sent to the schools. (see appendix)

#### Nellie Orme Gift

Miss Nellie Orme, a teacher at Dundee School in the Omaha system, had established a fund for books and/or films about birds. Accordingly, in the fall of 1945, eight colored bird films were ordered and were received in January 1946. These were: "Birds of the Dooryard," "Birds of the Country Side," "Birds of the Inland Waterways," "Birds of the Marshes," "The Red-winged Blackbird," "The Ruby-Throated Hummingbird," "

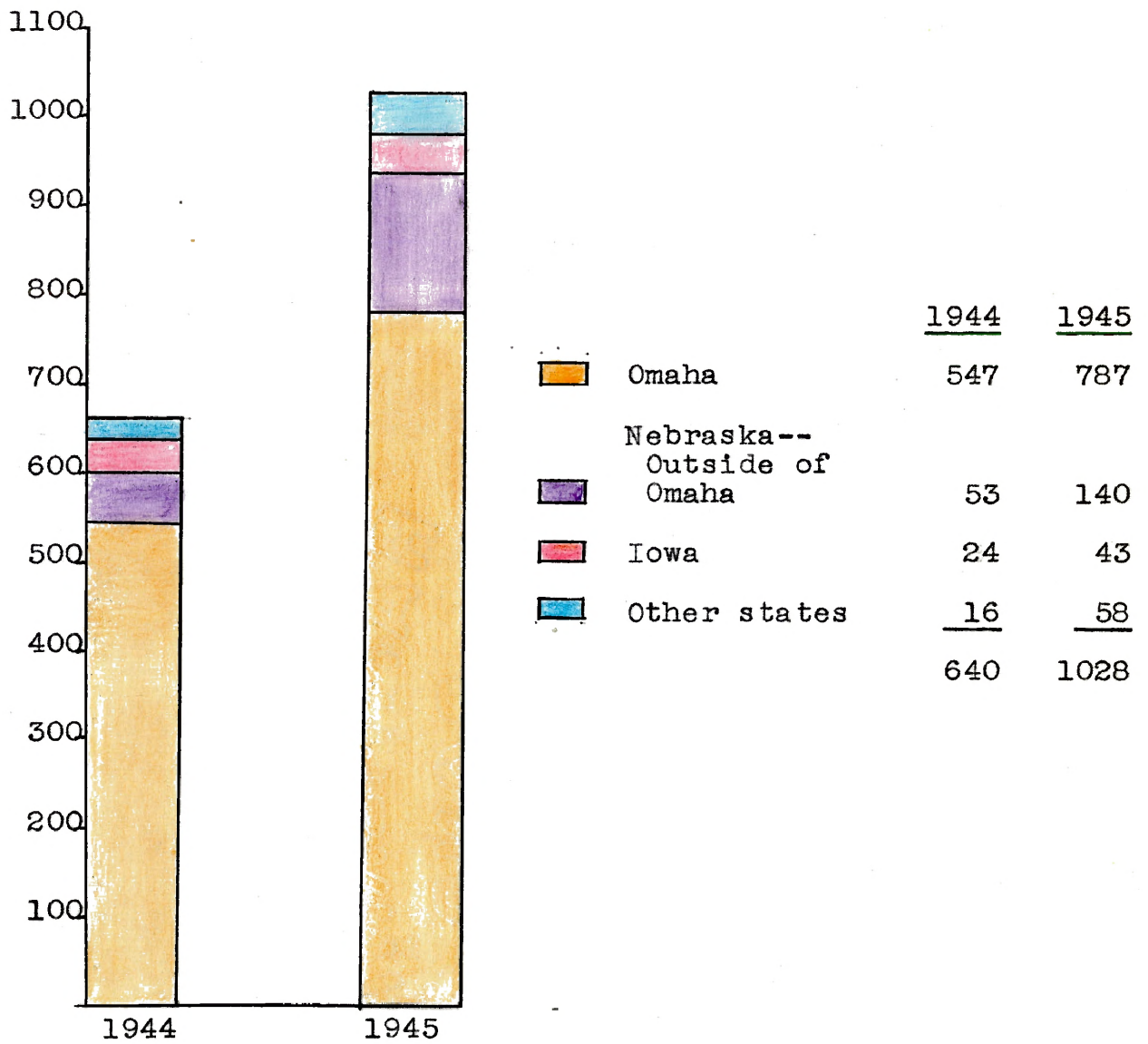
"The Bobolink and Bluejay," and "Five Colorful Birds." These films are making an unusual contribution to the study of birds in the schools.

Second Iowa-Nebraska  
Audio-Visual Institute

In October of 1945, the University of Omaha sponsored the second Iowa-Nebraska Audio-Visual Education Institute. This second conference was aimed to serve a larger purpose than the first institute, which was held in 1944. Accordingly, the program which consisted of lectures, films, demonstrations, panel and audience discussions, was arranged in five divisions, namely: Elementary Grades, Secondary Grades, College Level, Religious Education, and Adult Education. Many specialists in the field were in attendance and on the program. Among them were Lieutenant James Brown, of the United States Navy; Anatole Lindsay of Films Incorporated; Joseph Dickman, Director of Audio Visual Education, Chicago Public Schools; Walter Wittich, Director of the Audio Visual Bureau, University of Wisconsin; Oscar Sams from the office of Co-Ordinator of Inter-American Affairs; Margaret Carter of the National Film Board of Canada; Floyd Brooker of the United States Office of Education; Roger Albright from Teaching Films Custodian; John Hamilton from the British Information Services; V. C. Arnsperger, Vice-President of

REGISTRATIONS AT AUDIO-VISUAL INSTITUTES

University of Omaha  
(From Registration Reports Compiled by Charles Hoff)



Encyclopedia Brittanica; Stephen Corey of the University of Chicago; and Mary Palmer from Chicago, who represented the International Council of Religious Education.

The effect of this institute on the promotion of the visual education idea, particularly in Omaha and Nebraska, can be gauged partly by the registration figures. In 1944, the total registrations were 640; in 1945 they were 1,028. Of these, 787 were from Omaha, 140 from outstate Nebraska, and 101 were from twelve other states, including the District of Columbia. That this institute attracted national attention is evident from this statement of Trenholme's (1:35):

Cities also, frequently sponsor conferences, some of which, such as Omaha's, are almost national in scope. These conventions, conferences, and institutes give the impetus to an in-service training program.

Totals from the Central  
Film Library, June, 1946

At the close of the 1945-46 school year, the school system owned, exclusive of those owned by individual schools, fourteen sound projectors, 103 sound films,<sup>a</sup> and sixteen silent films. These films have,

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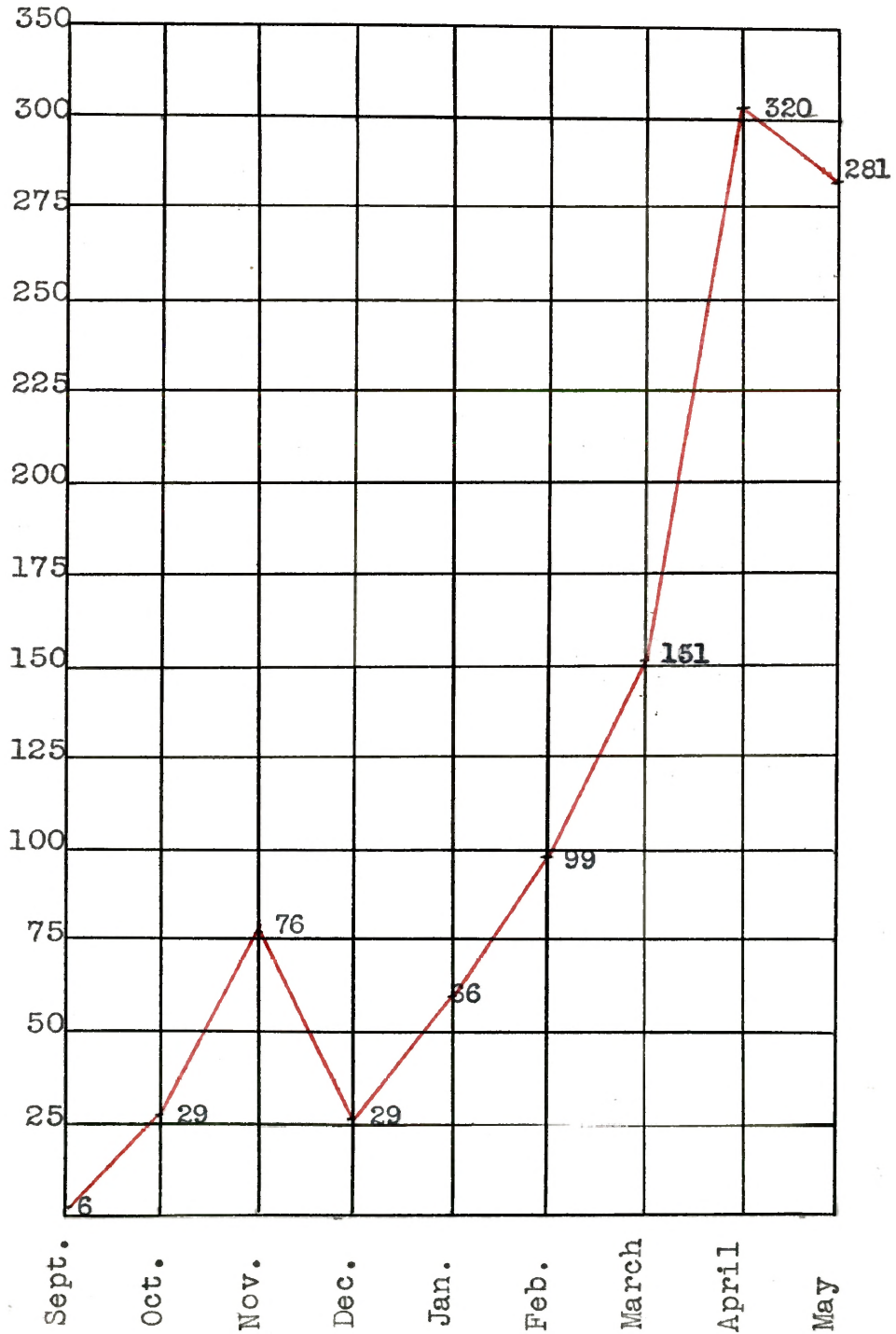
a. Includes donated films in addition to those secured on lease-to-own basis.



BOOKINGS - ALL SCHOOLS  
September 1945 to June 1946

Total bookings - 1057

Average per month - 117.40



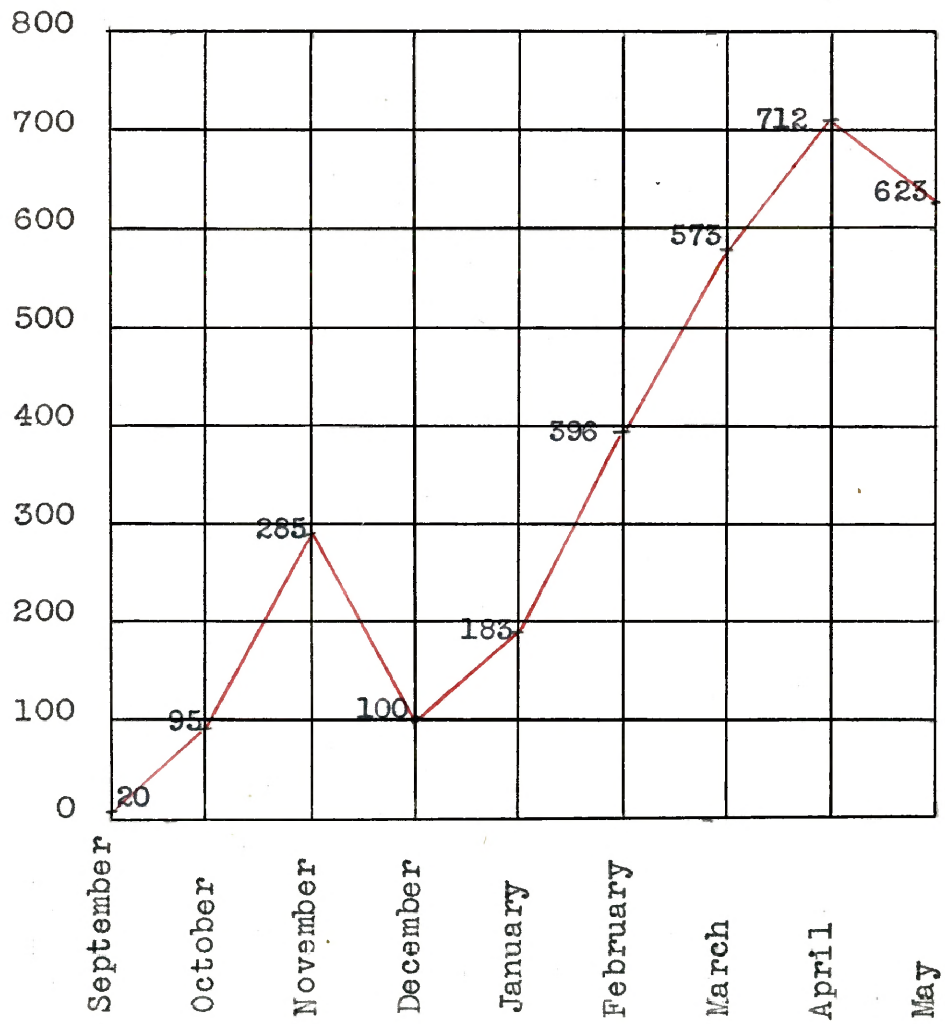


SHOWINGS - ALL SCHOOLS

September 1945 to June 1946

Total showings - 2987

Average per booking - 2.82



during the first year of their use had 2987 showings to a total audience of 159,710 pupils. (See graph page 47) These figures do not include the showings of films which schools may have secured from sources other than the Central Film Library.

The report from the central office shows also the following:

1. Fifteen grade schools own projectors
2. Five grade schools have projectors on order
3. Four grade schools are thinking of buying a projector
4. Thirty-one schools do not intend to buy any equipment

With the establishment of the Central Film Library an actuality, and with projectors available, any teacher in the system wishing to use a film for instruction purposes, may order a film and/or projector for such use. If a film desired is not in the Omaha library, such film may be rented from any of the existing film rental libraries, if the school ordering it will pay the cost of such film.

#### Other film libraries in Omaha

In addition to the films in the central library, there are also a few usable films available in the Omaha area which deserve mention. Those from the Office of Inter-American Affairs are housed at the

University of Omaha, and may be used upon the payment of a fifty cent service charge. Transportation is not included in this fee. The National Dairy Council has a small library of films dealing with nutrition, which they gladly loan to the schools. They will furnish not only the film, but the projector, screen, and operator as well. Thus, any school, whether owning projection equipment or not, may use these films.

REFERENCES TO CHAPTER FIVE

1. Trenholme, Kingsley. In-Service Training in Audio-Visual Aids, See and Hear, March, 1946.

## Chapter Six

### COORDINATION OF THE SCHOOL LIBRARY AND VISUAL AIDS The History of the Program at Druid Hill School (a)

Druid Hill School is a small Omaha school of approximately four hundred pupils, consisting of a kindergarten and nine rooms for the eight elementary grades. In 1944, a central library was established, and since the enrollment was large enough to employ one additional teacher, a full time library teacher was secured. (b)

Children from every room in the building came to the library at least once a week. Those in the upper grades came two or three times each week. What could this library teacher do to enrich the environment of these four hundred boys and girls, in addition to the regular procedure of library science, help in reference work, appreciation of literature and recreational reading? Without a monograph or course of study as a guide, this problem challenged her initiative and resourcefulness.

Obviously, the first thing to do was to discover the needs of the children. It was felt that the

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a. At the request of Walter A. Wittich, Editor, much of this chapter was published in the September, 1945, See and Hear, under the title, "Bringing the Library into the Curriculum."

b. January, 1944.

children needed an opportunity for visualization by pictorial representation, by dramatization of literary selections, or by impersonation of the characters they met during their reading. The further discovery that there was no organized plan for the use of projected visual aids, gave the teacher a starting point, and fortunately one of great interest to her.

Druid Hill had no equipment for projection nor were they using Modern Sound Pictures program. No other teacher had the time or interest to inaugurate a program, so the library teacher, who was very interested, welcomed this opportunity to launch an experiment in coordinating projected aids with the units under study in the various classrooms. Since the principal (a) was keenly aware of the value of such an undertaking, she gladly gave her approval, and helped in planning.

With no projection facilities in the building, it was necessary to secure equipment from outside sources. Mr. Cumming graciously furnished a projector and operator from his office when films were rented from film bureaus. The National Dairy Council served the program by sending film, projector and operator when asked to do so.

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a. Margaret F. O'Brien

During that first spring--1944--several films from the Office of Co-ordinator of Inter-American Affairs were used, as well as a few rented films. "Farm Animals" from the National Dairy Council was used in the second and third grades to supplement their unit on animals. Other films from this same agency were used to aid in health and nutrition units in the intermediate and upper grades.

In the fall of 1944, longer range planning was made, and by closely checking with the classroom teachers on their units in science and the social studies, the library teacher found material to correlate with these. Each teacher planned her own lessons to be used before and after the showing of the films. All films were reshowed after the follow-up activities in the classrooms. Whenever possible, parents were invited to see the films so that they, too, might share the enthusiasm of the teachers and children for this aid to better learning.

Among the films used during this year were the following:

From the Dairy Council  
Farm Animals  
Milk Parade  
America Learns to Fly  
Milk as You Like It

From the Office of Co-Ordinator of Inter-American  
Affairs:

Our Neighbors Down the Road  
Defense Against Invasion  
Winged Scourge

From Other Sources

Pioneers of the Plains  
Navajo Indians  
Butterflies  
Moths  
The Passenger Train  
New England Fisherman  
Sea and Beach Animals  
The House Fly  
Thrushes and Their Relatives

During the summer of 1944, the library teacher attended the Visual Education Institute held at the University of Wisconsin, at Madison, Wisconsin. There she met and was impressed with the skill of Dr. Walter A. Wittich in this field of education. When Mr. Charles Hoff of the University of Omaha was planning the first Iowa-Nebraska Institute on Visual Aids to Teaching, she was very happy to recommend Dr. Wittich for leader of demonstrations.

The teachers of the school were gradually, but consistently, becoming increasingly interested in this tool for more effective teaching. When Dr. Wittich asked for a class from our school for use in a demonstration at the institute, children and teachers alike became aware of the interest this method of teaching could arouse. He used the film, "Pioneers of the Plains" for this demonstration and while there had been no preliminary teaching done in this subject matter



yet it created so much interest that follow-up activities were a natural outcome, and the boys and girls asked for a reshowing.

Closely following the conference at the University of Omaha, and coming at a very opportune time to intensify the interest of teachers in the visual presentation of subject matter, was the week of demonstrations (see Chapter IV) for Omaha teachers conducted by Dr. Walter Wittich. All of the Druid Hill teachers, as well as all other teachers in the system, attended at least one of the sessions, where they learned a great deal about the techniques of film utilization.

Evidence that Druid Hill teachers benefitted greatly from these demonstrations was apparent in the increased use of the film after this week's experience. After seeing "The Teddy Bears' Picnic", the teachers of the kindergarten and the first grade felt they must show it to their children. The following is a record of the presentation of this movie: (a)

Preparation:

Teacher: "What were some of your favorite toys when you were little, before you started to school?"

Child: "Dolls and----"

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a. Mable H. Plummer, teacher

Teacher: "What kind of dolls?"

Child: "Big dolls, little dolls, mamma dolls, baby dolls, rag dolls. My mamma made a doll out of stockings and cotton."

Teacher: "Did you ever have a Raggedy Ann or Raggedy Andy doll?"

Child: "Oh, yes. I had a Raggedy Ann. I've seen a book about Raggedy Andy. It had pictures."

Teacher: "Did you have any other toys made of cloth?"

Child: "A monkey, and I had a dog.--I had a Teddy Bear."

Teacher: "Did you ever take your dolls or cloth boys to bed with you?"

Child: (Many had taken different toys to bed with them.) Wanda took her doll and Teddy bear--I took turns with them sometimes.

Teacher: "One time a man whose name was Teddy Roosevelt went to a country called Australia. He brought back some little furry animals that looked like little bears. They really were Koala Bears but when he got to New York City people said, 'Oh, see Teddy's Dears.' Why do you suppose they said that?"

Child: "Because the man's name was Teddy and they were his bears."

Teacher: "Yes, and so people didn't even bother to call them by their right name--which was--"

Child: "Koala Bears."

Teacher: "But everyone kept on calling them--"

Child: "Teddy Bears."

Teacher: "These bears like to play very much like little children. Their mothers carry them when they are little, too."

Teacher: "And now we are going to see a movie about these Koala Bears. There are some things you should look for in this picture. Will you look to see if their mothers carry them as your mother carried you when you were little,--and will you watch to see how these little bears walk and how they play? If you listen you may hear some of the words in the song about Teddy Bears."

(Showing of "Teddy Bears' Picnic")

Reactions:

Teacher: "How did you like the movie?"

Child: "I liked it fine. It was keen. The Teddy bears were so funny."

Teacher: "Were they really Teddy Bears?"

Child: "No--Koala Bears."

Teacher: "Did the mother carry her babies as your mother carried you when you were little?"

Child: "No, the bear carried the babies on her back--the babies just crawled on and hung on like anything."

Teacher: "Do you know of any real mothers who carry their babies on their backs?"

Child: "Yes, but not like a bear. Indian mothers carry their babies on their backs, but they are in a shawl or something."

(Discussion on the board which Indian mothers used to carry the papoose on.)

Teacher: "How did you like the way the bears played together?"

Child: (No direct response)

Teacher: "Did any little bear pout? Did any one hit or play unfair? Did any little bear tattle? Would you like to see the picture again and see how they played?"

(Everyone wanted to see it again)

Teacher: "When we see the movie again be sure to watch if these little Koala Bears play well together. Did you notice how they walked?"

Child: "Yes, they walked something like a duck."

Teacher: "Waddled!"

Child: "Yes, back and forth--like this. But that was when he walked on two feet. He can walk on four feet like this."

Teacher: "All of you be little bears and walk on four feet. Now on two feet."

(Here, the kindergarten teacher played the music she had picked up from the musical background of the film, and the children walked in rhythm to it.)

Development of speaking vocabulary:

Teacher: "Where did those bears come from?"

Child: "Australia."

Teacher: "What did you say the bears were called?"

Child: "Koala Bears."

Teacher: "What do you call the baby bear?"

Child: "Cub."

Teacher: "What did we call the baby that isn't a bear, that is carried on its mother's back?"

Child: "Papoose."

Teacher: "What did you see these baby bears doing?"

Child: "Climbing and dancing."

Stories used in connection with this picture:

The Three Bears  
The Little White Teddy Bear

Science in connection with this picture:  
Animals that walk on four feet  
Animals that walk on two feet

The following is the evaluation of this unit made by the first grade teacher:<sup>a</sup>

This unit proved to be a delightful experience for the children. It was learning through vicarious experiences.

There was action and fun with new things to think of and talk about.

The rapt, interested expressions as they watched, the anticipation they evinced when they knew they were to see the picture again, proved that it was one to provoke learning.

School programs today tend to extend and enrich the child's understanding of life through well-chosen experiences. In progressive schools the subject matter should be well integrated with worth while activities.

This unit provided opportunity for integration with subject matter, extended the activity program and group interest. It was well worthwhile from the standpoint of concept and vocabulary building.

Not only were the teachers becoming more interested and alert to the possibilities of projected visual materials, but the children were adjusting their attitudes from the idea that each film showing was to be an entertainment, to the idea that it was to be a tool for learning. During the discussion period in a third grade following the showing of "Farm Animals,"

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a. Mabel H. Plummer

one habitue of the corner movie serial said, "That wasn't any good. There wasn't any murder in it." A few months later, after the "Passenger Train" was shown to this same group, the library teacher asked this particular child what she thought of the film. Before the girl could answer, a boy spoke up, "Oh, she probably wanted the train to run off the track and tip over." Thus, the social censure of the group helped to make the transition to the study type film an easy one.

Since interest in this new development at Druid Hill was so keen that the children felt slighted if ignored, at least one film was found to serve a unit being studied by every grade in the building so that none of the children would feel they had been forgotten. Their gratitude was adequately expressed when they often were heard to say, "That's our library teacher. She's the one who shows us pictures."

A second grade was studying about animals that help us, so the film "Farm Animals" was secured and shown after a fine preliminary preparation by a very interested teacher.<sup>a</sup> As a follow-up, the children in this grade pursued their lessons in language arts with mimeographed multiple choice test including such questions as:

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a. Elizabeth Britton

"Cows get up with:

1. back feet first
2. front feet first,"

"The little calf was

1. fifteen days old
2. fifteen minutes old."

"A field horse eats

1. once a day
2. three times a day."

"The horses are

1. given a bath
2. curried and brushed."

"The goat has

1. a trunk
2. a beard."

"Goat babies are called

1. piglets
2. kids."

Other follow-up activities included drill

on reading vocabulary, such as:

grain	horse trough	chewing her cud
field	hoof	frisky
mare	harness	frisking
colt	bridle	triangular part
calf--calves	bit	shearing the sheep

As a spelling lesson, the children made a long list of words used in the film, and then chose fifteen to learn to spell.

In Natural Science, the children made illustrated booklets, and as a culminating experience, they produced an interesting and informative assembly program to which they invited their parents.

The eighth grade <sup>B</sup> was working on the subject of the American Indian and his contribution to our

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a. Lula Pritchard, teacher

present society. The library teacher felt that the film, "The Navajo Indian" might supplement their unit. It was shown the first time before any stress was given to any particular tribe. After this first showing, interest in further elementary research was keen. The pupils investigated the size and location of the present Navajo reservation. They were interested in discovering why the people of this tribe live as they do. The children became absorbed in reading of the quaint customs, especially of the marriage ceremony and the dances. They sought to discover the Navajo contribution to our civilization. A day or so after the first showing two boys brought a crude handloom made of tree branches, someone else brought models of both summer and winter hogans, and one boy, whose interest in school had been very poor, had made a string of beads! Before the week was over, nearly everyone in the room had made either a handloom, a string of beads, or had hammered out a bit of jewelry. Soon the rug weaving fad spread to other rooms in the building, and children could be seen weaving whenever they had spare time. Other Indian souvenirs were brought in, stimulating discussions of the arts and crafts of the various tribes. From a general study of Indians, the interest aroused by this picture directed the attention rather to an intense study of the Navajo compared to other tribes. Subtle implications were aroused in the minds



# ACTIVITIES STIMULATED BY THE FILM, "NAVAJO INDIANS"

Grade Eight

Druid Hill School, 1945



of many of the pupils, as was evidenced by this comment from the written report of one member of the class,<sup>a</sup>

We should not look down on the Indians because they get along on so little. They were taught by Nature to get along on a little. Their small amounts meant more to them than our large amounts do to us. They have always had something to work at.

Finally, the organization of their material for public presentation was so well done, that after several assemblies at school, they were invited to appear before a church group, which they did graciously, making a fine contribution to public relations between the school and the community.

With all this activity in the visual education field, while using borrowed equipment, the interest of the Parent Teacher Association of Druid Hill School became more and more pronounced. Plans were made to finance the purchase of equipment through several money-making activities, such as a Bingo Party for parents and Jitney Lunches for the school children. With the addition of some funds from the proceeds of paper sales conducted by the teachers and children, a projector and screen were ordered in the spring of 1945.

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a. Pat Jacobs' paper for Eighth grade English, "Indians."

VIEWING AN EDUCATIONAL FILM IN THE LIBRARY

Druid Hill School, 1946



With the acquisition of their own equipment, and by the establishment of the Omaha library of films, teachers felt that much of the red tape of securing films and equipment at the time needed had been cut. A small school fund permitted the rental of a few films not available in Omaha and the payment of transportation charges on some free material. Classroom teachers were urged to do their own ordering, consulting with the library teacher for suggestions as to availability and appropriateness of films. Every teacher in the building ordered one or more films for use in her particular situation during 1945-46, while the library teacher constantly sought out materials that could be correlated with each unit of study.

Eight teachers of the staff took instructions in operation of equipment and were designated as approved operators by Mr. Cuming's office.

Children from the second and third grades participated in a demonstration at the second Iowa-Nebraska Visual Education Institute held in October at the University of Omaha. In March, 1946, the second grade teacher <sup>a</sup> gave a demonstration lesson for the Parent Teacher Association, using the colored film, "The Ruby Throated Hummingbird."

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a. Claire Bookmeyer

BOOKINGS AT DRUID HILL  
September 1945 to May 1946

Total - 56  
Average per month - 6.22



### SHOWINGS AT DRUID HILL

September 1945 to May 1946

Total - 158

Average per film - 2.82



From September, 1945, to May 31, 1946, fifty-six films were used in teaching situations at Druid Hill School; an average of 5.6 films per room. Thus, in the opinion of the writer, not too many were used so as to make the medium of the screen in education commonplace, yet there were enough to make for effective teaching.

The question may well be asked, "Will motion pictures in schools make education so easy that children will not develop habits of hard study?" The answer may be found in this statement of Mays (1:160):

The motion picture combines the two great channels of learning--sight and sound--which, enriched by color, music and dramatic effects, present the lessons of school and life with a power and vitality unequalled by any other medium of education.

Or the answer may be found in this statement of a classroom teacher at Druid Hill School: <sup>a</sup>

It might be said the visual education program does much to establish readiness for Reading and Language Arts. Meaning can really be attached to word symbols. The child who does not have a rich home environment is greatly benefitted by seeing the real picture on the screen, and the necessity for field trips and excursions can be obviated.

Or, as another teacher says: <sup>b</sup>

In introducing a unit, the film will arouse the child's curiosity and will give reality to

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a. Elisabeth Britton, Druid Hill School

b. Grace Rhinos, Druid Hill School

the subject. The children can read and read but when they see it, it's different. In a written report of a people, it takes paragraphs and paragraphs to explain the setting, the customs, dress and activities, but the film presents all of these in a much shorter space of time.

Or, as still another teacher writes: <sup>a</sup>

Experiences may be brought to the children through those films which would be impossible or impractical to bring in any other way.

When the opinions of learned psychologists and experienced teachers coincide with those of the pupils themselves, then they may be considered really valuable. Some of the reactions of pupils at Druid Hill follow:

In the last year we had a great many Visual Education films. I think they are a pleasant way to get knowledge. Reading a book is all right but it takes much longer and you can't see what you are reading. By using films a whole class can learn as much about one subject as one pupil can by reading a book. In my opinion, visual education films are a great progress in modern education. <sup>b</sup>

When people think of school they think of books, but now-a-days it's different. When you read about Daniel Boone you just read and don't think. But when a picture of Daniel Boone is shown on the screen you can see it. And the same with birds. You can read about them but you can't see their natural color. With film you can see their natural beauty. Films in the school have helped me a lot. <sup>c</sup>

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a. Jayne Peniston, Central Park School

b. Frank Roberts

c. Gerald Clausen



Movies are very educational if they are the right kind. Most of the school movies we have had in the library have helped me mostly in Social Studies. The bird pictures also are very helpful. It has made me notice birds more than I have ever noticed them before.

The pictures we have seen this semester were very few. I wish we could have seen more than we did.<sup>a</sup>

In our study of the digestive system of the body, most of the help has been through films. In this way we have seen how different organs of the body work. .... The visual education films have helped us to see what we have studied and talked about.<sup>b</sup>

I can see the film here and not go over to some other country to learn about it. Therefore, I can learn about countries I have never seen.<sup>c</sup>

Educational films have helped me because it is much easier to understand things after I have seen them moving and sometimes talking as in real life. Films print pictures on my mind in such a way that I can remember them and go back to them when it becomes necessary.<sup>d</sup>

Thus, it may be seen that psychologists, teachers, and pupils all agree that the use of films will stimulate thinking and learning rather than retard these processes.

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a. Carl Miller

c. Clifford Ballenger

b. Joan Elliott

d. Jack Conner

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## Chapter Seven

### CONCLUSION

#### Summary:

In review we find these significant facts:

1. Many cities have had visual education departments for several years. St. Louis started in 1905, as did Philadelphia, while Chicago has been using teaching films since 1921.
2. Many cities have large departments. St. Louis has now about 2,300 teaching films, Philadelphia has approximately 800 sound and 700 silent films, Chicago has 7,000 sound and 3,000 silent prints, Kansas City owns 567 sound and 1,448 silent reels, while Sioux City, Iowa, with a school enrollment of 7,516, has 250 films in its library.
3. Audio-visual institutes and conferences are giving impetus to the use of these aids to education.
4. The beginnings of the movement in the Omaha Public Schools were made through the use of the programs of a commercial company, i. e., The Modern Sound Picture Co. Inc.
5. The first visual education committee in Omaha was formed in 1939, but no appreciable effects came from this committee's efforts.
6. The first Iowa-Nebraska Audio-Visual Institute held at Omaha University was a stimulus to the idea of a definite program in the Omaha Public Schools.

7. The demonstrations for the Omaha teachers by Dr. Wittich from Madison, Wisconsin, gave them invaluable in-service training in the use of audio-visual materials.
8. The second annual visual education committee performed a valuable service to the school system in evaluating and selecting the first films for the central film library.
9. The second annual Iowa-Nebraska Audio-Visual Institute sponsored by the University of Omaha, supplemented the influence of the first institute by its increased enrollment, which totalled 1,028.
10. The central film library contained at the end of the 1945-46 school year, thirty-three films owned outright and eighty-six leased. Fourteen projectors were owned by the library, which were located in zones throughout the system; fifteen grade schools had projectors of their own and five grade schools had ordered projectors.
11. From September, 1945 to June 3, 1946, there had been 1,057 bookings of films, which through 2,987 showings had had a total audience of 159,710 pupils.
12. Druid Hill School inaugurated its own visual education program through the use of films in 1944, and increased the number in use each year. Fifty-six films were shown 158 times between September 1945 and June 1946.

#### Suggestions for further study

Now that a library of films and a few projectors have been procured, so that any school so minded, may develop and carry on a program using visual aids, further investigations as to the educational value of these aids could be made.

1. The effectiveness of the use of films in teaching in specific subject matter areas in Omaha, could be determined in much the same manner as Miss Jales has done in Biology in South High School.
2. A comparison of teaching with and without films might be made with children of low intelligence quotients and/or poor reading abilities.
3. A study of the effects of a visual aids program on the behavior patterns of pupils would be interesting and profitable.
4. Since the visual education program in Omaha is so newly born and no separate department has yet been established, some interested student could well trace the further development and administration of the program.
5. Since this study has been limited to the development of the program in the elementary schools, and since the high schools do have their own programs of visual instruction, an interesting and profitable project would be the tracing of the history of the use of visual aids in those secondary schools.

Recommendations for the Administration of the program:

1. There should be a definite, generous appropriation for this program. The president of the Omaha Board of Education suggested at a meeting of the Omaha Real Estate Board, January 30, 1946, that the visual education program in Omaha should be enlarged, spending possibly \$20,000 in the next two years. If this suggestion were followed, Omaha could well compare with other cities in the amount spent in this area of instruction. Chicago appropriates forty-five cents per year per pupil, or a total of \$131,860.00. Were Omaha to spend the same amount (forty-five cents per pupil), the appropriation for

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a. William Kunold

the elementary schools would be approximately \$9,729.90<sup>a</sup> for the year. L. C. Larson (1:311 and 327) from Indiana University, advises for a well-rounded program, an annual budget of approximately \$150.00 per elementary teacher; but, he says, that in his opinion, unless schools receive additional financial support, it will be difficult to reach even an annual budget of thirty dollars per teacher, the amount suggested by some leaders.<sup>b</sup>

2. Omaha should create a separate department of Visual Education with a full-time director at the head.

No program of audio-visual aids can be developed on a sound and continuing basis without a competent supervisor or director. Upon him will fall the problems of administration and supervision, and they are many. They should not be left to the mercies of some overworked assistant, superintendent, or principal as a part-time venture. . . . . No matter how small the organization, someone must assume responsibility for the work if it is to be effective. Too often, superintendents pass this item off lightly, thinking that a program of audio-visual aids consists merely of obtaining materials and making them available. A department based on this philosophy is bound to fail. . . . . Too many good ideas died in infancy because they didn't get the proper bringing up. A newly born audio-visual department is no exception. (2:18)

This full-time director could coordinate visual aids with the material in the existing

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a. Omaha elementary schools' enrollment, 21,622, April 1946.

b. 644 elementary teachers in Omaha. At thirty-dollars per teacher, the budget for elementary schools would be \$19,320.00.

or future courses of study in all of the subjects matter areas; he, or she, could initiate procedures for training personnel in the use of visual aids; he could pass on to teachers a vision of what such aids can do to vitalize the techniques of instruction

3. Whether Omaha appoints a full-time director of visual aids or not, some more convenient system of distribution of films and/or equipment should be evolved. As it is, ordering films from an out-of-town rental agency, with delivery to the school door, by mail or express, is more convenient for the teacher than going to the Joslyn Castle to pick up films. Pick-up of equipment is likewise inconvenient.

Most large city systems have a delivery plan, whereby films and/or equipment are delivered on certain days to certain buildings. Kansas City has a messenger who makes a circuit of about twenty schools a day for five days, picking up the films delivered the week before and delivering the materials ordered for the following week. Des Moines reports that teachers telephone for reservations, which are then delivered by a man and light truck employed for that purpose. Topeka, Kansas distributes their films and equipment by a truck which delivers other school supplies. Sioux City, before the war employed a man to distribute the films and equipment. They plan, as soon as possible, to again employ someone to give full time to the distribution of all visual aids, films, maps, film strips, slides, etc.

Omaha, then, could employ some means of distribution which would eliminate the necessity of sending a messenger, either teacher or pupil, to the library at the Joslyn Castle to pick up the materials, and which would make the projectors which are owned, more easily accessible to the schools wanting them.



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A P P E N D I X

(Copy of letter sent to other cities)

Omaha, Nebr.  
July 4, 1945.

Dear Sir:-

In writing a thesis dealing with visual education, I find that I would like a few facts and figures from neighboring cities and towns. If you are not divulging any confidential information, would you kindly answer these questions?

What is your department of visual education called?

Who is the head of this department?

What position did he hold before assuming the duties of this office?

How many schools in your system?

What is your elementary enrollment?

What is your high school enrollment?

How many projectors for elementary schools?

How many for high schools?

How many films in your film library?

How do you distribute films and/or equipment?

Thanking you very much, I am

Sincerely yours,

Ruth A. Hamilton



MODERN SOUND PICTURES, INC.  
1219 Farnam Street Omaha, Nebraska  
Telephone At. 8477

September 11, 1944

Dear Principal:

Attached hereto you will find a complete list of the six educational movies scheduled for the Omaha and Council Bluffs schools for the first semester 1944-45 season.

The price per program for your school is \$27.00 for six programs.

We expect to start our programs the week of Sept. 25th. Our office will contact you within the next several days to make definite arrangements as to the most convenient time for your school.

Each subject has been carefully selected for educational content and we feel quite sure that every program will meet with your approval.

Yours very truly,  
MODERN SOUND PICTURES INC.

EDUCATIONAL MOVIES - FIRST SEMESTER - 1942-3  
(Running time on all programs  
is approximately thirty minutes)

Program No. 1

The Day is New. A day in the life of an average Mexican family. Pictures the varied activities - work, play, etc., from dawn to night.

Birds of Canada. A fine presentation of the birds found in the country of our northern neighbor - many of which migrate to the United States.

Ring of Steel. This patriotic film shows scenes of battle grounds famous in American history and indicates the part the American soldier has played in the growth of the nation - Pictures American soldiers, as they were in the past, and as they are now, carrying on the traditions of past accomplishment.

Program No. 2

The Story of the Mountains. Formation of volcanoes and how they change the earth's surface. Two boys and an Indian guide penetrate the mountains to study animal life and capture a mountain lion cub. The scene changes to the Swiss Alps, revealing the kind of people and the industries engendered by the mountains. The attempt of the Bruce Expedition to scale Mt. Everest closes the film.

Old Mother Hubbard - A cartoon fantasy on the old tale showing Mother Hubbard, the dog, the empty cupboard, and what was done to fill it.

Program No. 3

First Aid - Shows what to do in all sort of emergencies - care of the victim - bandaging, handling, etc. What to avoid.

For Health and Happiness - Shows the importance of good nutrition on health and happiness. Shows scenes of children from infancy to youth, and the food groups that contribute to well rounded development.

Pioneers of the Plains - The men and women who made the west - How they came, what they faced - The story of their accomplishments - The thing we enjoy today because of hardy pioneers.

Program No. 4

Three Little Kittens (Erpi Film, Primary)  
While these little kittens put on no mittens, they do capture the interest of all who follow them through their interesting experiences. Discovered in the barn with their mother, by the farmer's wife, they provide an opportunity for learning about the characteristics of cats in general. When about two weeks old the kittens are carried by their mother to a new home in an old buggy, where they learn to feed, clean themselves, and play. Later they have a skirmish with a dog and learn to catch mice. Finally two of the kittens are given to a local tradesman by the farmer's wife.

Giants of the North (Bray film, elementary)  
This film shows some of the huge animals of Alaska and how the pictures of them are made. Whales spouting and leaping from the smooth waters of Glacier Bay; salmon leaping up a waterfall to the stream above; brown bears emerging from the forest to feed on salmon in the streams. An excellent film study of the habits of wild animals.

The Story of Our Flag. An inspiring dramatization; traces the history and evolution of the flag of the present time. Historic incidents, related to the flag, are dramatized. Tells of the proper use and display of the flag, and some of the common abuses.

Program No. 5

An Airplane Trip (Erpi Film, Primary). In a modern airlines a mother and her young daughter take a journey. On arrival at the airport the hangar is inspected, and servicing operations on different parts of the plane are observed. After the plane is loaded with mail and express the passengers take their places, safety belts are adjusted and the plane takes off. Enroute the instruments and the operation of the plane are simply explained. Picturesque views of earth and clouds are shown. The Stewardess serves a meal and makes up the sleeping berths. A weather report, via telephone, is received by the pilot and plane lands at dusk.

Manhattan Waterfront. A visit to New York's waterfront, where mile after mile of docks bound one of the greatest and busiest harbors in the world. Where more than ten thousand ships of all kinds and sizes, enter and leave each year. Gigantic ocean greyhounds are seen coming to anchor, after a long ocean voyage. Great freighters are seen unloading produce from all parts of the world.

Mount Vernon. A film visit to the most revered historic shrine in America. On the shores of the Potomac lies the estate of George Washington; a place of quiet beauty and center of historic interest. In this picture the old mansion filled with articles--furnishings, pictures, etc., of Washington's time, many of them his own, is opened to the eyes of the audience. The other buildings of the estate, the historic boat landing and the tomb, are seen in the film.

Program No. 6:

The Goat Family. (Erpi Primary Film) Portrays intimately the life of goats and kids on a goat farm. The care of the goats, and milking, are clearly explained. The goat kids are followed from birth to the time they are about two months old, in play and in mischief. Old Billy Goat has been taught to pull a wagon. Johnny drives Billy to deliver milk to the village. Film content relates to oral and written language, nature study, elementary science, social studies and geography.

The Wheat Farmer (Erpi Elementary Film)  
The object of this film is to portray the life of a wheat farmer and his family in a typical mid-western area, and to point out the importance of their products to our everyday existence. Preparing the soil and planting winter wheat are treated in detail, along with the other farm tasks--milking, cooking, and general repair work. The brother and sister attend a 4-H Club meeting, where the brother reports on the progress of his strawberry raising project. When the wheat is ripe, father and son, assisted by a neighbor, and a hired man, operate a modern combine. Mother and daughter help by preparing food for the harvesting crew. The wheat is loaded into trucks from the combine and hauled to town for shipment to the flour mill.

The Saar. A visit to that great industrial area in Germany that is so vital to National security. The great mines, manufacturing plants, with their thousands of workers, and many of the manufactured products are seen in this film. The mode of life, homes, etc., are shown.

# PROGRAM

THE IOWA-NEBRASKA

## INSTITUTE ON AUDIO-VISUAL AIDS TO TEACHING

The Municipal University of Omaha  
Omaha, Nebraska

THURSDAY - OCT. 12, 1944

### SPECIAL EXECUTIVES' CONFERENCE

Emphasis on matters of specific interest to governing boards and executives of colleges, public schools, private schools, industry, and churches as well as community leaders. While this day's program is labeled "executives' conference," teachers and the general public are invited, and are welcome to attend.

Modern equipment exhibits - Leading National Items.

FRIDAY - OCT. 13, 1944

### TEACHING DEMONSTRATIONS

For teachers, supervisors, librarians, equipment-maintenance personnel and purchasing agents of colleges, high schools, elementary schools and all other educational and training institutions; Methods of preparation, techniques of presentation, follow-up; finding and evaluating film, slides and other material; finding and evaluating equipment.

Modern equipment exhibits (available and otherwise).

SATURDAY - OCT. 14, 1944

### TEACHING DEMONSTRATIONS

Continuation of Friday demonstrations: for college, high school, and elementary age groups.

Closing with panel summarizing results of the three-day institute.

Modern equipment exhibits at all hours - three days.

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REGISTRATION FEE \$1.00 PER PERSON FOR ANY OR ALL SESSIONS

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THE IOWA-NEBRASKA  
INSTITUTE ON AUDIO-VISUAL AIDS TO TEACHING

EXTRA FEATURES

NATIONAL-FIRM EQUIPMENT EXHIBITS

Representatives of equipment firms will be present at their booths in the Library, room 202, throughout the three days of the Audio-Visual Institute (October 12, 13, and 14) for personal interviews with purchasing agents and equipment operators. The latter may receive instruction in operation techniques or obtain information about the care of machines. Demonstration of machines and projection equipment will take place in rooms 203, 207 and 209.

GUEST SPEAKERS, FACULTY MEMBERS, AND COUNSELORS AVAILABLE  
FOR PERSONAL AND PRIVATE CONFERENCES

A separate conference desk will be provided for each of these out-of-town guests at accessible locations so that any who wish to discuss special problems with them may do so during intermissions.

GOVERNMENTAL AGENCIES

Representatives of the offices of the Coordinator of Inter-American Affairs, The British Information Service and the Canadian Film Service will have exhibits in the exhibit hall. They will also have a continuous showing of various types of film in room 102.

UNIVERSITY OF OMAHA AIDS

The following departments of the University of Omaha will arrange special demonstrations of their teaching or testing equipment on half-day notice at any time during the three days, when groups of fifteen or more can be scheduled at a time. If interested in seeing these departmental equipment aids please arrange for same at the registration desk immediately upon arrival:

Child Testing Service, Psychology Department

Special observation laboratory -- Dr. Thompson and Miss Edwards

Reading Improvement Laboratory

Equipment for recording the eye movements on film; another which provides drills for developing speed and comprehension; another for projecting other aids on screens; and several other types of interesting equipment -- Miss Wood and Mrs. Wolfe

The University Library

Recordak Projector -- for private reading of microfilm

Copies of complete volumes of rare and unobtainable books -- on microfilm

Also microfilm copies of "Omaha Bee" daily newspaper back to its beginning -- Miss Lord

The Dean's Testing Service

Special IBM equipment for grading examination papers and scoring many special aptitude and other tests given in the Dean of Students' Office -- Dean Lucas and Miss Minter

Student Health Department

Maico Audiometer -- a means of quickly determining if student-hearing difficulties exist. This is not a treatment machine nor a diagnostic apparatus, except to determine if there is a deficiency in hearing -- Dr. Anderson, M. D. and Mrs. Nuernberger, R. N.

Report of the Institute Summary Panel  
of the  
Iowa-Nebraska Audio-Visual Aids Institute.

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The University of Omaha  
Saturday, October 14, 1944

The following recommendations were formulated by the Institute Summary Panel and they reflect the reports made by the contributors to the Institute program. These recommendations were presented to those attending the final session of the Institute.

RECOMMENDATIONS

1. Teacher-training institutions and school systems should provide in their programs of pre-service and in-service education much needed training and experience in the use of the so-called audio and visual aids.
2. The State Department of Public Instruction should initiate a vigorous program of promoting the use of audio and visual aids in the schools of Nebraska, including a F. M. Radio network; and the legislature should make a suitable appropriation for this service.
3. Companies now engaged in the production of audio and visual aids for use in schools should have their programs directed by competent educators in an effort to guarantee to schools an effective instructional device.
4. Superintendents of schools should stress to their respective boards of education the need for audio and visual aids and recommend that an adequate amount of the school budget be set aside for the purchase and up-keep of such instructional aids and for equipping teachers to use these aids.
5. Teachers should select or make the audio and visual aids which will help them do the most effective job of teaching, both within and without the classroom.



6. Audio and visual aids in any school system should be readily available to teachers and the responsibility for having these aids used should be placed with an interested individual or a committee of educators in the school.

7. The University of Omaha should sponsor a second audio and visual aids institute next year. Other universities and colleges should also provide such institutes.

#### INSTITUTE SUMMARY PANEL

1. Dr. Frank Sorenson, Director of curriculum and supervision, Office of the Nebraska State Superintendent of Public Instruction
2. Dr. K. O. Broady, Director of university extension and chairman, committee on visual education, University of Nebraska
3. Miss Belle Ryan, Assistant superintendent of schools, Omaha
4. Mr. E. M. Hosman, Director of adult education and the summer sessions, University of Omaha
5. Dr. C. L. Crawford, superintendent of schools, Council Bluffs
6. Mr. John Hamilton, British Information Service.

**SURVEY OF BUILDING EQUIPMENT  
FOR MOTION PICTURE AND SLIDE PROJECTION**

Omaha Public Schools

March 1944

1. Is your auditorium equipped with:

Dark Curtains

\_\_\_\_\_

Electric outlets for projectors

\_\_\_\_\_

Booth

\_\_\_\_\_

Other

\_\_\_\_\_

No auditorium

\_\_\_\_\_

2. Number of classrooms equipped with dark  
curtains

\_\_\_\_\_

Number of classrooms equipped with  
outlets

\_\_\_\_\_

3. What provision should be made in  
your building in order to provide  
for the use of films and slides?

Indicate which room should be equipped.

## SUMMARY OF EQUIPMENT SURVEY

### 1. Schools with:

#### Auditorium

Dark curtains	38
---------------	----

Outlets	34
---------	----

### 2. Classroom (at least one)

Dark curtains	10
---------------	----

Outlets	37
---------	----

### 3. Schools asking for:

Dark curtains	29
---------------	----

Outlets	14
---------	----

Screens	3
---------	---

OMAHA PUBLIC SCHOOLS

EVALUATION SHEET FOR SELECTION OF FILMS

Title of Film \_\_\_\_\_ Rated by \_\_\_\_\_

1. In what areas of instruction would you consider this film valuable enough to use?

2. Will you check the grade levels at which this film would be suitable for use in the course of study.

3. Will you check the grade levels at which the commentary of this film would be understandable to children.

4. Does the film stimulate thinking and socially useful discussion leading to further learning? At what grade levels especially?

Answers		Comments
Language Arts _____		
Social Studies _____		
Natural Science _____		
Physical Science _____		
Mathematics _____		
Kdg _____ 1 _____ 2 _____		
3 _____ 4 _____ 5 _____		
6 _____ 7 _____ 8 _____		
High School _____		
Kdg _____ 1 _____ 2 _____		
3 _____ 4 _____ 5 _____		
6 _____ 7 _____ 8 _____		
High School _____		
Yes _____ No _____		
Kdg _____ 1 _____ 2 _____		
3 _____ 4 _____ 5 _____		
6 _____ 7 _____ 8 _____		
High School _____		



CATALOG OF FILMS AVAILABLE

IN

OMAHA PUBLIC SCHOOLS  
CENTRAL FILM LIBRARY

3902 Davenport Street  
Omaha 3, Nebraska

Department of Visual Education

## INDEX

	<u>Page</u>
Correlation of Films With the School Program . . . . .	1-8
THE SOCIAL STUDIES .. . . .	1-3
<u>Primary Grades</u> . . . . .	1
Stories About Children . . . . .	1
Travel and Transportation . . . . .	1
The Community . . . . .	1
The Farm . . . . .	1
Animals and Pets . . . . .	1
<u>Intermediate Grades Social Studies or Geography</u> . . . . .	2
How Our Country Grew . . . . .	2
Americans at Work . . . . .	2
Eastern States . . . . .	2
Western States . . . . .	2
U. S. Possessions . . . . .	2
Western Hemisphere Neighbors . . . . .	2
Canada . . . . .	2
Latin America . . . . .	2
World Neighbors . . . . .	2
Europe . . . . .	2
Asia . . . . .	2
Our Community . . . . .	2
Housing and Feeding Our People . . . . .	2
<u>Upper Elementary and High School Social Studies</u> . . . . .	2-3
American History . . . . .	2
Growth of American Civilization . . . . .	2
Problems of Democracy . . . . .	3
Of Our Growing America . . . . .	3
Of Our Industrial Civilization . . . . .	3
Inter Cultural Relations . . . . .	3
Community Civics . . . . .	3
Services to the Community . . . . .	3
Community Responsibilities . . . . .	3
Sociology . . . . .	3
Community Living . . . . .	3
People and Their Environments . . . . .	3

	<u>Page:</u>
Economics . . . . .	3
Production and Technology . . . . .	3
Exchange of Goods in the Americas . . . . .	3
Commercial Geography . . . . .	3
Geography of Productive Resources and Trade . . . . .	3
 NATURAL SCIENCES . . . . .	 3-8
<u>Primary Grade Sciences</u> . . . . .	3
<u>Intermediate Grade Sciences</u> . . . . .	4
General Science . . . . .	4
Our Changing Earth . . . . .	4
Structure and Development of Plants . . . . .	4
Birds . . . . .	4
Insects and Their Ways . . . . .	4
Water Animals . . . . .	4
Farm Animals . . . . .	4
Reproduction . . . . .	4
Adaptations and Habitats of Living Things . . . . .	4
Bird Migration . . . . .	4
Energy and Its Control . . . . .	4
Science in Everyday Life . . . . .	4
<u>Upper Elementary School General Sciences</u> . . . . .	5-6
Biological . . . . .	5
World of Plants . . . . .	5
World of Animals . . . . .	5
Reproduction of Living Things . . . . .	5
Life Histories of Plants and Animals . . . . .	5
Body Functions . . . . .	5
Care of Our Bodies . . . . .	5
Communicable Diseases . . . . .	5
Physical . . . . .	6
Electrical Energy . . . . .	6
Heat Energy . . . . .	6
Sound Energy . . . . .	6
Light Energy . . . . .	6
Energy at Work . . . . .	6



Page

Transportation and Communications . . . . . 6  
 Characteristics of Matter . . . . . 6  
 Chemical Change . . . . . 6  
 Earth Science . . . . . 6  
 Astronomy . . . . . 6

High School Sciences . . . . . 6-8

General Biology . . . . . 6-7  
     Living Things and Their Environment . . . . . 6-7  
     Plant Life . . . . . 7  
     Animal Life . . . . . 7  
     Man--Health and Disease . . . . . 7  
 Physics . . . . . 7-8  
     Energy and Its Control . . . . . 7  
     Technology . . . . . 8  
     Aeronautics . . . . . 8  
 Chemistry . . . . . 8  
     Nature of Chemical Change . . . . . 8  
     Chemistry in Living Things . . . . . 8  
     Technology in Home and Industry . . . . . 8  
 Home Economics . . . . . 8

OUTLINES OF FILM CONTENT

	<u>Page</u>		<u>Page</u>
Adventures of Bunny Rabbit . . . . .	17	Early Settlers of New England . . . . .	18
Airplane Changes World Map . . . . .	19	Earth in Motion . . . . .	11
Airplane Trip, An . . . . .	18	Elephants . . . . .	17
Alaska . . . . .	18	Electrochemistry . . . . .	11
Animals of the Zoo . . . . .	17	Electrodynamics . . . . .	9
Beach and Sea Animals . . . . .	14	Electrons . . . . .	9
Birds of Prey . . . . .	14	Electrostatics . . . . .	9
Black Bear Twins . . . . .	17	Energy and Its Transformations . . . . .	9
Boats . . . . .	19	Endocrine Glands . . . . .	12
Body Defenses Against Disease . . . . .	12	Eskimo Children . . . . .	20
Butterflies . . . . .	15	Exploring the Universe . . . . .	11
Catalysis . . . . .	10	Eyes and Their Care . . . . .	13
Children of China . . . . .	19	Fireman . . . . .	20
Children of Holland . . . . .	20	Flatboatmen of the Frontier . . . . .	18
Children of Switzerland . . . . .	20	Flowers at Work . . . . .	16
Colloids . . . . .	11	Foods and Nutrition . . . . .	13
Colonial Children . . . . .	20	French Canadian Children . . . . .	20
Control of Body Temperature . . . . .	12	Fungus Plants . . . . .	16
Digestion of Foods . . . . .	12	Fuels and Heat . . . . .	11
Distributing Heat Energy . . . . .	11	Fundamentals of Acoustics . . . . .	9

	<u>Page</u>		<u>Page</u>
Fundamentals of Diet . . . . .	14	Pond Insects . . . . .	15
Goats . . . . .	17	Poultry on the Farm . . . . .	17
Gray Squirrel . . . . .	17	Primary Cell . . . . .	9
Heart and Circulation . . . . .	13	Principles of Baking . . . . .	14
Heredity . . . . .	13	Principles of Cooking . . . . .	14
Home Electrical Appliances . . . . .	12	Problems of Flight . . . . .	10
House Fly . . . . .	15	Receiving Radio Messages . . . . .	10
Kentucky Pioneers . . . . .	18	Reproduction Among Mammals . . . . .	14
Leaves . . . . .	16	Robin Redbreast . . . . .	18
Life in Old Louisiana . . . . .	19	Roots of Plants . . . . .	16
Light Waves and Their Uses . . . . .	9	Seed Dispersal . . . . .	16
Mechanisms of Breathing . . . . .	13	Shelter . . . . .	18
Mexican Children . . . . .	20	Simple Machines . . . . .	12
Moths . . . . .	15	Solar Family . . . . .	12
Molecular Theory of Matter . . . . .	11	Sound Waves and Their Sources . . . . .	10
Navajo Children . . . . .	21	Spiders . . . . .	15
Nervous System . . . . .	13	Theory of Flight . . . . .	10
Passenger Train . . . . .	21	Thermodynamics . . . . .	10
Pioneers of the Plains . . . . .	19	Tiny Water Animals . . . . .	15
Plant Growth . . . . .	16	Thrushes and Their Relatives . . . . .	15
Planter of Colonial Virginia . . . . .	19	Vacuum Tubes in Radio . . . . .	10
Policeman, The . . . . .	21	Westward Movement . . . . .	19
		Work of the Kidneys . . . . .	13

CHRONICLES OF AMERICAN PHOTOPLAYS  
(silent)

	<u>Page</u>
Alexander Hamilton . . . . .	24
Columbus . . . . .	22
Daniel Boone . . . . .	24
Declaration of Independence, The . . . . .	23
Dixie . . . . .	25
Eve of the Revolution, The . . . . .	23
Frontier Woman, The . . . . .	24
Gateway to the West, The . . . . .	23
Jamestown . . . . .	22
Peter Stuyvesant . . . . .	22
Pilgrims, The . . . . .	22
Puritans, The . . . . .	22
Vincennes . . . . .	24
Wolfe and Montcalm . . . . .	23
Yorktown . . . . .	23

## CORRELATION OF FILMS WITH THE SCHOOL PROGRAM

The following material is offered as suggesting possible uses in the school program for the films now in the Central Film Library

It is taken from material provided by Encyclopaedia Britannica Films and is in no way intended as a final or authoritative guide to the use of the films.

Further study by committees and the experiences of the teachers themselves in the use of this material will provide for revisions of this material which will make it more useful.

It should be emphasized that in no case should the teacher use a film that she is not familiar with from actually previewing it. Study guides are available for most of the films and will be sent with the film, but even these do not substitute for the preview in acquainting the teacher with the contents of the film and its application to her specific situation.

### THE SOCIAL STUDIES

#### Primary Grades

The films designed for use in the primary grades are broad in scope of subjects. They cover, principally, the social studies program, with some that contain elements of introductory science and technology. However, all primary grade films may be used effectively to motivate reading, to develop vocabulary, and stimulate expression in the arts, including written and oral language.

<u>Units or Areas</u>	<u>Films</u>
Stories about Children	French-Canadian Children Children of Switzerland Mexican Children Navajo Children Eskimo Children Colonial Children Children of China Children of Holland
Travel and Transportation	Passenger Train Airplane Trip Boats
The Community	Fireman Policeman
The Farm	Poultry on the Farm Goats
Animals and Pets	Adventures of Bunny Rabbit Animals of the Zoo Black Bear Twins Elephants Gray Squirrel Robin Redbreast

## Intermediate Grades Social Studies or Geography

Social studies in the intermediate grades usually include studies of concepts and generalizations similar to those suggested in the outline below. The film correlations indicate the subject matter of the films, and their relationships to the units of study.

### Units or Areas

### Films

How Our Country Grew

Early Settlers of New England  
Planter of Colonial Virginia  
Flatboatmen of the Frontier  
Kentucky Pioneers  
Colonial Children  
Life in Old Louisiana  
Pioneers of the Plains

Americans at Work

Eastern States

Boats  
Passenger Train

Western States

Airplane Trip

U. S. Possessions

Eskimo Children  
Alaska

Western Hemisphere Neighbors

Canada

French-Canadian Children

Latin America

Mexican Children

World Neighbors

Europe

Children of Switzerland  
Children of Holland

Asia

Children of China

Our Community

Fireman  
Policeman

Housing and Feeding Our People

Fundamentals of Diet  
Shelter

## Upper Elementary and High School Social Studies

Teachers of upper elementary and high school social studies and related studies will find in the following correlation outline, films that provide motivating and learning experiences for a wide range of subjects. The principal subject matter topics indicate the specific courses with which the films are correlated. The sub-topics suggest typical units or areas commonly included in these courses.

### Subjects

### Films

American History

Growth of American Civilization

Early Settlers of New England  
Planter of Colonial Virginia  
Flatboatmen of the Frontier  
Pioneers of the Plains  
Life in Old Louisiana  
Kentucky Pioneers  
Westward Movement

## Problems of Democracy

Of Our Growing America

Westward Movement

Of Our Industrial Civilization

Shelter

## Inter Cultural Relations

Alaska

## Community Civics

Services to the Community

Fireman  
Policeman

Community Responsibilities

Early Settlers of New England

## Sociology

Community Living

Shelter

People and Their Environments

Pioneers of the Plains  
Kentucky Pioneers

## Economics

Production and Technology

Airplane Changes Our World Map

Exchange of Goods in the Americas

Alaska

## Commercial Geography

Geography of Productive Resources  
and TradeAirplane Changes Our World Map  
Alaska

## NATURAL SCIENCES

## Primary Grade Sciences

Several films in the area of science have been produced specifically for the primary grades. This group may be considered to include the kindergarten and the first three grades.

Black Bear Twins  
Robin Redbreast  
Gray Squirrel  
Goats

Elephants  
Poultry on the Farm  
Animals of the Zoo  
Adventures of Bunny Rabbit

Certain other films produced specifically for primary grades social studies may be used to introduce science and technology.

Passenger Train  
Airplane Trip

Boats  
Fireman

Certain other films produced specifically for the intermediate grades may be of value in the primary grades, especially in the second and third grades. In these grades consideration should be given to the possibility of running the film without sound with the teacher supplying the commentary.

Thrushes and Relatives  
Birds of Prey  
Butterflies  
Spiders  
Moths

Leaves  
Sunfish  
Plant Growth  
Fungus Plants  
Seed Dispersal

## Intermediate Grade Sciences

There are many films available for integration with science classroom work in the intermediate grades. For ready reference, common units or study topics have been indicated together with related films. Some of the animal stories designed specifically for the primary grades have been included.

<u>Units or Areas</u>	<u>Films</u>
General Science	
Our Changing Earth	The Solar Family The Earth in Motion
Structure and Development of Plants	Flowers at Work Roots of Plants Seed Dispersal Fungus Plants Plant Growth Leaves
Birds	Thrushes and Relatives Birds of Prey
Insects and Their Ways	Pond Insects Butterflies Housefly Moths Spiders
Water Animals	Beach and Sea Animals Tiny Water Animals Pond Insects
Farm Animals	Goats
Reproduction	Robin Redbreast Flowers at Work Seed Dispersal Gray Squirrel Spiders Butterflies
Adaptations and Habitats of Living Things	Seed Dispersal Butterflies Birds of Prey Plant Growth
Bird Migration	Birds of Prey Spiders
Energy and Its Control	Home Electrical Appliances Distributing Heat Energy Electrostatics Fuels and Heat Simple Machines
Science in Everyday Life	Airplane Changes Our World Map Shelter Fundamentals of Diet

## Upper Elementary School General Sciences

Units or AreasFilms

## Biological

World of Plants

Flowers at Work  
 Roots of Plants  
 Seed Dispersal  
 Fungus Plants  
 Plant Growth  
 Leaves

World of Animals

Reproduction Among Mammals  
 Thrushes and Relatives  
 Beach and Sea Animals  
 Tiny Water Animals  
 Birds of Prey  
 Pond Insects  
 Moths  
 Spiders  
 Housefly  
 Heredity

Reproduction of Living Things

Reproduction Among Mammals  
 Tiny Water Animals  
 Endocrine Glands  
 Flowers at Work  
 Seed Dispersal  
 Moths  
 Spiders  
 Fungus Plants  
 Heredity

Life Histories of Plants  
and Animals

Fungus Plants  
 Plant Growth  
 Pond Insects  
 Butterflies  
 Moths  
 Housefly

Body Functions

Control of Body Temperature  
 Mechanisms of Breathing  
 Heart and Circulation  
 Foods and Nutrition  
 Nervous System  
 Endocrine Glands  
 Digestion of Foods  
 Work of the Kidneys

Care of Our Bodies

The Eyes and Their Care  
 Fundamentals of Diet  
 Foods and Nutrition

Communicable Diseases

Body Defenses Against Disease  
 Housefly

## Physical

Electrical Energy	Home Electrical Appliances Receiving Radio Messages Electrons Electrostatics Primary Cell Vacuum Tubes Electrodynamics Electrochemistry
Heat Energy	Energy and Its Transformations Distributing Heat Energy Fuels and Heat Thermodynamics
Sound Energy	Sound Waves and Their Sources Fundamentals of Acoustics Receiving Radio Messages
Light Energy	Light Waves and Their Uses Solar Family Leaves
Energy at Work	Energy and Its Transformations Home Electrical Appliances Simple Machines Fuels and Heat Thermodynamics
Transportation and Communications	Airplane Changes Our World Map Receiving Radio Messages Sending Radio Messages Sound Waves Vacuum Tube Thermodynamics
Characteristics of Matter	Molecular Theory of Matter Colloids Electrons
Chemical Change	Leaves Catalysis Fuels and Heat Electrochemistry
Earth Science	Airplane Changes Our World Map
Astronomy	Exploring the Universe Earth in Motion Solar Family

## High School Sciences

The sequences of high school science courses are developed largely from the Biological and Physical Sciences. Films for Home Economics are also included in this section. The General Biology courses usually are divided into specific units or areas of study, with which the following outline is designed to correlate.

Units or AreasFilms

## General Biology

Living Things and  
Their Environment

Beach and Sea Animals  
Tiny Water Animals  
Flowers at Work



General Biology (con't)

Living Things and  
Their Environment

Roots of Plants  
Seed Dispersal  
Birds of Prey  
Fungus Plants  
Pond Insects  
Plant Growth  
Moths  
Leaves  
Spiders  
Housefly  
Butterflies

Plant Life

Flowers at Work  
Roots of Plants  
Seed Dispersal  
Leaves  
Plant Growth

Animal Life

Reproduction Among Mammals  
Beach and Sea Animals  
Tiny Water Animals  
Birds of Prey  
Pond Insects  
Moths  
Housefly

Man--  
Health and Disease

Body Defenses Against Disease  
Reproduction Among Mammals  
Control of Body Temperature  
Mechanisms of Breathing  
Heart and Circulation  
Fundamentals of Diet  
Work of the Kidneys  
Foods and Nutrition  
Eyes and Their Care  
Nervous System  
Endocrine Glands  
Digestion of Foods

Physics

Energy and Its Control

Sound Waves and Their Sources  
Energy and Its Transformations  
Light Waves and Their Uses  
Receiving Radio Messages  
Sending Radio Messages  
Distributing Heat Energy  
Simple Machines  
Fuels and Heat  
Primary Cell  
Electrons  
Electrostatics  
Vacuum Tubes  
Thermodynamics  
Electrodynamics  
Theory of Flight  
Problems of Flight

## Physics (con't)

## Technology

Airplane Changes Our World Map  
 Home Electrical Appliances  
 Distributing Heat Energy  
 Theory of Flight  
 Problems of Flight

## Aeronautics

Airplane Changes Our World Map  
 Energy and Its Transformations  
 Control of Body Temperature  
 Light Waves and Their Uses  
 Molecular Theory of Matter  
 Receiving Radio Messages  
 Mechanisms of Breathing  
 Sending Radio Messages  
 Heart and Circulation  
 Electrodynamics  
 Electrostatics  
 Solar Family  
 Primary Cell  
 Birds of Prey  
 Seed Dispersal  
 Vacuum Tubes  
 Earth in Motion  
 Thermodynamics  
 Theory of Flight  
 Problems of Flight  
 Eyes and Their Care

## Chemistry

## Nature of Chemical Change

Molecular Theory of Matter  
 Electrochemistry  
 Colloids  
 Catalysis  
 Electrons  
 Primary Cell

## Chemistry In Living Things

Foods and Nutrition  
 Digestion of Foods  
 Leaves

## Technology in Home and Industry

Principles of Cooking  
 Principles of Baking  
 Primary Cell  
 Fuels and Heat

## Home Economics

Housefly  
 Shelter  
 Goats  
 Digestion of Foods  
 Principles of Baking  
 Foods and Nutrition  
 Principles of Cooking  
 Fundamentals of Diet  
 Home Electrical Appliances  
 Early Settlers of New England

(sound films)

## SECONDARY SCIENCES

## PHYSICS

Electrodynamics

Animated and normal photography treat: Galvani's discovery of current electricity; magnetic field about a live wire; magnetic field of a coil; electromagnets; Rowland's experiment; magnetic hypothesis; reclescence; magnetic induction; A.C. and D.C. generators; current induction; and transformers.

Collaborator: Harvey B. Lemon, Ph.D., The University of Chicago

Electrons

Faraday's laws; valence; Millikan's oil drop experiment; the principles of vacuum tubes; Edison effect; photoelectric cells; reproducing sound on film; and the determination of the electron's mass, are explained by animation.

Harvey B. Lemon, Ph.D., The University of Chicago

Electrostatics

Photography and animated drawings describe the production of negative and positive electrification on the basis of the electron theory, explains the movement of the electrons in the electroscope, the operation of a static machine, condensers, lightning and lightning rods.

Harvey B. Lemon, Ph.D. and Hermann I. Schlesinger, Ph.D., Uni. of Chicago

Energy and Its Transformations

Potential, kinetic and radiant energy, as manifested in mechanical, electrical, chemical, and thermal forms, are explained and illustrated. Joule's experiment; the relation of "energy" to "power" and "work"; and sources of energy are considered.

Harvey B. Lemon, Ph.D. and Hermann I. Schlesinger, Ph.D., Uni. of Chicago

Fundamentals of Acoustics

Animated diagrams illustrate the principles of velocity, refraction, range of hearing, lowering intensity, attenuation in air, eliminating high and low frequencies, reverberation, focusing, and the physiology of hearing. Sound effects clarify the action.

Harvey B. Lemon, Ph.D. and Hermann I. Schlesinger, Ph.D., Uni. of Chicago, Harvey Fletcher, Ph.D. and Donald MacKenzie, Ph.D., Bell Telephone Laboratories

Light Waves and Their Uses

Explains the principles of reflection with plane, concave, and convex mirrors. Refraction, interference, polar screens, the electro-magnetic spectrum, and the quantum theory are clarified by unusual effects.

H. Horton Sheldon, Ph.D., New York University

Primary Cell

Explains the operation of the dry cell in terms of electron action. Detailed action is shown at the zinc electrode and at the carbon electrode including depolarization. Cells are shown working as batteries in both series and parallel connections.

Morris Meister, Ph.D., High School of Science, New York, New York

### Problems of Flight

Intended as a companion reel to the film (Theory of Flight), this production describes the use of the plane's controls in taking off, climbing, banking, stalling, spinning and recovery, diving, gliding, and landing. The latter two are given special consideration.

R. J. Stephenson, Ph.D., The University of Chicago; W. T. Brownell, Lieut. U.S.M.C.R.

### Receiving Radio Messages

The fundamental principles of radio reception are clarified by means of animated drawings. Explains tuning, capacity, inductance and resonance. The film demonstrates detection by a crystal and the operation of the earphones.

Wilbur L. Beauchamp, Ph.D., The University of Chicago

### Sound Waves and Their Sources

Animated drawings and normal photography explain several types of sound sources, including the vocal organs. Frequency, amplitude, wave length, fundamentals, and harmonics, are explained with acoustic accompaniment. The high-speed camera and an oscilloscope help to clarify the phenomena portrayed.

Harvey B. Lemon, Ph.D. and Hermann I. Schlesinger, Ph.D., Uni. of Chicago; Harvey Fletcher, Ph.D. and Donald MacKenzie, Bell Telephone Laboratories

### Theory of Flight

Wind tunnel tests demonstrate the relation of air velocity to lift and drag on plain and cambered air-foils. Control of airplane movements about vertical, lateral, and longitudinal axis by means of the rudder, elevator, and ailerons, respectively is demonstrated.

R. J. Stephenson, Ph.D., University of Chicago and W. T. Brownell, Lieut. U.S.M.C.R.

### Thermodynamics

Animated drawings depict molecular action in heated iron with relation to temperature; the chemistry of combustion; transformations of energy in the steam engine, steam turbine, gasoline engine, and Diesel engine. Applications of the first and second laws of thermodynamics are portrayed.

H. Horton Sheldon. Ph.D., New York University

### Vacuum tube in Radio

Animation explains the operation of the vacuum tube. The three functions of the vacuum tube in radio are carefully explained; amplification, detection and production of carrier waves.

Wilbur L. Beauchamp, Ph.D., The University of Chicago

## CHEMISTRY

### Catalysis

Presents factors which may be responsible for catalytic actions: concentration by absorption; intermediate compound formation; chain reaction; breaking of reaction chains; poisoning of catalysts; and negative catalysts. The manufacture of rubber and anti-knock gasoline are treated as examples.

Hermann I. Schlesinger, Ph.D. and Warren C. Johnson, Ph.D., The University of Chicago

Colloids

Limits of particle size are described in terms of phenomena (filtration, sedimentation, and Tyndall effect); explanations are given in terms of experimental illustrations and animation. The Tyndall effect, Brownian movement, cataphoresis, and the Cottrell process are demonstrated.

Hermann I. Schlesinger, Ph.D. and Warren C. Johnson, Ph.D., Uni. of Chicago

Electrochemistry

Animated diagrams portray the electrolytic decomposition of hydrogen chloride and the production of electric current from the reaction between chlorine and hydrogen of platinum electrodes. Electroplating illustrates participation of electrodes and other phenomena.

Hermann I. Schlesinger, Ph.D. and Warren C. Johnson, Ph.D., Uni. of Chicago

Molecular Theory of Matter

Animated drawings explain the diffusion of gases, the evaporation of liquids and the transformation of liquids into solids. Other features are: a machine gun analogy of the force exerted by molecules in motion, and a microscopic view of the Brownian movement.

Hermann I. Schlesinger, Ph.D. and Harvey B. Lemon, Ph.D., Uni. of Chicago

## GENERAL SCIENCE

Distributing Heat Energy

Reveals heat sources -- coal, gas, electricity, oil, and wood. Hot air, hot water, and steam heating plants using coal, oil, and gas as fuels are shown. Conduction, convection and radiation; methods and materials of insulation for houses and containers are explained.

H. Horton Sheldon, Ph.D., New York University

Earth in Motion

The earth's sphericity is demonstrated, while rotation is established by star trails and the Foucault pendulum. Phenomena associated with revolution, such as characteristics of orbit, law of areas, inclination of axis, and seasons are clarified by animated photography.

Walter Bartky, Ph.D., The University of Chicago

Exploring the Universe

Principles of the refracting and reflecting telescopes; changes in the dipper; binary stars; eclipsing variables; trinary stars; the motion of the stars in the Hyades and the Hercules cluster; the other phenomena are explained by animation.

Walter Bartky, Ph.D., The University of Chicago

Fuels and Heat

Animated diagrams show the manufacture and storage of carbohydrates by plants; the role of carbon in the burning of fuels; the formation of coal and petroleum; the process of combustion; and molecular action in relation to heat and temperature.

H. Horton Sheldon, Ph.D., New York University

### Home Electrical Appliances

Animated drawings are utilized extensively to explain the principles involved in the operation of the electric iron, fluorescent lighting, and the refrigerator. Alternating current is used in all scenes involving the flow of electrons. The principles of the thermostat are given detailed study. The maintenance of electric motors is illustrated in connection with the vacuum cleaner.

Earl C. McCracken, Ph.D., Teachers College, Columbia University

### Simple Machines

Shows the basic features of simple machines -- the lever, the inclined plane, the wedge, the pulley, and the screw. Applications of these devices to modern complex machines are demonstrated. Animated drawings clarify abstract mechanical principles.

H. Horton Sheldon, Ph.D., New York University

### Solar Family

Describes, with animated drawings, the evolution of the solar system according to the planetesimal hypothesis. The real and apparent motions of the planets are portrayed, including the motion of the solar system in space.

Walter Bartky, Ph.D., The University of Chicago

## HUMAN BIOLOGY

### Body Defenses Against Disease

The body's three lines of defense -- the skin and mucous membrane, the lymphatic system, and the circulatory system including the liver and spleen -- are treated by animated drawings and photomicrography. Actions of phagocytic cells and serums are revealed.

Paul R. Cannon, M.D., The University of Chicago

### Control of Body Temperature

Designates foods as the source of body heat, and portrays the roles of nerves, glands, and muscles to the control of body temperature. The blood stream is depicted as the distributor of heat, and the hypothalamus as a thermostat.

Anton J. Carlson, Ph.D., M.D.; H. G. Swann, Ph.D.; and F. J. Mullin, Ph.D., M.D., The University of Chicago

### Digestion of Foods

Presents such aspects of digestion as mastication, swallowing, stomach contractions, intestinal segmentation, peristalsis, and glandular activity by means of animated and normal photography. Photomicrography shows villi motility. Laboratory demonstrations explain chemical reactions.

A. J. Carlson, Ph.D., M.D. and H. G. Swann, Ph.D., University of Chicago

### Endocrine Glands

Animated and other special photography describe the nature and function of the parathyroid, pituitary, pancreas, and thyroid glands. Insulin as related to diabetes; hyper and hypothyroidism; and mammary gland stimulation also are demonstrated.

A. J. Carlson, Ph.D., M.D., and H. G. Swann, Ph.D., University of Chicago

Eyes and Their Care

Describes the physiology and hygiene of the eye, including learning to judge distance, eye movements, light receptors, field of vision, night blindness, double vision, near-sightedness, far-sightedness, astigmatism, infections, removal of foreign bodies, and protection.

Dept. of Ophthalmology College of Medicine, New York University and College of Physicians and Surgeons, Columbia University

Foods and Nutrition

Normal dietary requirements of carbohydrates, fats, proteins, minerals, vitamins, and water are presented by animated and normal photography. Photomicrography shows growth of culture tissue. Metabolism phenomena are treated in clarified detail.

A. J. Carlson, Ph. D., M. D. and H. G. Swann, Ph. D., Uni. of Chicago

Heart and Circulation

Photomicrography, animated and normal photography show the mechanics of the pulmonary and systemic systems. Capillary action, and blood pressure as related to health are depicted. Amplified heart beat sounds are reproduced in synchronization with valvular action.

Anton J. Carlson, Ph.D., M.D., The University of Chicago

Heredity

Depicts the processes of mitosis and meiosis by means of animated and composite photography. Chance combinations; the relation of genotypes and phenotypes; unit characters; and dominance of two unit characters are illustrated in cattle and guinea pigs.

H. H. Strandkov, Ph.D., The University of Chicago

Mechanisms of Breathing

Animated drawings describe the nature of the breathing process including gaseous exchange in the lungs and body tissues; nervous control of breathing; and factors affecting rate and depth of breathing. Pathological conditions are revealed and artificial respiration is demonstrated.

Victor Johnson, Ph.D., M.D., The University of Chicago

Nervous System

Describes the nature and function of the nervous system, including the anatomy of the spinal cord, axones, dendrites, nerve bundles, receptor and effector organs, nerve impulse and reflex arc. Amplified sounds of nerve impulses are reproduced.

Ralph W. Gerard, Ph.D., M.D., The University of Chicago

Work of the Kidneys

Describes the renal system, the formation of urine, regulation of blood composition, and the functioning of the bladder. Relation of blood pressure to urine flow, and rate of secretion as affected by sugar, water and temperature, are given particular consideration.

Anton J. Carlson, Ph.D., M.D., H. G. Swann, Ph.D., and F. J. Mullin, Ph.D., M.D., The University of Chicago

### Reproduction Among Mammals

Animated photography tells the story of mammalian reproduction including fertilization, cleavage, blastulation, gastrulation, formation of neural folds, development of membrane, embryonic circulation, and parturition. Amphibian cell division is shown by means of photomicrography.

H. H. Strandskov, Ph.D., The University of Chicago

### HEALTH AND HYGIENE

#### Fundamentals of Diet

Delineates the functional classifications of foods; shows that nature has provided most of these for the young of animals and plants; gives examples of many foods in each classification; shows by animal experiments what happens in diet deficiencies.

C. R. Cowgill, Ph.D., Yale University

### HOME ECONOMICS

#### Principles of Baking

Explains the factors involved in the making baked products. Shows that all baked products, or flour mixtures, have a common ingredient -- flour. To this framework are added other ingredients dependent on the kind of product desired. Factors described in the film are: leavening agents, methods of combining ingredients, and oven temperatures used.

Natalie K. Fitch, Ph.D., Teachers College, Columbia University

#### Principles of Cooking

Emphasizes the fundamental principles of the simple cooking processes -- boiling, frying, broiling, roasting, and steam cookery. Each process is illustrated to show how food properties are changed by application of heat. Each process is described in terms of its effect on nutritive values and palatability. Animated drawings explain changes that take place in starches and meat when heat is applied.

Natalie K. Fitch, Ph.D., Teachers College, Columbia University

### ELEMENTARY SCIENCES

#### BIOLOGY - ANIMAL LIFE

##### Beach and Sea Animals

Provides a survey of typical beach and sea animals in their native habitats. Special consideration is given to their interrelationships and methods of self-protection. Balance in nature is illustrated.

Clyde Fisher, Ph.D., American Museum of Natural History

##### Birds of Prey

Species of owls, eagles, hawks, and vultures are revealed in characteristic activities. Typical calls and other sounds are reproduced. Closeups permit detailed study of individual features; nest life; and rearing of the young.

T. Gilbert Pearson, Ph.D., President Emeritus, National Association of Audubon Societies



Butterflies

Presents the life histories of the Swallow-tail and Cabbage butterflies. Animated drawings, time-lapse, and closeup studies describe developmental periods from the egg through the chrysalis stages.

Clyde Fisher, Ph.D., American Museum of Natural History

House-Fly

Follows the common house-fly through its various stages of development and directs attention to its role as a disease carrier. Details of the body parts are presented under magnification. Practical examples for its control are illustrated.

Clyde Fisher, Ph.D., American Museum of Natural History

Moths

Depicts the egg, larva, pupa, and adult stages of the silk and white-marked tussock moths. Closeups study in detail feeding, molting, cocoon weaving and emergence activities. Reference is made to the economic importance of moths.

Clyde Fisher, Ph.D., American Museum of Natural History

Pond Insects

Describes events in the life cycles of the Diving Water beetle, the Mayfly, and the Dragonfly. Habitats, feeding and struggle for existence are observed by means of unusual underwater closeups.

Clyde Fisher, Ph.D., American Museum of Natural History

Spiders

Tells the life story of the Nursery-web spider and illustrates the peculiar habits and characteristics of the Orb-web, Funnel-web, and Trap-door spiders. Scenes of a spiral web together with scenes of spiders attacking, stinging, and ensnaring insects are shown.

Clyde Fisher, Ph.D., American Museum of Natural History

Tiny Water Animals

Photomicrography shows the life processes of the amoebae and paramecia. Time-lapse scenes of the reproductive processes of the amoebae are provided. White human blood corpuscles are compared to amoebae.

Roy Waldo Miner, Ph.D., American Museum of Natural History

Thrushes and Relatives

Shows the habitats, feeding habits, brooding, development and activities of representative species of this family of birds. Calls and songs are reproduced. Closeups provide studies of nest life and of the birds in flight.

T. Gilbert Pearson, Ph.D., President Emeritus, National Association of Audubon Societies

## BIOLOGY - PLANT LIFE

Flowers at Work

Animated drawings reveal the nature and function of sepals, petals, stamens, pistil, anthers, pollen grains, style, and ovaries. Methods of pollination and other reproductive processes are shown with a variety of species. Time-lapse photography demonstrates the graceful movements of flowers.

Clyde Fisher, Ph.D., American Museum of Natural History

Fungus Plants

Demonstrates the growth and reproduction of mushrooms and other fungi. Closeup and time-lapse photography, animated drawings, and photomicrography trace rapid growths, including Hyphae and Rhizomorph formation. Details of structure are given special consideration

Clyde Fisher, Ph.D., American Museum of Natural History

Leaves

Shows the relation of leaves to roots, stems and flowers of plants. Describes the process of photosynthesis and provides cross-section views of tree trunks and leaves. Animated drawings, photomicrography, and time-lapse photography, clarify many interesting phenomena.

Clyde Fisher, Ph.D., American Museum of Natural History

Plant Growth

Time-lapse photography, animated drawings, and photomicrography describes the life cycle of the pea plant. Opening of the flowers; seed germination; growth of roots, stalk and tendrils; cross pollination; and the streaming of protoplasm in pollen tubes is shown.

Clyde Fisher, Ph.D., American Museum of Natural History

Roots of Plants

Provides examples of tap, fascicled, and fibrous roots and treats their structure and function with animated drawings, photomicrography, normal, and time-lapse photography. Sensitivity of root-caps, osmosis, and the formation of starch and sugar are depicted.

Clyde Fisher, Ph.D., American Museum of Natural History

Seed Dispersal

Portrays the dispersal of plant seeds by wind; transportation by animals; and propulsion from seed cases. Time-lapse photography, and photomicrography reveal different species of seeds moving about, germinating, and sprouting. Closeups show their structure and function.

Clyde Fisher, Ph.D., American Museum of Natural History

## PRIMARY SCIENCE

Adventure of Bunny Rabbit

Bunny Rabbit confers with a frog, squirrel, and turtle while on his way to a farm to get some lettuce. There he meets some cows, chicks, puppies, and turkeys before he is captured by the farmer, escapes, and returns home.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

Animals of the Zoo

Depicts an array of wild animals in their respective zoo homes. All are observed during their feeding times, thus providing an opportunity to study their food and eating habits. Habitats and characteristics of each are described.

New York Zoological Society

Black Bear Twins

Portrays the experience of a family of campers in observing a pair of small, hungry, and mischievous twin bears. The bears play with a blanket and ball; raid a wild-bee hive; nurse their stings in a mud puddle; then go for a swim in an adjoining lake.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

Elephants

Attention is given to the physical features, food, methods of eating, drinking, and habits of elephants. A full-grown elephant is put through a series of tests for a circus buyer. Young elephants are shown learning tricks and to obey commands.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

Goats

Depicts the domestic life of a herd of goats on a farm. The feeding, milking and care of mature goats are shown. Two baby goats are depicted in characteristic activities. A billy goat pulls the farmer's boy in his miniature wagon to deliver milk.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

Gray Squirrel

Depicts the life of a squirrel family in an old oak tree. Mother squirrel is revealed nursing her one-week old babies in their nest. Later, one of the squirrels wins a thrilling race against a red fox.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

Poultry on the Farm

Treats the appearance and habits of adult and young chickens, ducks, geese, and turkeys. A chick embryo; chicks hatching; young ducklings swimming and feeding; and families of geese and turkeys are featured. Natural sounds of the poultry are reproduced.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

Robin Redbreast

Tells the story of a robin family. The development of the young in the nest is depicted from hatching to maturity. A wondering cat is chased away by the parent birds. The calls and notes of the birds are reproduced.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

## GEOGRAPHY

## THE AMERICAS (REGIONS)

Alaska

Lumbering, fishing, mining, transportation, farming, and fur raising activities are shown in their natural settings. Unusually beautiful scenic effects enhance the value of the film. Both white settler and Indian cultures are represented.

Vilhjalmur Stefansson

## ORIENTATION GEOGRAPHY

Airplane Changes Our World Map

Portrays the problem of map projection distortion; early maps and globes; latitude and longitude; Mercator's, Mollweide's, and Goode's projections; and distance contrasts between points on the globe by land, water and air travel routes. The film is of special significance in light of current world developments.

George T. Renner, Jr., Ph.D., Teachers College, Columbia University

Shelter

Traces man's growing ability to change the form of materials, and shows how transportation has increased the variety of his supply. Examples range from African grass huts and Eskimo igloos, to modern skyscrapers, apartment buildings, and individual homes.

Wallace W. Atwood, Ph.D., President, Clark University

## AMERICAN HISTORY

Early Settlers of New England

Reenacts the lot of Salem's hardy pioneers about 1626. Dependence upon the sea and the land for food; division of labor; care of the sick; problems of crop cultivation; and the background beginnings of American democracy are portrayed.

Chester R. Arnold, Director of Pioneers' Village, Salem, Mass.

Flatboatmen of the Frontier

Shows the lot of early settlers of the Ohio Valley, including the agricultural economy; frontier homes and domestic activities; flatboat building and loading; and the trip down-river to market. Frontier personalities, speech and music are interwoven throughout.

T. D. Clark, Ph.D., University of Kentucky

Kentucky Pioneers

Depicts travel along the Wilderness Road, the role of the frontier forts, and the settlers' establishment of new homes. Weaving, soap-making, cooking, candle molding, carpentry, cabin construction, schooling, and square dancing are described.

T. D. Clark, Ph.D., University of Kentucky

### Life in Old Louisiana

Treats historical aspects of the Mississippi River; the packet boats; the delta country; cotton and cane plantations; slavery; education; religion; architecture; music; the "Code Duello"; Creole customs, manners, and attitudes; and the prevalence of French speech.

James J. A. Fortier, Historian, New Orleans City Archives

### Pioneers of the Plains

Traces the experiences of a pioneer family on the midwestern plains. Sequences include: relationship with other settlers and cattlemen; building and decorating a sod house; plowing; collecting fuel; and contacts with a circuit-riding minister.

James L. Sellers, Ph.D., University of Nebraska

### Planters of Colonial Virginia

Recaptures representative phases of life in Colonial Virginia. Shows Williamsburg as the political and social center of the colony; the roles of the slave, indentured servant, and artisan; methods of manufacture and means of transportation; architecture; social customs; and music of the period.

Richard L. Morton, Ph.D., College of William and Mary and the Research Staff of Colonial Williamsburg

### Westward Movement

Treats the period from 1790 to 1890. Territorial expansion routes of migration, and transportation, increase and distribution of population, extension of settlement, admission of states to the union, and the mining and cattle frontiers are shown.

Henry S. Commager, Ph.D., Columbia University

## PRIMARY SOCIAL STUDIES

### Airplane Trip

Relives the experience of a mother and daughter who journey by air from Los Angeles to Salt Lake City. Airport servicing operations are shown. Enroute, the plane's instruments and operation are explained.

Ernest Horn, Ph.D., The State University of Iowa, Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

### Boats

Portrays the experiences of a boy and girl going by boat from Albany, down the Hudson River to New York. They inspect the boat and observe the many different types of boats on the river. The New York harbor is featured.

Ernest Horn, Ph.D., The State University of Iowa, Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

### Children of China

Reproduces episodes from the home, school and play life of children in a representative village deep in the interior of China. Home and community customs reflect the influence of tradition on contemporary life. Chinese dialogue is reproduced and interpreted.

L. C. Goodrich, Ph.D., Columbia University

Children of Holland

Home and school life, and a horse and cart trip to a typical Dutch town provide captivating glimpses of rural and urban Holland. Handicraft, hobby and recreational activities, and interpreted native conversations are included.

Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

Children of Switzerland

Portrays the influences of an Alpine environment upon the pastoral lives of a Swiss boy and girl. Characteristic village, home, and outdoor scenes reveal the frugal existence of a mountail people whose chief means of livelihood are their cattle.

Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

Colonial Children

Depicts in an authentic setting the self-sufficient home life of Colonial times. Shows in detail the furnishings, clothing, customs, and events in a Colonial family's day from the morning chores to the reading of the Scriptures by the fireside in the evening.

Edwin J. Hipkiss, Curator at the Museum of Fine Arts, Boston, Mass.

Eskimo Children

Depicts the Eskimo Solution to problems of food, shelter, clothing, and transportation; tasks of parents and children; handicraft arts; forms of recreation; family and community customs; and changes resulting from recent outside contacts.

Henry B. Collins, Jr., Sc.D., Smithsonian Institution

Fireman

Care of equipment, drills, testing of trucks, hose, ladders and life saving devices, are shown in typical settings. A real fire affords an opportunity to observe the firemen answering the alarm and extinguishing the blaze.

Ernest Horn, Ph.D., The State University of Iowa, Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

French-Canadian Children

Describes the home, school and community life of children in a French-Canadian farm family. Old World influences affecting the speech, manners and customs of these northern neighbors are striking. Conversations are reproduced and interpreted.

W. P. Percival, Ph.D., Deputy Minister, Dept. of Education, Quebec, P.Q.

Mexican Children

Reveals the home, school, and play life of a Mexican boy and girl. The holiday setting of a small town is portrayed. An Aztec costume dance in which the boy and his father take part, to the strains of fiesta music, is enacted.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

### Navajo Children

Relates the experience of a Navajo boy and girl in moving with their family from their winter quarters to their summer home. On reaching their destination, they are shown participating in the work of the family.

Arthur I. Gates, Ph.D., Teachers College, Columbia University; Ernest Horn, Ph.D., The State University of Iowa, and Celeste C. Peardon, M.A.

### Passenger Train

Interprets a journey on a modern, streamlined, Diesel-electric-powered train. Duties of the ticket seller, gateman, baggageman, conductor, engineer, motor attendant, mail clerk, dining car cook, waiter, and pullman porter are depicted and commented upon.

Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

### Policeman

Follows a typical city patrolman through one of his regular shifts of duty. Use of motorcycles and patrol cars with two-way radio communication is demonstrated and explained. Lessons in rescue work and pedestrian and vehicular traffic safety are developed.

Ernest Horn, Ph.D., The State University of Iowa, Arthur I. Gates, Ph.D., Teachers College, Columbia University and Celeste C. Peardon, M.A.

(All of these films are silent)

Columbus (Four reels)

The career of Columbus from 1485 to 1492, disclosing the discouragements, the persistent efforts and the ultimate triumph of the "Mad Italian." First seen at the court of King John of Portugal, he discovers the duplicity of this monarch and starts anew on the arduous search for support which leads him, years later, before Ferdinand and Isabella of Spain. At first rebuffed, he secures a second interview through the intercession of Juan Perez and wins Isabella's aid. Then comes the departure of his tiny fleet from Palos, his dangers on the high seas and his eventual landing upon Watling Island.

From "The Spanish Conquerors" by Irving Berdine Richman

Jamestown (Four reels)

A faithful impression of the Jamestown settlement in 1612 under the stern rule of Sir Thomas Dale. The daily life of the colonists. The ever-present menace of the Indians whose hostility is aggravated in part by Spanish intrigue. The capture of Pocahontas, her marriage to John Rolfe and the end of Powhatan's war of extermination, factors contributing to the successful establishment of the first permanent English settlement in America.

From "Pioneers of the Old South" by Mary Johnston

The Pilgrims (Three reels)

The struggle for religious freedom as typified by the story of the Pilgrims. Starting with the experiences of the Separatists at Scrooby, England, their migration to Holland during 1607-8. Twelve years later, the departure of the devout band for America. The voyage of the Mayflower. The landing on Plymouth Rock. Hardships and sufferings during the first winter. The refusal of the Pilgrims to return to England and other incidents revealing their faith and devotion to the ideal of freedom in religious thought and expression.

From "The Fathers of New England" by Charles M. Andrews

The Puritans (Three reels)

The economic background of the Massachusetts Bay Colony. Life in early New England, 1630, contrasted with the court of Charles I. The political moves behind Thomas Morton's effort to discredit the Puritans in England and to bring about the revocation of their Charter. The rise of political dissension at home, including the departure of Roger Williams. The capable leadership of Governor Winthrop in successfully bringing the colony through this dual crisis in its affairs.

From "The Fathers of New England" by Charles M. Andrews

Peter Stuyvesant (Three reels)

A summary of the outstanding events from 1653 to 1664 which reveals how Dutch New Amsterdam became English New York. Life in the picturesque Dutch colony under the stern rule of Stuyvesant. The attitude of England toward Dutch colonial ambitions on the Hudson. The decision, strengthened by the reports of Englishmen from Long Island, to send a fleet against New Amsterdam. The growing restlessness of Stuyvesant's citizens under his autocratic administration. The arrival of the English fleet. Preparations for battle. The bloodless surrender of New Amsterdam by Stuyvesant after standing out against his counsellors and citizens to the last moment.

From "Dutch and English on the Hudson" by Maud Wilder Goodwin



The Gateway to the West (Three reels)

Suggesting the beginning in 1753 of the bitter conflict for the vast wilderness west of the Alleghenies between France, working south from Canada, and England, pressing westward from her seaboard colonies. Presenting, also, a charming picture of life in Old Virginia. In detail, the experiences of young Colonel George Washington, sent by Governor Dinwiddie to protest the French occupation of the Ohio Valley. Washington receives a curt refusal. A successful skirmish brings down upon his small force a large body of French reinforcements. He retreats but is forced to stand at "Fort Necessity." To save his command, he surrenders; a significant defeat since it opened the eyes of England's ministers to the seriousness of the French menace in America.

From "The Conquest of New France" by George M. Wrong

Wolfe and Montcalm (Three reels)

The bitter struggle between France and England in America, culminating in the Battle of the Plains of Abraham and the fall of Quebec in 1759. The acute situation in world politics which prompted William Pitt to send an army overseas under command of General James Wolfe. The situation in New France with General Montcalm hampered by the jealousy of Vaudreuil, Governor-General. The military strategy of Wolfe. His attack on Quebec. Montcalm's desperate defence. The clash on the Plains of Abraham. The occupation of Quebec and the arrival of an English fleet the following spring.

From "The Conquest of New France" by George M. Wrong

The Eve of the Revolution (Three reels)

Depicting the most significant incidents of the decade 1756-1775 and through these interpreting the state of mind of the people as the movement for independence gained impetus. In detail, re-creating scenes incident to the Stamp Act and the stand against "Taxation without Representation." Also re-creating the "Boston Massacre," the "Boston Tea Party," the Salem Assembly, the rides of Paul Revere and William Dawes, Jr., the sharp military clashes at Lexington Green and Concord Bridge and the retreat of the British. In short, the most notable events preceding the actual outbreak of the War of Independence.

From "The Eve of the Revolution" by Carl Becker

The Declaration of Independence (Three reels)

An account of the efforts of a small group of patriots to bring about a unanimous vote in favor of independence which reveals the three outstanding attitudes of public opinion in 1776, as represented by Tories, Conservatives, and those in favor of absolute independence. The influence of pamphleteers, typified by Thomas Paine and his "Common Sense," the unofficial gatherings of delegates, the concern of John Adams, Franklin and others as to the attitude of France, the proceedings of the Second Continental Congress culminating in the famous session of July 2, 1776, when a unanimous resolution for independence was secured. The formal adoption of the Declaration of July 4, and the subsequent excitement.

From "The Eve of the Revolution" by Carl Becker

Yorktown (Three reels)

The progress of the War of Independence between January and October, 1781. The hardships and sufferings of the American troops. The problems facing General Washington due to discouragement and mutiny. The international aspects of the campaign of 1781 and the aid rendered by the French leaders. Washington's march south. The arrival of the French fleet in the Chesapeake. The successful outwitting of Clinton and Cornwallis. The battle of Yorktown and the subsequent surrender of Cornwallis.

From "Washington and His Comrades in Arms" by George M. Wrong

Vincennes (Three reels)

The struggle for supremacy along the frontier when the American Colonies were fighting for Independence in the east. Hamilton, British Governor-General of the Northwest, occupies Vincennes to curb the influence of westward-spreading pioneers. George Rogers Clark, to rid the country both of Hamilton and of his Indian allies, strikes out from Kentucky and reaches Kaskaskia before cold weather in 1799. Hamilton, protected by a seemingly impenetrable wilderness, feels secure until spring. Grasping his opportunity, Clark presses on across the "Drowned Lands" in the face of tremendous hardships and captures Vincennes, breaking the influence of the British over the Indians and winning for the Republic the vast territory from which later were formed the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin.

From "The Old Northwest" by Frederic Austin Ogg

Daniel Boone (Three reels)

The courage and unconquerable spirit of the early pioneers, typified by a portion of the adventuresome career of Daniel Boone. In 1775, landholders of North Carolina sent him as the forerunner of a new settlement in what is now Kentucky. He establishes Boonesboro but the colony faces extinction because of sickness and Indian depredations. Boone is captured by the Shawnees. In 1788, a French officer in the British service organizes an Indian offensive against Boonesboro. Boone, meanwhile accepted as a brother by the savages, escapes, races back to his settlement and successfully defends it against a bitter nine-day attack.

From "Pioneers of the Old Southwest" by Constance Lindsay Skinner

The Frontier Woman (Three reels)

To portray the sacrifices of the women of the frontier and the part played by them in the making of our nation, this film recreates the story of the settlement of Watauga in the Tennessee mountains in 1780. Cornwallis had sent Ferguson to destroy the power of the frontier patriots. John Sevier and his mountain men set out from Watauga to oppose him. The women of the settlement, left with the old men and boys, refuse to recall their warriors in the face of an impending Indian attack. Sevier defeats Ferguson at King's Mountain, the turning point of the Revolution in the west. On their return several of his men are killed by Cherokees. The joy of the Watauga women is turned to grief. After but two hours at home Sevier and his mountain men again swing into their saddles, determined to remove forever the menace of the Indians.

From "Pioneers of the Old Southwest" by Constance Lindsay Skinner

Alexander Hamilton (Three reels)

A biographical film revealing Hamilton's work during the crucial period immediately following the War of Independence in stabilizing the currency of the new government and formulating its financial system. He is first seen at Morristown, New Jersey, as aide to General Washington during the closing years of the war. He is present at Washington's inauguration, and is appointed first Secretary of the Treasury. He at once undertakes to secure adequate revenue through taxation. Opposition to his Excise Tax leads to open rebellion in western Pennsylvania. He foresees the necessity for the government to regard this as an opportunity to show its strength. President Washington, despite his reluctance to risk a civil war, accepts Hamilton's viewpoint and calls out the militia. The disorder is promptly and decisively checked.

From "Washington and His Colleagues" by Henry Jones Ford

Dixie (Three reels)

"Dixie" relates the story of the civilian South throughout the Civil War, revealing the heroic part played by the women of the Confederacy and the position and attitude of the slaves. To this end, it traces the experiences of a typical Southern family behind the lines, from the time its men ride off to the war to the final months of the struggle. It ends with a re-creation of Appomattox. General Lee, representing the unbroken spirit of the South, meets with General Grant and terms of surrender are arranged.

From "The Day of the Confederacy" by Nathaniel W. Stephenson

THE  
PAGEANT OF AMERICA  
Lantern Slides

Department of Visual Education  
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## THE PAGEANT OF AMERICA LATERN SLIDES

(Numbers in parentheses at the end of each slide listing refer to volume and cut in The Pageant Of America where related text can be found)

### I. The Story Of The Indian

1. Distribution Of Indian Tribes And Wild Animals Before The Discovery (Map). (I-Frontispiece)
  2. A Typical Forest Indian Family. (1-2)
  3. Council Meeting of Forest Indians. (3-46)
  4. Erecting A Chippewa Bark Lodge. (1-12)
  5. A Fortified Indian Village. (1-7)
  6. Indian Village And Fields In Virginia. (3-47)
  7. Indians Planting Corn. (3-48)
  8. Indians Burning Out A Tree For A Boat. (1-28)
  9. Home Industry--Iroquois Weaving, Cooking and Grinding. (1-26)
  10. Chipping Flints. (1-33)
  11. The Moose Chase. (1-14)
  12. Implements Made of Wood--Used By Forest Indians. (1-37)
  13. Indian Maple Sugar Camp. (1-27)
  14. Strings Of Purple And White Wampum. (4-685)
  15. Handicrafts Of The Plains Indians. (1-81)
  16. Picture-Writing Of The Sioux, 1799-1870. (1-95)
  17. Indians Disguised As Coyotes, Stalking Buffaloes. (1-68)
  18. Bison Hunting In Winter. (1-72)
  19. Village Of The Eastern Sioux. (1-83)
  20. Sioux Warrior In Full Costume. (1-66)
  21. A Navajo Family. (2-570)
  22. Arapaho Indian. (2-498)
  23. Indian Tepees. (2-408)
  24. The Ghost Dance. (2-532)
  25. Room In A Zuni House. (1-121)
- (See also slides nos. 60,70,76,85,86,89,99,103,107,111,122,202,214,299,314,349,593, 636,663,690-704,721,738,863,888,939,940, 206.)

### II. The European Background

26. Crusaders On The March. (1-144)
27. Marco Polo. (1-155)
28. Routes Of The Early European Explorers In Asia (Map). (1-149)
29. Henry At The Sagres Observatory, 1419. (1-169)
30. Vasco Da Gama. (1-174)
31. The Famous Globe Of Martin Behaim, 1492. (1-177)
32. Queen Elizabeth. (1-306)
33. A Medieval Manor (Diagram). (3-1)
34. A Manorial Accounting. (3-14)
35. The Yule Log At Christmas. (3-27)
36. A Cottage Interior (Scrooby). (3-22)
37. A Village Street, Godshill, Isle Of Wight. (3-21)
38. View On Castle Hill, England. (13-1)
39. The London Customs House, 1663. (1-339)
40. Early Navigating Instrument (Astrolabe). (1-201)
41. An English Galleon, 1588. (1-305)
42. The Sea Of Darkness. (1-165)

(See also slides nos. 779,869,870,871,954,955,956.)

### III. Discovery And Exploration

43. The Viking Ship. (1-129)
  44. Leif Ericsson Discovering Vinland. (1-140)
  45. Paths Of The Norse Sea Rovers, 800-1000 A.D. (Map). (1-133)
  46. Columbus Before The Council Of Salamanca. (1-191)
  47. Columbus And The Friars Of La Rabida. (1-193)
  48. The "Santa Maria," Flagship Of Columbus. (1-200)
  49. The Departure Of Columbus From Palos. (1-199)
  50. The Landing Of Columbus. (1-205)
  51. Columbus Received By Ferdinand And Isabella At Barcelona. (1-208)
  52. John Cabot And His Son Sebastian. (1-213)
  53. Balboa Discovers The Pacific, 1513. (1-222)
  54. Ferdinand Magellan. (1-223)
  55. One Of Magellan's Ships, The "Victoria." (1-224)
  56. Cartier Looks For The Strait. (1-231)
  57. Cartier First To See The United States From Canada, 1535. (1-606)
  58. Burial Of De Soto In The Mississippi River. (1-284)
  59. La Salle Sails The First Ship On The Lakes. (1-680)
  60. Aztec Artists Picturing Arrival Of Spanish. (1-245)
  61. Pizarro's First Sight Of The Inca Empire. (1-269)
  62. Coronado's March Through The Southwest. (1-286)
  63. The "Half-Moon" Passing The Palisades. (1-468)
- (See also slides nos. 71, 83, 84, 92, 99, 100, 106, 108-110, 113, 634, 644, 646, 664, 685, 705-707, 756, 757, 908-911.)

### IV. The Thirteen Colonies And Their Settlement

64. The Departure Of Raleigh's Colonists. (1-315)
  65. The Tree Inscribed "Croatoan." (1-318)
  66. The Building Of Jamestown, 1607. (1-348)
  67. The Trial Of John Smith. (1-349)
  68. Title Page From "A True Relation," 1608. (1-350)
  69. The First Women Arrive In Jamestown. (1-352)
  70. Pocahontas. (1-365)
  71. The Wanderings Of The Pilgrims (Map). (1-401)
  72. The "Mayflower" In Plymouth Harbor. (1-402)
  73. The Landing Of The Pilgrims. (1-408)
  74. Pilgrim Exiles. (1-410)
  75. Early Plymouth. (1-413)
  76. First Thanksgiving In New England. (15-3)
  77. Expulsion Of Quakers From Massachusetts. (10-219)
  78. The Flight Of Roger Williams From Massachusetts. (1-448)
  79. Framing The Fundamental Orders Of Connecticut. (1-454)
  80. Galleons Off New Amsterdam. (1-475)
  81. The Stadt Huys, 1679. (1-492)
  82. The Fort At New York. (1-493)
  83. Landing Of Philip Carteret In New Jersey. (1-509)
  84. De Vries Claims The Delaware For The Dutch. (1-500)
  85. Penn In Treaty With The Indians, 1683. (1-530)
  86. The Penn Treaty Belt. (1-531)
  87. Mason And Dixon Boundary Stone. (1-554)
  88. Philadelphia, 1754. (1-539)
  89. Lord Calvert Bartering With The Indians. (12-162)
  90. Earliest Known Map Of "The Province Of Carolina." (1-563)
- (See also slides nos. 96, 105, 635, 672, 683, 728, 758, 772, 773, 781, 913-915, 956-961.)

## V. The Struggle For The Continent

91. Menendez Challenges Ribaut's Ships. (1-296)
  92. Routes Of Elizabethan Sea Rovers (Map). (1-336)
  93. Drake Captures The Treasure Ship. (1-322)
  94. The Spanish Admiral Surrenders To Drake. (1-334)
  95. Elizabeth Knights Drake. (1-324)
  96. Spanish Scouts Visit Jamestown. (1-359)
  97. Louis XIV, King Of New France. (1-654)
  98. Expansion Of New France, 17th and 18th Centuries (Map). (1-671)
  99. Cartier Erects A Cross, 1534. (1-603)
  100. Cartier At Hochelaga (Montreal), 1535. (1-605)
  101. Champlain Building Quebec. (1-622)
  102. The First Seigneur, 1635. (1-630)
  103. Jean De Brebeuf, Missionary To The Hurons. (10-34)
  104. The Mothers Of New France. (1-658)
  105. Surrender Of New Amsterdam, 1664. (1-487)
  106. First Inland Meeting Of The French And British, 1666. (6-51)
  107. Joliet And Marquette Greeted By The Illinois Indians, 1673. (1-673)
  108. French Fur Traders On The Great Lakes. (2-263)
  109. Dulhut At Little Portage, Minnesota, 1679. (1-676)
  110. LaSalle Annexes The Future Louisiana, 1682. (1-684)
  111. The French And The Iroquois. (6-58)
  112. Frontenac Returns To Canada. (6-62)
  113. Cadillac Founds Detroit, 1701. (1-695)
  114. Boundaries Claimed At Beginning Of French And Indian War, 1754 (Map)(2-29)
  115. Braddock's Defeat. (6-150)
  116. Montcalm At The Battle Of The Plains. (6-205)
  117. Boundaries Established As A Result Of French And Indian War, 1763 (Map).(6-214)
- (See also slides nos. 84,633,634,641,664,708,709,711,712,715-717,727,759,917,941.)

## VI. Colonial Life

118. Equipment For Life In The Wilderness. (3-37)
  119. Burning Up The Logs. (3-54)
  120. 17th-Century Plowing In New England. (3-64)
  121. The Colonial Plow. (3-435)
  122. Squanto Teaching Principles Of Corn Culture To Pilgrims. (3-52)
  123. The Cowherd. (3-66)
  124. A Typical Colonial Fireplace, 1750. (5-8)
  125. Spinning In Colonial Days. (11-383)
  126. Candle-Dipping At Home. (5-12)
  127. Large And Small Candle Molds. (5-13)
  128. The Loom In The Colonial Household. (5-31)
  129. Sunday Evening Courtship. (10-124)
  130. The Turner (A Craftsman's Shop). (5-101)
  131. Colonial Shipwrights At Work. (4-15)
  132. Wharves At New Bedford. (3-664)
  133. An Early New England Town Meeting. (1-447)
  134. Accused Of Witchcraft. (10-104)
  135. The Stocks And Whipping Post. (10-218)
  136. A New England Dame School. (10-601)
  137. A Hornbook. (10-630)
  138. Pews In Old Ship Meetinghouse, Hingham, Massachusetts. (10-113)
  139. Bird's-Eye View Of Ideal Plantation Buildings (3-121)
  140. Bordley's Threshing Floor. (3-205)
  141. When Quality Goes To Town. (3-130)
  142. After-Church Gossip. (3-124)
  143. Virginia In The Olden Time. (3-125)
- (See also slides nos. 69,76,483,484,539,542-544,594-597,710,806,807,848,850-854,942)

VII. The Revolution

- 144. Main Lanes Of Imperial Commerce. (Diag.). (4-18)
  - 145. Otis Protesting The Writs Of Assistance. (8-79)
  - 146. Bostonians Reading The Stamp Act. (8-94)
  - 147. Embossed Stamp (Two Shillings Sixpence). (8-91)
  - 148. Boycott Of A Boston Importer, 1770. (8-138)
  - 149. The Boston Massacre. (8-148)
  - 150. The Old South Meetinghouse, Boston. (8-160)
  - 151. The Boston Tea Party. (8-161)
  - 152. Boston Mob Maltreats Customs Officer. (8-167)
  - 153. Maryland Tea Merchant Forced To Burn His Ship. (8-164 center panel)
  - 154. The Horse "America" Throwing Its Rider. (8-254)
  - 155. Arousing The Minute Men. (6-240)
  - 156. American Uniforms, 1775-1776. (6-opp. page 127)
  - 157. Revolutionary Musket Of 1775. (6-372)
  - 158. A Revolutionary Gun And Carriage. (6-409)
  - 159. The Fight At Lexington. (6-244)
  - 160. Battle Of Bunker Hill. (6-252)
  - 161. John Adams Proposing Washington For Commander-In-Chief. (6-253)
  - 162. Raising The Flag At Prospect Hill, Somerville, Mass. Jan. 1, 1776. (6-310)
  - 163. The Retreat From Long Island. (6-291)
  - 164. Hessians On The Road To Trenton. (6-301)
  - 165. Surrender Of General Burgoyne. (6-337)
  - 166. The British Entry Into Philadelphia, 1777. (6-344)
  - 167. Entertaining The Redcoats, Philadelphia, 1778. (6-361)
  - 168. Washington At Valley Forge. (6-365)
  - 169. Washington's Camp Bed. (6-387)
  - 170. George Clark And His March On Vincennes. (2-80)
  - 171. The "Bonhomme Richard" And The "Serapis." (6-538)
  - 172. Meeting Of Greene And Gates At Charlotte, North Carolina. (6-478)
  - 173. The Surrender Of Lord Cornwallis. (6-512)
  - 174. Washington Resigns His Commission. (6-522)
  - 175. Boundaries After Revolutionary War, 1783. (6-523)
- (See also slides nos. 179, 537, 562, 563, 591, 626-628, 630, 642, 645, 649, 651, 654, 656-658, 669, 671, 674, 677, 679, 735, 736, 855, 876, 919, 943, 962-965, 967, 968, 990-992.)

VIII. The Constitution And The New Government

- 176. The First Prayer In Congress. (8-188)
- 177. Patrick Henry In The First Continental Congress. (8-190)
- 178. Session Of Second Continental Congress. (2-280)
- 179. Title Page Of "Common Sense," 1776. (8-223)
- 180. Independence Hall, Philadelphia. (13-162)
- 181. Reading The Declaration From The Old State House, Boston. (8-241)
- 182. Currency Issued By The New Confederation, 1778. (4-706)
- 183. Franklin At The Court Of France. (8-314)
- 184. The Signing Of The Constitution. (8-350)
- 185. Last Page Of The Constitution With Signatures Of The Signers. (8-351)
- 186. Washington's Welcome At Trenton. (8-379)
- 187. Reception Of Washington At New York. (8-380)
- 188. Washington Takes The Oath Of Office. (8-381)
- 189. The First Presidential Mansion. (8-383)
- 190. Senate Chamber At The Temporary Capital Of Philadelphia. (8-460)
- 191. The First Mint, Philadelphia, 1792. (4-715)
- 192. The Whiskey Rebellion. (3-197)
- 193. Thomas Jefferson. (8-461)
- 194. The White House, 1805. (8-412)
- 195. The Trail Of Aaron Burr. (8-481)

(See also slides nos. 631, 650, 665, 666, 737, 883, 884, 969-976.)



### IX. Westward Expansion

196. Carolina Emigrants Crossing The Blue Ridge. (2-37)
  197. Daniel Boone In Hunter's Garb. (2-60)
  198. Plan Of Fort Boonesborough (Diagram). (2-59)
  199. Daniel Boone And The Knetucky Settlers In Cumberland Gap. (2-63)
  200. Daniel Boone Escorting Pioneers Into The Western Country. (2-54)
  201. Furnishing The Pioneer Home. (5-4)
  202. George Rogers Clark Signing A Treaty With The Indians. (2-78)
  203. The Landing Of General Putnam At Marietta, 1788. (2-151)
  204. Typical Settlement On The Ohio River, 1791. (2-155)
  205. Flat Boat And Beginnings Of Warsaw, Ill. (4-182)
  206. Indian Attack Down The Ohio. (2-163)
  207. Old National Or Cumberland Road. (2-194)
  208. Pittsburgh, 1796. (2-146)
  209. Indiana Pioneers Beginning A Cabin. (2-184)
  210. The Louisiana Purchase, 1803, (Map). (2-313)
  211. Transfer Of Upper Louisiana To The United States, 1804. (2-321)
  212. Meriwether Lewis. (2-320)
  213. Lewis And Clark At The Three Forks, 1804. (2-327)
  214. The Lewis And Clark Party Meeting The Shoshone Indians. (2-328)
  215. Lewis And Clark On The Columbia. (2-334)
  216. John Jacob Astor. (2-338)
  217. Hunters And Trappers In The West. (2-388)
  218. The Trapper At Work. (2-424)
  219. A Trapper Fording A Stream. (2-389)
  220. The Government Tollgate. (13-318)
  221. Fort Dearborn, 1803. (2-274)
  222. The Levee, Chicago, 1833. (13-340)
  223. The Alamo, 1836. (2-466)
  224. A Caravan Encamped. (2-396)
  225. Sutter's Fort, 1846. (2-478)
  226. California Gold Diggers, 1856. (2-486)
- (See also slides nos. 227-233, 295, 296, 320, 322, 643, 653, 670, 673, 678, 686, 717-725, 730, 731, 739, 775-777, 782, 784, 845, 846, 856, 897, 918-923, 980.)

### X. The Advancing Frontier (7 Maps)

227. United States Frontier, 1790. (2-49)
228. United States Frontier, 1800. (2-137)
229. Unites States Frontier, 1810. (2-273)
230. United States Frontier, 1820. (2-252)
231. United States Frontier, 1830-1840. (2-304)
232. United States Frontier, 1850-60-70. (2-535)
233. United States Frontier, 1880-90-1900. (2-563)

### XI. Slavery and the War Between the States

234. Free And Slave Areas After The Missouri Compromise, 1820 (Map). (8-528)
235. Slave Quarters, South Carolina. (3-317)
236. Cotton Picking. (3-323)
237. Hauling The Cotton For Shipment. (3-326)
238. Page Heading Of "The Liberator," 1831. (8-576)
239. Advertisement Of The Underground Railroad, 1844. (8-633)
240. Fugitive Slaves Arriving At The Home Of Levi Coffin. (8-648)
241. Webster's Reply To Hayne. (8-549)
242. "Our Federal Union--It Must Be Preserved." (8-550)
243. Earliest Known Photograph Of Abraham Lincoln, About 1846. (10-408)
244. Lincoln Riding The Circuit, 1858. (8-706)
245. Lincoln's Debate With Douglas. (8-708)
246. Lincoln On His Way To Inauguration. (9-9)

- 247. Inauguration Of Jefferson Davis, 1861. (9-7)
  - 248. The Confederate Capitol, Richmond. (9-63)
  - 249. John Bull's Disappointment At Cotton Growing In Africa. (9-36)
  - 250. John Bull Takes His Cotton Buying To India. (9-37)
  - 251. Crew On Deck Of The "Monitor." (7-80)
  - 252. Farragut At The Battle Of Mobile Bay. (7-286)
  - 253. Lincoln In 1864. (9-58)
  - 254. Stonewall Jackson's Troops In Action (7-115)
  - 255. Federal Soldiers Before The Battle Of Gettysburg. (7-226)
  - 256. Sherman's March To The Sea. (7-381)
  - 257. Lee After The Surrender At Appomattox. (7-397)
  - 258. The Lost Cause. (9-79)
  - 259. Dress Of The Ku-Klux-Klan. (9-125)
  - 260. The Lincoln Memorial, Washington, D.C. (13-Frontispiece)
- (See also slides nos. 550, 589, 632, 637, 639, 647, 655, 660-662, 681, 682, 687, 743-746, 768-770, 819-821, 859, 860, 885, 928, 982-984, 994, 995.)

### XII. The World War

- 261. Warning Issued By Germany Upon Sailing Of The "Lusitania." (9-595)
- 262. The Sinking Of The "Illinois." (7-480)
- 263. General Pershing. (7-613)
- 264. Newton Baker Drawing First Draft Number. (9-626)
- 265. Camp Prepared For The Draft Army. (7-556)
- 266. American Soldier's Equipment. (7-662)
- 267. National Guard In Training At Fort Sill. (7-552)
- 268. Machine Gunners Of The Twenty-Ninth Division At Camp McClellan. (7-587)
- 269. The First United States Destroyers To Arrive At Queenstown. (7-511)
- 270. Submarine At Periscope Depth In Bantry Bay. (7-517)
- 271. The "U-58," First German Submarine Captured By Americans. (7-524)
- 272. Convoy Of Merchantmen Seen From The Air. (7-528)
- 273. American Subchasers In The Mediterranean. (7-534)
- 274. A Train Load Of Mines En Route To A Quay. (7-715)
- 275. Breguet Bombing Plane Used By The United States Air Service. (7-742)
- 276. French Renault Tanks Used By Americans. (7-602)
- 277. The Western Theatre Of Operations, March, 1918 (Map). 7-616)
- 278. Ferdinand Foch. (7-667)
- 279. American Women Sewing For The Soldiers. (7-607)
- 280. Girls Making Surgical Dressings. (7-608)
- 281. Woman Munitions Worker. (7-609)
- 282. A First-Aid Station, Close To The Front. (7-631)
- 283. Y.M.C.A. Canteen In France. (7-640)
- 284. Street Barricade At Chateau Thierry. (7-675)
- 285. No Man's Land. (7-754)
- 286. Americans In Trenches Near Verdun. (7-777)
- 287. The Argonne. (7-789)
- 288. German Devastation In Town Of Grand Pre. (7-796)
- 289. German Prisoners In The Meuse-Argonne. (7-804)
- 290. Orlando, Lloyd George, Clemenceau And Wilson. (9-644)

(See also slides nos. 577, 64, 652, 688, 749-755, 933, 986-989, 999, 1000, 689.)

### XIII. Transportation Before 1860

- 291. Old Coaching Days. (4-118)
- 292. Stage Coach Held Up By Half Breeds And Indians. (4-402)
- 293. Breakdown Of The Christmas Coach. (3-179)
- 294. A Corduroy Bridge In Indiana. (4-127)

- 295. Conestoga Wagons On The National Road. (4-146)
  - 296. A Pack Train On The Santa Fe Trail. (2-395)
  - 297. Philadelphia Cart. (4-141)
  - 298. New Jersey Cart. (4-142)
  - 299. Indians Crossing Missouri River In Bull Boats. (2-366)
  - 300. The Steamer "Yellowstone" On The Missouri River, 1832. (2-383)
  - 301. The Clipper Ship "Glory Of The Seas." (4-Frontispiece)
  - 302. Flatboat Descending The Ohio River. (2-90)
  - 303. The Jolly Flatboat Men. (4-183)
  - 304. Ferry On The Susquehanna About 1830. (4-121)
  - 305. The Marriage Of The Waters. (4-163)
  - 306. Canal Barge At Summit Of Allegheny Portage. (4-169)
  - 307. The "Clermont." (4-193)
  - 308. S.S. "Savannah." (4-235)
  - 309. Steamboat "Grand Turk" At Fueling Station On Mississippi. (4-210)
  - 310. United States Mail Steamer "Adriatic." (4-239)
  - 311. Baltimore And Ohio Passenger Car, 1830. (4-245)
  - 312. Horse Treadmill Car. (4-251)
  - 313. Peter Cooper's "Tom Thumb." (4-254)
  - 314. The Original "Dewitt Clinton" Engine And Coaches. (4-263)
  - 315. The Meeting Of The Ways. (4-264)
  - 316. The Locomotive "Old Ironsides," 1831. (4-265)
  - 317. Freight Car Of 1832. (4-334)
  - 318. Interior Of An American Railway Car, 1852. (4-321)
  - 319. Wells-Fargo Express Office. (4-392)
- (See also slides nos. 8,41,43,141,196,205,456,756,761,767,784,786,787,789,795,926,927.)

#### XIV. Transportation Since 1860

- 320. Laying The Tracks Of The Pacific Railroad, 1869. (2-542)
  - 321. Building The Union Pacific Railroad--Attacked By Indians. (4-368)
  - 322. Early Train Delayed By Buffaloes. (4-366)
  - 323. Burlington Test Of Air Brakes With 50 Freight Cars. (4-311)
  - 324. The Largest "Iron Horse" In The World. (4-279)
  - 325. A Modern Refrigerator Car. (5-642)
  - 326. Interlocking Switch System. (4-315)
  - 327. Hell Gate Bridge. (4-295)
  - 328. The Largest Schooner In The World. (4-441)
  - 329. The Screw Steamship "Bothnia," 1874. (4-413)
  - 330. Steamship "Majestic." (4-425)
  - 331. The Tramp Ship. (4-423)
  - 332. Great Lakes Freighter. (4-448)
  - 333. Unloading Fruit From A Steamer To A Refrigerator Car. (4-465)
  - 334. Henry Ford In His First Model Car, 1893. (4-779)
  - 335. First American Limousine. (4-797)
  - 336. Early Automobile On Muddy Road. (4-818)
  - 337. Modern Dirt Road. (4-823)
  - 338. Winter Travel In The Country. (3-178)
  - 339. A Modern Paved Country Road. (3-490)
  - 340. "Pullman" Type Motor Bus. (4-815)
  - 341. Langley's 1896 "Aerodrome." (4-854)
  - 342. Wright Brothers Gliding At Kitty Hawk, North Carolina. (4-856)
  - 343. Flight Of The First Zeppelin, July 2, 1900. (4-842)
  - 344. Early Air-Liner. (4-874)
  - 345. Charles A. Lindbergh And The "Spirit Of St. Louis." (4-876)
  - 346. The Dirigible "Los Angeles." (4-845)
  - 347. Interior Of Passenger-Carrying Airplane. (4-873)
  - 348. Illuminated Wind Indicator On Emergency Landing Field. (4-549)
- (See also slides nos. 467,480,481,493,520,578,788,790,791,794,796,797,798,929,935,985,932.)

### XV. The Story Of Communication

- 349. Indian Sign Language. (1-97)
  - 350. Early Mail Stage Coach, 1799. (4-516)
  - 351. The Overland Mail Starting East From San Francisco. (4-401)
  - 352. Attack On A Mail Coach. (4-518)
  - 353. The Pony Express Rider. (4-397)
  - 354. Rural Free Delivery, Madison, Minnesota. (4-525)
  - 355. Christmas Rush--Washington Post Office. (4-532)
  - 356. Loading Mail Plane. (4-553)
  - 357. Naval Semaphore Signaling. (4-562)
  - 358. Army Heliograph Signaling. (4-568)
  - 359. The First Telegraph Message. (4-581)
  - 360. The "Agamemnon" Laying The 1858 Cable. (4-596)
  - 361. Landing The Shore End Of The Cable, Valentia, Ireland, July 7, 1866. (4-605)
  - 362. Submarine Telegraph Between America And Europe, (Map). (4-591)
  - 363. Thomas Alva Edison. (5-358)
  - 364. Bell Opening The Chicago--New York Long Distance Telephone Line. (4-643)
  - 365. Diagram Of A Telephone Transmitter. (4-631)
  - 366. Graph Showing Comparative Share Of World's Telephones In Unites States (4-646)
  - 367. Marconi With His Apparatus. (4-656)
  - 368. How Radio Broadcasting Travels (Chart). (4-661)
  - 369. Photograph Of Calvin Coolidge Sent By Radio. (4-678)
  - 370. Interior Of WJZ Broadcasting Studio. (4-676)
- (See also slides nos. 792,793,802,938,977)

### XVI. The Western Farmer

- 371. "Breaking" The Paririe--8-Oxen Team. (3-351)
  - 372. A Prairie Farmhouse In Illinois, 1857. (3-352)
  - 373. A Kansas Sod House, 1860. (13-341)
  - 374. A Prairie Home In Iowa. (3-623)
  - 375. An Abandoned Farm. (3-247)
  - 376. The Cyclone. (3-410)
  - 377. A Windbreak On The Western Plains. (3-412)
  - 378. Application For Land Under Homestead Act. (3-402)
  - 379. The Oliver Chilled Plow. (3-444)
  - 380. Plowing On The Old Farm. (3-440)
  - 381. A Gang Plow With Horses. (3-446)
  - 382. A Disk Plow Drawn By Tractors. (3-450)
  - 383. Cradling. (3-455)
  - 384. The First Reaper. (3-456)
  - 385. Hay Pitching--Old. (3-473)
  - 386. Hay Pitching--New. (3-474)
  - 387. A Header At Work. (3-467)
  - 388. Mowing Machine In Timothy. (3-471)
  - 389. The Thresher At Work. (3-485)
  - 390. Husking Corn By Machinery. (3-479)
  - 391. A Model Dairy. (3-524)
  - 392. Spraying The Orchard. (3-487)
  - 393. Pitching Horseshoes. (3-281)
  - 394. The Barn-Raising, A Social And Co-operative Event. (3-264)
  - 395. A Canning Club At Work. (3-540)
  - 396. A District School. (3-612)
  - 397. A Farm Bureau Meeting On The Prairies. (3-599)
  - 398. Importance Of Farmer In National Politics (Cartoon). (3-554)
  - 399. The Desert Awaiting Reclamation. (3-492)
  - 400. The Roosevelt Dam In Flood Time, Tonto National Forest, Arizona. (9-472)
- (See also slides nos. 619,799-803,805,808-818,880,881,947,948.)

XVII. The Story Of Lumber And Paper

401. The Winter Lumber Camp. (5-538)
402. The Mess House. (5-539)
403. Felling A Tree. (5-540)
404. Cutting The Top Off A Spar Tree. (5-571)
405. Hauling A Mountain Of Logs. (5-542)
406. A Big Tree, Washington. (5-568)
407. A Logging Railway Incline. (5-576)
408. Sliding Logs Down A Flume. (5-565)
409. Logs On A River Bank. (5-543)
410. A Log Boom. (5-544)
411. Sorting Logs At The End Of A Drive. (5-547)
412. A Cigar Raft On The Pacific Coast. (5-577)
413. Whipsaw, Pennsylvania Backwoods. (5-586)
414. A Band Saw, Virginia. (5-590)
415. Lumber Drying Yard, Louisiana. (5-597)
416. After The Ax, The Desert. (5-598)
417. The Forest Ranger. (3-528)
418. Rittenhouse Paper Mill. (5-601)
419. Making Paper By Hand. (5-620)
420. The "Hollander" Beating Machine. (5-621)
421. A Hundred Thousand Cords Of Pulp Wood. (5-619)
422. A Mechanical Wood Pulp Grinder. (5-622)
423. A Chemical Pulp Digester. (5-623)
424. Fourdrinier Machine--Wet End. (5-624)
425. Fourdrinier Machine--Dry End. (5-625)

(See also slides nos. 937,944)

XVIII. The Story Of The Factory (Textiles)

426. Carding Wool By Hand. (5-26)
  427. A Family At Work, Spinning And Weaving. (5-30)
  428. The Flying Shuttle. (5-63)
  429. Arkwright's Spinning Frame, 1769. (5-66)
  430. Hargreaves' Spinning Jenny, 1770. (5-64)
  431. Crompton's Mule. (5-68)
  432. Cartwright's Loom, 1785. (5-69)
  433. Old Watt Engine, 1776, (5-213)
  434. Whitney's Cotton Gin. (3-302)
  435. The Interior Of Slater's Mill, 1790. (5-82)
  436. The Whitmarsh Mill, 1832. (5-423)
  437. Picking Room Of A Cotton Mill. (5-387)
  438. A Drawing Frame. (5-389)
  439. Mule Spinning. (5-393)
  440. Beaming. (5-397)
  441. "Drawing In." (5-398)
  442. A Weaving Room, With Looms In Action. (5-399)
  443. Cotton Mills, West Point, Georgia. (5-384)
  444. Sorting Wool. (5-415)
  445. The Wood Worsted Mill, Lawrence, Mass. (5-416)
  446. Troops Defending The Lawrence (Mass.) Mills During The Textile Strike, 1912. (5-728)
  447. Opening Bales Of Reeled Silk From Japan. (5-429)
  448. Winding Silk. (5-430)
  449. Dyeing Silk. (5-433)
  450. The Silkworm's Substitute. (5-435)
  451. Silk Mill At Paterson, New Jersey. (5-427)
  452. Wilson Dam, Muscle Shoals, Alabama. (5-328)
- (See also slides nos. 125,128,822,833.)

### XIX. The Story Of Coal And Oil

- 453. The Evolution Of Coal (Chart). (5-130)
  - 454. An Early Coal Mine. (5-138)
  - 455. Loading Coal By Hand. (5-159)
  - 456. Mine Mule Hauling A Load. (5-162)
  - 457. Slate Picking In The 'Sixties. (5-167)
  - 458. Davy's Safety Lamp. (5-189)
  - 459. Using Canaries To Detect Presence Of Gas. (5-191)
  - 460. Sprinkler Car At Mine Entrance. (5-192)
  - 461. Cross Section Of A Coal Mine. (5-150)
  - 462. The Miner And His Tools. (5-184)
  - 463. Mine Cage At Shaft Top. (5-153)
  - 464. Preparing To Blast A Vein. (5-155)
  - 465. A Mechanical Coal Loader. (5-160)
  - 466. Combination Cutter, Breaker and Loader. (5-161)
  - 467. The Electric Mine Locomotive. (5-163)
  - 468. Anthracite Breaker Buildings. (5-165)
  - 469. Sorting Screens. (5-168)
  - 470. Tipple For A Bituminous Mine. (5-169)
  - 471. Head Of Picking Table In A Tipple. (5-170)
  - 472. Comparative Coal Supplies Of The World (Chart). (5-149)
  - 473. Water, Oil And Gas Underground (Diagram). (5-248)
  - 474. Drake And The First Oil Well. (5-234)
  - 475. Oil Creek Valley, 1865. (5-238)
  - 476. Oil Wells In The Pacific. (5-249)
  - 477. Oil Tank On Fire. (5-270)
  - 478. Gas Well Blowing Wild. (5-263)
  - 479. Crude Oil Industry, From Field To Refinery (Diagram). (5-269)
  - 480. Loading Tank Cars. (5-271)
  - 481. Oil Tank Steamer. (5-272)
  - 482. The United States As An Oil Producer (Map). (5-245)
- (See also slides nos. 824-826, 857, 858, 951.)

### XX. The Story Of Iron And Steel

- 483. America's First Ironworks Attacked By Indians, 1622. (5-438)
  - 484. Casting The Saugus Pot, 1642. (5-439)
  - 485. Ruins Of A Catalan Forge. (5-476)
  - 486. Ruins Of A Cold Blast Furnace. (5-477)
  - 487. Ruins Of A Hot Blast Furnace. (5-478)
  - 488. An Early Steel Plant, Cincinnati, 1832. (5-460)
  - 489. An American Rolling Mill, ca. 1820. (5-504)
  - 490. Filling A Furnace By Hand. (5-482)
  - 491. Inclined Plane For Hoisting Raw Materials, 1881. (5-483)
  - 492. Mechanical "Skip" For Filling A Furnace. (5-484)
  - 493. Unloading Ore On Lake Erie. (5-473)
  - 494. A Modern Blast Furnace. (5-480)
  - 495. How Pig Iron Is Made. (5-481)
  - 496. Cupola For Remelting Iron. (5-489)
  - 497. Stirring Iron In A Puddling Furnace. (5-491)
  - 498. A Bessemer Converter In Action. (5-497)
  - 499. Filling An Open-Hearth Furnace. (5-499)
  - 500. Open-Hearth Steel Pouring Out Of The Furnace (5-501)
  - 501. Filling Ingot Molds With Liquid Steel. (5-502)
  - 502. A Modern Rolling Mill. (5-506)
  - 503. Lifting Pots Of Crucible Steel From The Furnace. (5-507)
  - 504. The Melting Pot Of The Steel Industry. (5-527)
  - 505. From Iron Mine To Finished Product (Chart). (5-488)
- (See also slides nos. 667, 827, 828, 916, 931.)

XXI. The Story Of The Cattlemen, Packer And Tanner

- 506. The Bronco Buster. (3-371)
  - 507. Two Old-Timers. (3-400)
  - 508. Roping A Steer. (3-382)
  - 509. Hunting The Bison: A New Sport. (3-364)
  - 510. Shorthorns On The Plains. (3-426)
  - 511. A Texas Longhorn. (3-367)
  - 512. Dipping Cattle. (3-522)
  - 513. Sheep In The Mountains. (3-421)
  - 514. Driving Hogs Through The Streets, Cincinnati, 1860. (5-629)
  - 515. Unloading Hogs At Chicago. (5-637)
  - 516. A View Of The Chicago Stockyards. (5-636)
  - 517. A Chicago Packing Plant. (5-638)
  - 518. Modern Dressing Of Carcasses. (5-640)
  - 519. Government Inspection Of Meat. (5-641)
  - 520. How Products Are Shipped In A Refrigerator Car. (5-643)
  - 521. The First American Tannery, Lynn, 1630. (5-651)
  - 522. An Old-Time Open-Air Tannery. (5-652)
  - 523. Modern Tannery Buildings. (5-653)
  - 524. The Soaking Pit. (5-654)
  - 525. Splitting Hides By Machine. (5-655)
  - 526. The Tan Vats. (5-656)
  - 527. Polishing Leather With A Staking Machine. (5-657)
  - 528. Tanning Drums For Chrome Leather. (5-661)
- (See also slides nos. 834-836, 838-840.)

XXII. The Story Of Literature

- 529. The New England Primer, 1727. (11-44)
  - 530. A Page Of "Common Sense." (11-117)
  - 531. "Poor Richard's Almanack." (11-135)
  - 532. Rip Van Winkle. (11-560)
  - 533. Old Christmas. (11-248)
  - 534. Leatherstocking. (11-281)
  - 535. William Cullen Bryant In His Study. (11-311)
  - 536. Ralph Waldo Emerson. (11-327)
  - 537. "The Rude Bridge That Arched The Flood." (11-334)
  - 538. Hawthorne As Surveyor Of Customs, Salem. (11-353)
  - 539. "House Of Seven Gables," Salem, Mass. (11-50)
  - 540. Longfellow In His Study, Craigie House. (11-370)
  - 541. "Under A Spreading Chestnut Tree The Village Smithy Stands." (11-374)
  - 542. The Wedding Of Priscilla And John Alden. (11-385)
  - 543. The Wayside Inn, Sudbury, Massachusetts. (11-390)
  - 544. Kitchen In The Whittier Birthplace. (11-395)
  - 545. Whittier's "Snowbound." (11-404)
  - 546. Illustration From Lowell's "The Biglow Papers." (11-420)
  - 547. Oliver Wendell Holmes. (11-433)
  - 548. First Page Of Poe's "The Bells." (11-466)
  - 549. Walt Whitman In His Home. (11-474)
  - 550. Uncle Tom Saving Eva From A Watery Grave. (11-531)
  - 551. Illustration From Melville's "Moby Dick." (11-540)
  - 552. Mark Twain. (11-613)
  - 553. Huckleberry Finn. (11-617)
  - 554. John Burroughs In His Last Years. (11-643)
  - 555. Joel Chandler Harris' Character, Uncle Remus. (11-664)
  - 556. "Little Women" By Louisa M. Alcott. (11-695)
  - 557. "O. Henry"--William Sydney Porter. (11-787)
  - 558. Sinclair Lewis And James Branch Cabell. (11-775)
  - 559. Booth Tarkington. (11-777)
  - 560 Edna St. Vincent Millay. (11-807)
- (See also slides nos. 68, 179, 954, 955, 957, 958, 960.)

XXIII. The Story Of Art

- 561. Mrs. Seymour Fort. (12-14)
  - 562. George Washington. (12-25)
  - 563. Capture Of The Hessians At Trenton. (6-306)
  - 564. Peace And Plenty. (12-112)
  - 565. Harp Of The Winds, A View On The Seine. (12-122)
  - 566. The Mother. (12-106)
  - 567. The Ascension. (12-154)
  - 568. Hark, The Lark! (12-81)
  - 569. The Lookout--"All's Well." (12-128)
  - 570. The Whistling Boy. (12-143)
  - 571. Mother And Child. (12-148)
  - 572. The Thinker. (12-149)
  - 573. Madame X. (12-225)
  - 574. The Power Of The Law. (12-161)
  - 575. The Woodcutters. (12-241)
  - 576. The Western Slope. (12-218)
  - 577. The Blue Devils Marching Up Fifth Avenue. (12-245)
  - 578. In The Wake Of The Ferry. (12-248)
  - 579. The Throne. (12-253)
  - 580. Scene In A Restaurant. (12-251)
  - 581. A Young Girl. (12-290)
  - 582. In The Country. (12-291)
  - 583. River Effect, Paris, 1908. (12-265)
  - 584. Old Warehouses, Portsmouth. (12-445)
  - 585. Ponte Vecchio. (12-437)
  - 586. Filling The Treasure Chest. (12-557)
  - 587. Resurrection Window. (12-186)
  - 588. Bronze Doors. (12-307)
  - 589. Emancipation. (9-42)
  - 590. The Peace Of God. (12-314)
  - 591. The Minute Man. (12-315)
  - 592. Solitude Of The Soul. (12-325)
  - 593. The End Of The Trail. (12-356)
- (At the elementary level slide no. 887 may be substituted for slide no 592.  
See also slides nos. 89,885,886,888,889.)

XXIV. The Story Of Architecture

- 594. Log Cabin Near Darby, Pennsylvania. (13-8)
- 595. Capon House, Topsfield, Massachusetts. (13-41)
- 596. The Ward House, Salem, Massachusetts. (13-49)
- 597. Seventeenth-Century Wall Paneling. (13-110)
- 598. Interior, Christ's Church, Virginia, 1732. (13-93)
- 599. Westover On James River, Virginia. (13-171)
- 600. Mount Vernon. (13-174)
- 601. Monticello, Albemarle County, Virginia. (13-243)
- 602. Annapolis State House, 1790. (13-189)
- 603. The National Capitol, Washington, D. C. (13-478)
- 604. Classic Mansion In Philadelphia, 18th Century. (13-147)
- 605. Eighteenth-Century Stairway. (13-116)
- 606. First Baptist Church, Providence, R.I., 1775. (13-121)
- 607. Trinity Church, Boston--H. H. Richardson, Architect. (13-406)
- 608. Dyckman House, New York, 1798. (13-223)
- 609. House Of Early Dutch Governors, Albany. (13-68)
- 610. New York City Hall, 1826. (13-233)
- 611. Rotunda, New York City Hall. (13-234)
- 612. Victorian Pseudo-Elegance. (13-360)
- 613. The Charm Of Broad Simplicity. (13-639)



- 614. The Library, University Of Virginia. (13-257)
- 615. Interior, Library Of Congress, Washington. (13-515)
- 616. The Columbia University Library. (13-616)
- 617. Harkness Memorial Tower--Yale University. (13-610)
- 618. Interior Of Pennsylvania Station, New York. (13-505)
- 619. Main Street, 1873, McPherson, Kansas. (13-343)
- 620. The Nebraska State Capitol, Lincoln. (13-486)
- 621. St. Joseph's Church, Laguna, New Mexico. (13-26)
- 622. Spanish Type House, California. (13-826)
- 623. Railroad Station--San Diego, California. (13-509)
- 624. The Woolworth Building, New York. (13-467)
- 625. The Skyscraper Of The Future. (13-469)

(See also slides nos. 4, 19, 23, 25, 35-38, 81, 105, 124, 138, 143, 150, 167, 180, 181, 194, 201, 235, 260, 373, 539, 543, 544, 587, 588, 713, 778, 890-895.)

### SUPPLEMENTARY SLIDES

#### Portraits

- 626. Samuel Adams. (8-121)
- 627. Benedict Arnold. (6-451)
- 628. John Barry. (6-531)
- 629. Father Bartolome De Las Casas. (10-10)
- 630. General John Burgoyne. (6-316)
- 631. Aaron Burr. (8-476)
- 632. John C. Calhoun. (8-500)
- 633. The Cartier Medallion. (1-601)
- 634. Samuel De Champlain. (1-611)
- 635. Charles I. (1-427)
- 636. Chief Of The Six Nations In Colonial Costume, About 1710. (1-6)
- 637. Henry Clay (8-499)
- 638. Jefferson Davis With His Bride. (8-644)
- 639. Jefferson Davis. (7-24)
- 640. Admiral George Dewey. (7-406)
- 641. Sir Francis Drake. (1-319)
- 642. Benjamin Franklin. (8-319)
- 643. John C. Fremont. (2-440)
- 644. Martin Frobisher. (1-308)
- 645. General Horatio Gates. (6-329)
- 646. Sir Humphery Gilbert. (1-309)
- 647. General U. S. Grant. (7-292)
- 648. Field Marshal Sir Douglas Haig. (7-668)
- 649. Statue In Memory Of Nathan Hale. (6-457)
- 650. Alexander Hamilton. (8-401)
- 651. John Hancock. (8-157)
- 652. Herbert Hoover. (9-627)
- 653. Sam Houston. (2-465)
- 654. Admiral Lord Howe. (6-280)
- 655. Andrew Jackson. (6-670)
- 656. John Paul Jones. (6-536)
- 657. Thaddeus Kosciuszko. (6-330)
- 658. Marquis De Lafayette. (6-497)
- 659. Captain James Lawrence. (6-603)
- 660. General Robert E. Lee. (7-25)
- 661. General Robert E. Lee On "Traveller." (7-251)
- 662. Abraham Lincoln. (12-312)
- 663. Little Turtle. (2-167)
- 664. Jacques Marquette. (10-43)

- 665. John Marshall. (8-467)-portrait by John W. Jarvis.
- 666. John Marshall. (8-357)-from portrait by St. Memis.
- 667. T. W. Means, Pioneer Of Hanging Rock. (5-457)
- 668. James Monroe. (8-520)
- 669. James Otis. (8-78)
- 670. General Zebulon M. Pike. (2-346)
- 671. William Pitt, First Earl Of Chatham. (8-111)
- 672. Sir Walter Raleigh. (1-313)
- 673. James Robertson. (2-38)
- 674. Field Marshal Comte De Rochambeau. (6-424)
- 675. Theodore Roosevelt. (9-432)
- 676. General Arthur St. Clair. (2-166)
- 677. Colonel Barry St. Leger. (6-321)
- 678. John Sevier. (2-39)
- 679. General Philip Schuyler. (6-258)
- 680. General Winfield Scott. (6-694)
- 681. Major General Philip Sheridan. (7-342)
- 682. General William T. Sherman. (7-369)
- 683. Myles Standish. (1-412)
- 684. Zachary Taylor. (6-683)
- 685. Americus Vespucci. (1-218)
- 686. General Anthony Wayne. (2-168)
- 687. Daniel Webster. (8-640)
- 688. Woodrow Wilson. (9-537)-From a photograph.
- 689. Woodrow Wilson. (9-539)-In 1919, from a photograph

Indians, Explorers, And Settlers

- 690. Passing The Pipe. (1-88)
- 691. Mandan Indians. (1-65)
- 692. Zuni Potters. (1-122)
- 693. "Furring" Indians Going Home. (1-634)
- 694. Attacking The Grizzly Bear. (1-76)
- 695. The Primitive Marksman. (1-1)
- 696. "Theire Sitting At Meate." (1-23)
- 697. A Central Council House Of The Iroquois. (2-99)
- 698. A Seminole Village Group, Florida. (2-235)
- 699. Door Of Sheldon House, Deerfield, Mass., With Holes Made By Indian Hatches. (6-84)
- 700. Indian Workers Tortured In Hispaniola. (10-8)
- 701. Indian Skirmish. (2-512)
- 702. Too Near The Warpath. (3-191)
- 703. English Colonists Trading With Iroquois. (4-19)
- 704. Rival Traders Racing To The Indian Camp. (2-19)
- 705. Leif Ericsson--The Landing In Vinland. (1-141)
- 706. Columbus' Presentation At Court. (1-190)
- 707. De Soto At The Mississippi, 1542 (1-283)
- 708. Huguenots Pleading With Menendez. (1-300)
- 709. Marquette's Funeral At The Mouth Of The Marquette In Michigan, 1675. (1-675)
- 710. A New England Town Meeting. (8-4)
- 711. The Pioneer Habitant. (1-663)
- 712. Le Canadien. (1-664)
- 713. Old Habitant House. (1-667)
- 714. Habitant Ploughing. (1-665)
- 715. Sons Of La Verendrye Sighting The Rockies. (1-705)
- 716. Celoron's Leaden Plate. (6-132)
- 717. Typical Eighteenth-Century Frontiersman. (2-22)
- 718. Frontier Dwelling In A Clearing. (3-195)
- 719. Daniel Boone And His Companions Viewing The Land Of Kentucky. (2-52)

- 720. Arrival Of Pioneers At Youngstown, 1799. (2-161)
- 721. Moses Cleaveland Meeting Indian Chief, 1790. (2-175)
- 722. A Frontier Scene West Of The Mississippi. (3-353)
- 723. Jim Bridger At The Great Salt Lake, Utah. (2-427)
- 724. Dr. Whitman Starting For The East. (2-434)
- 725. Fremont's Party Ascending The Highest Peak In The American Rockies. (2-441)

#### War And Peace

- 726. Fort Union On The Missouri. (1-92)
- 727. The Victory Of Cortes At Otumba. (1-265)
- 728. Old Fort, Burial Hill. (1-416)
- 729. Fort Orange (Albany). (1-473)
- 730. Fort Harmar, 1790. (2-147)
- 731. Fort Washington. (2-160)
- 732. The Treaty Of Fort Greenville. (2-173)
- 733. Interior Of Fort Hall. (2-446)
- 734. Fort Necessity. (6-140)
- 735. Winter Encampment At Valley Forge, 1777. (6-380)
- 736. Captured Flags From Yorktown Laid Before Congress, November 3, 1781. (6-520)
- 737. The End Of The Whiskey Rebellion. (8-416)
- 738. General Brock Meets Tecumseh. (6-627)
- 739. United States Fort At Detroit, 1812. (6-628)
- 740. Fort Niagara, 1814. (6-638)
- 741. Signing The Treaty Of Ghent. (8-517)
- 742. Landing Scott's Army At Vera Cruz, 1847. (6-695)
- 743. A Northern Conception Of Enthusiastic Troops Going To The Front. (7-14)
- 744. Confederate Jubilations At Richmond On Receiving News Of the Battle Of Bull Run. (7-47)
- 745. Entry Of Morgan's Freebooters Into Ohio. (7-202)
- 746. General Lee's Farewell To His Troops. (7-398)
- 747. Cuban Insurgents. (7-421)
- 748. The Advance On San Juan Hill. (7-446)
- 749. Admiral Sims And Officers At Raising Of The Admiral's Flag--Queenstown, 1917. (7-518)
- 750. Blackboard Showing Record Of Draft Numbers Drawn July 20, 1917. (7-555)
- 751. The First Days Of Training. (7-561)
- 752. On The Edge Of Belleau Wood. (7-680)
- 753. A View Of The Valley Of The Marne In The Sector Of The 38th Regiment. (7-699)
- 754. American Cemetery In France. (7-807)
- 755. United States Peace Commission. (9-638)

#### Ships And Naval Encounters

- 756. The Gokstad Viking Ship, 800-1000 A.D. (1-132)
- 757. Jacques Cartier's Flotilla, 1535. (1-604)
- 758. First Boat Ashore, Provincetown Harbor. (1-399)
- 759. French Fire Ships Attacking The British Fleet At Quebec. (6-201)
- 760. Ship "Columbia" In Oregon, 1790. (4-50)
- 761. The River Steamboat "New Orleans." (4-202)
- 762. "Old Ironsides." (6-581)
- 763. The Battle Of Plattsburg. (6-668)
- 764. The "Chesapeake" And "Shannon." (6-599)
- 765. The Battle Of Lake Erie. (6-650)
- 766. Perry Transferring His Flag At The Battle Of Lake Erie. (6-651)
- 767. Snags In The Upper Missouri, 1833. (4-204)
- 768. The Battle Between The "Monitor" And "Merrimac," March 9, 1862. (7-81)
- 769. Confederate Rams Engaging The Federal Blockading Fleet Off Charleston. (7-275)
- 770. The Battle Of Mobile Bay. (7-285)

Settlements, Towns, And Cities

- 771. Bridgetown, The Capital Of Barbados, 1695. (1-595)
- 772. Charleston, 1739. (1-569)
- 773. Ye Great Town Of Boston, 1743. (4-16)
- 774. Louisbourg, 1745, After The Capture. (6-128)
- 775. The Ohio Company's Garrison At The Mouth Of The Muskingum, 1792. (2-152)
- 776. Cincinnati, 1800. (2-182)
- 777. Astoria, 1813. (2-342)
- 778. Market Street, Baltimore In The 1830's. (13-436)

Commerce And Transportation

- 779. The Caravan. (1-158)
- 780. Oak And Pine Tree Shillings, 1652. (Obverse and Reverse). (4-694)
- 781. Shipping Tobacco From Virginia, 1777. (3-105)
- 782. Old National Or Cumberland Road (Map). (4-112)
- 783. A Caravan On Its Way To The West. (2-541)
- 784. Arrival Of A Caravan At Santa Fe. (2-397)
- 785. The End Of The Oregon Trail. (2-439)
- 786. A Flatboat On The Ohio. (2-162)
- 787. Western End Of The Erie Canal. (2-200)
- 788. Concrete Lock Of New York Barge Canal. (4-500)
- 789. Gurney's Steam Carriage, 1827. (4-773)
- 790. The Farmer's Automobile. (3-590)
- 791. Buggy Road, Mississippi. (3-313)
- 792. A Dirt Highway. (3-488)
- 793. Rural Free Delivery. (3-588)
- 794. Truck And Trailer On A Mountain Road. (4-802)
- 795. Lunardi's Second Balloon Flight At St. George's Field, London, September 15, 1785. (4-836)
- 796. Pilots Macready And Kelly Just Before The First Transcontinental Flight, 1923. (4-866)
- 797. Group Of Noted Trans-Oceanic Fliers. (4-881)
- 798. The Harbor Of Los Angeles. (4-454)

Industry And Minor Occupations

- 799. Harrowing. (3-147)
- 800. Corn Husking In The Barn. (3-260)
- 801. The Home Of A "Debtor Farmer." (3-196)
- 802. The Farm Telephone. (3-592)
- 803. The Farmer's Wife. (3-182)
- 804. Woman's Work, 1776. (3-24)
- 805. Paying Dues At The Farm Bureau. (3-601)
- 806. Plow Entirely Of Wood. (3-146)
- 807. Plow Of Nathaniel Harrington, 1742. (3-144)
- 808. Jethro Wood's Plow. (3-438)
- 809. The Harrow. (3-8)
- 810. The Village Post Office And Country Store. (3-271)
- 811. The Village Blacksmith. (3-273)
- 812. An Irrigated Field. (3-499)
- 813. Flooding A Field In Wyoming. (3-498)
- 814. An Irrigation Flume In Washington. (3-495)
- 815. Establishing Umatilla Project, Oregon. (3-500)
- 816. Umatilla Project--Six Years After. (3-501)
- 817. Guarding Against Foreign Invasion Of Plant Diseases. (3-527)
- 818. Exterminating The Common Barberry Bush. (3-526)
- 819. A Cotton Field. (3-322)

- 820. Hoeing The Young Cotton Plants. (3-321)
- 821. Hauling Cotton From A Plantation. (3-541)
- 822. The Boott Cotton Mills, Lowell. (5-95)
- 823. A Sugar Plantation, Louisiana. (3-328)
- 824. Early Mining In The Lehigh Valley. (5-142)
- 825. Coal "Ark" On The Susquehanna, 1808. (5-172)
- 826. A Patent Coal-Cutting Machine, 1865. (5-156)
- 827. First Furnace West Of Alleghenies, 1790. (5-455)
- 828. Union Furnace, Hanging Rock, Ohio. 1826. (5-456)
- 829. The Traveling Tinker. (5-39)
- 830. Float Wheel At The First Crismill And Sawmill In Ohio, 1789. (5-111)
- 831. Old Mill With Overshot Wheel. (5-112)
- 832. The Overshop Wheel Of Oliver Evans' Day. (5-115)
- 833. Water Pouring Over Holyoke Dam. (5-126)
- 834. Interior Of The Old Winslow "Ten-Footer" Shoe Shop. (5-665)
- 835. Goodyear-Welt Sewing Machine. (5-672)
- 836. The Pulling-Over Machine (5-673)
- 837. Maple Sugaring. (15-39)
- 838. Winter Quarters Of Cowboys, Kansas. (3-375)
- 839. Catching A Steer In Spanish California. (3-369)
- 840. A Rancher's Cabin, Texas. (3-373)
- 841. Distilling Whiskey. (3-192)
- 842. A Whiskey Trader. (2-379)
- 843. A Cod Fishing Fleet. (3-641)
- 844. Fish And Fur. (1-610)
- 845. The American Fur Company's Buildings, Fond Du Lac, Wisconsin. (2-271)
- 846. Trappers. (2-422)

#### Sociology And Recreation

- 847. Buccaneers Dividing The Spoils. (1-597)
- 848. Cattle Fair, Bowling Green. (1-477)
- 849. The Maypole Dance. (3-28)
- 850. Revels at Merry Mount. (15-2)
- 851. The Ducking Stool. (10-133)
- 852. The Pillory. (10-137)
- 853. A Wanton Gospeller. (10-122)
- 854. Stolen Frolic In A Puritan Farmhouse. (10-123)
- 855. Washington And Friends After A Day's Hunt. (15-21)
- 856. Sunday Morning In The Mines. (2-488)
- 857. A Miner's Ideal Home. (5-197)
- 858. How the Average Miner Lives. (5-198)
- 859. Anti-Slavery Meeting On The Common, Boston. (8-647)
- 860. Removing The Veil Of Ignorance And Superstition. (9-108)
- 861. Religious Liberty. (10-278)
- 862. Temperance Crusaders In A Liquor Shop. (10-479)
- 863. Indian Mission At Wailatpu, Washington. (10-582)
- 864. Camp Meeting At Sing Sing Prison, 1859. (10-421)
- 865. A Summer Camp. (15-715)
- 866. Boy Scouts Around A Camp Fire. (15-724)
- 867. A Peach Tree Carnival In Georgia. (3-616)
- 868. The Circus. (3-275)

#### Church And School

- 869. A Greenland Church. (1-138)
- 870. The Godshill Church, Isle Of Wight. (3-25)
- 871. Chapel, Haddon Hall. (3-26)
- 872. Planting The Cross In The Western World. (10-4)
- 873. Arrival Of The Ursulines, 1639. (1-637)

- 874. Serra's First Mass At San Diego. (10-27)
- 875. Old Bruton Church, Williamsburg. (3-129)
- 876. Washington Taking Communion With The Presbyterians At Morristown. (10-298)
- 877. A Circuit Preacher. (10-336)
- 878. A One-Teacher Rural School. (13-587)
- 879. A District Schoolroom In Maine. (10-708)
- 880. A Rural Consolidated School. (3-613)
- 881. The New York State College Of Agriculture, Cornell University. (3-514)
- 882. Dining Hall, Tuskegee Institute. (10-699)

#### Art And Architecture

- 883. First Inaugural Address. (8-382)
- 884. Signing The Louisiana Treaty. (8-472)
- 885. A Visit From The Mistress. (3-335)
- 886. Cannon Rock. (12-126)
- 887. The Walls Were As Of Jasper. (12-528)
- 888. Appeal To The Great Spirit. (12-327)
- 889. The Flyer. (12-342)
- 890. The Hall, Moat House, Kent. (3-29)
- 891. An Early Log House In St. Paul, Minnesota. (13-324)
- 892. Governor's House, St. Augustine, Florida. (13-19)
- 893. San Luis Rey De Francia, Near Oceanside, California. (13-36)
- 894. Union Railway Station, Washington, D. C. (4-340)
- 895. The Wrexham Tower At Yale University. (13-609)

#### Scenic

- 896. View From Brattahlid Over Ericsfiord. (1-137)
- 897. Cumberland Gap. (4-110)
- 898. In The Mountains Of Virginia. (3-187)
- 899. View Of Washington, The National Capital. (13-444)
- 900. Niagara Falls From The Canadian Side. (5-309)
- 901. Geysers In Yellowstone National Park. (15-730)
- 902. The Grand Canyon Of The Colorado. (15-732)
- 903. Glacier National Park, Montana. (15-741)
- 904. Scott Park, Showing Crater Lake. (15-739)
- 905. A Snow-Covered Lake In The Rockies. (3-493)
- 906. Mt. Ranier. (15-740)
- 907. The Golden Gate At Sunset, San Francisco. (4-453)

#### Maps

- 908. The Map Of Juan De La Cosa, 1500. (1-216)
- 909. Columbus' Voyages. (1-209)
- 910. The Straits Of Magellan. (1-225)
- 911. Cartier's Three Voyages, 1534-42. (1-602)
- 912. Feudal Estates Along The St. Lawrence. (3-90)
- 913. Early Virginia, 1607-20. (1-373)
- 914. Early Massachusetts Towns, To 1636. (1-446)
- 915. Land Distribution In Typical New England Community, Milford, Connecticut, 1639-1700. (3-80)
- 916. Bog And Swamp Ore Forges And Furnaces In Eastern Massachusetts, 1632-1776. (5-442)
- 917. Struggle Between England And France For Colonial Empire. (6-174)
- 918. The Old Northwest, 1760-1836. (2-201)
- 919. George Rogers Clark's Expedition In The Northwest, 1778-79. (2-79)
- 920. The Ohio Company Purchase. (2-150)
- 921. Western Reserve And Fire Lands. (2-177)
- 922. Indiana Land Purchases, 1795-1809. (2-183)
- 923. Routes Of Western Explorers, 1804-1846. (2-429)

- 924. Harrison's March To Tippecanoe. (2-190)
- 925. The Northern Campaign, War Of 1812. (6-634)
- 926. Early Eastern Canals And Railroads. (4-171)
- 927. Mid-Western Canals And Railroads, 1850. (4-173)
- 928. The Enslavement Of The South. (7-71)
- 929. Transcontinental Railroads Open In West, 1875. (2-398)
- 930. Map Showing Spanish Possessions, 1898. (7-402)
- 931. Distribution Of Blast Furnaces In The United States. (5-466)
- 932. Railways In The United States, 1910. (4-379)
- 933. General Offensive From September 26 to October 13, 1918. (7-770)
- 934. The Panama Canal Zone. (9-447)
- 935. Rail Terminal Facilities In Greater New York. (4-451)
- 936. Federal Reserve Districts. (4-764)
- 937. United States National Forests. (5-599)
- 938. United States Air Mail Routes. (4-546)

#### Charts And Diagrams

- 939. Chipping Flints--Shaping The Piece. (1-33)
- 940. Chipping Flints--Notching A Blade. (1-34)
- 941. Winter Quarters At Quebec, 1608. (1-623)
- 942. Making Indigo In South Carolina, 1770. (3-117)
- 943. Chart Illustrating Colonial Footdrill. (6-237)
- 944. Lumber Production By Geographic Groups, 1870-1920. (5-562)
- 945. Membership Of American Federation Of Labor, 1881-1924. (5-713)
- 946. Distribution Of Foreign Trade Of The United States, 1910-25. (4-472)
- 947. Wheat Production, 1919. (3-424)
- 948. Number Of Farms Reporting Water In House, January 1, 1920. (3-593)
- 949. Federal Reserve System Central Banking Functions. (4-766)
- 950. Proposed St. Lawrence Ship Canal Project. (4-502)
- 951. A Lump Of Coal And Some Of Its By-Products. (5-174)
- 952. Strokes Of Four-Cycle Engine, Part I. (5-283)
- 953. Strokes Of Four-Cycle Engine, Part II. (5-284)

#### Papers And Documents

- 954. A Page Of The Sagas. (1-135)
- 955. First Page of "Marco Polo," 1484. (1-157)
- 956. Coat-Of-Arms--Virginia Company Of London. (1-344)
- 957. Bradford's "History Of Plymouth Plantation." (1-421)
- 958. "Good Newes From New-England." (11-11)
- 959. The Charter Of Massachusetts, 1629. (1-432)
- 960. "A Relation Of Maryland," 1635. (1-542)
- 961. The Connecticut Charter, 1662. (8-13)
- 962. Page From Writ of Assistance. (8-75)
- 963. First Page Of The Stamp Act, 1765. (8-89)
- 964. Facsimile Of Threat To Stamp Distributors. (8-105)
- 965. Townsend Act Suspending The New York Assembly, 1767. (8-1180)
- 966. Two Pound Bill, North Carolina, 1771. (4-700)
- 967. Circular Letter From The Committee Of Correspondence In Boston, 1773.  
(8-154)
- 968. "The American Crisis." (8-246)
- 969. First And Second Sheets Of The Declaration Of Independence. (8-231 and 232)
- 970. First Page Of The Articles Of Confederation, 1777. (8-329)
- 971. Preamble Of The Constitution. (8-349)
- 972. French Gold Pays American Soldiers. (8-269)
- 973. First And Last Pages Of The Definitive Treaty Of Peace With Great Britain,  
1783. (8-284)
- 974. The Ordinance Of 1787. (8-336)
- 975. Title Page Of The Assumption Act, 1790. (8-411)
- 976. The Embargo Act, 1807. (8-486)
- 977. Boston Mail Stage Service, 1810. (4-151)

978. Manuscript Of The "Star Spangled Banner." (6-662)
979. Facsimile Of The Monroe Doctrine In Monroe's Handwriting. (8-532)
980. The Original Bear Flag, California, 1846. (2-482)
981. Shipping Card Advertising Clipper Service To California. (4-90)
982. Fugitive Slave Bill. (8-642)
983. Volunteers Wanted! (9-12)
984. Jackson's Last Dispatch. (7-219)
985. Advertisement Of Steamboat Transportation To The Gold Mines Of Idaho, 1863. (2-494)
986. Wilson's Proclamation Of War. (7-484)
987. The Declaration Of War, 1917. (9-613)
988. Keep It Coming. (7-489)
989. The Treaty Of Peace, 1919. (9-646)

#### Cartoons

990. Boston Port Bill Forced On America. (8- 177)
991. America Rejects The British Overtures. (8-272)
992. Lord North In The Suds. (8-276)
993. The Hartford Convention, 1814. (8-511)
994. Latest From Spirit-Land. (9-23)
995. Mrs. North And Her Attorney. (9-53)
996. Can A Man Be A Nurse? (9-152)
997. Elisha Roosevelt Sicketh The Bears On The Bad Boys Of Wall Street. (9-469)
998. Tangled. (9-491)
999. Let Us Have Peace. (9-608)
1000. Each Line And Word. (9-599)