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FIELD MUSEUM AND GROUP EDUCATION

*An Outline of the Work Carried on by Field
Museum of Natural History among School
Children through The N. W. Harris Pub-
lic School Extension and The James
Nelson and Anna Louise Raymond
Foundation for Public School
and Children's Lectures*

Field Museum of
Natural History



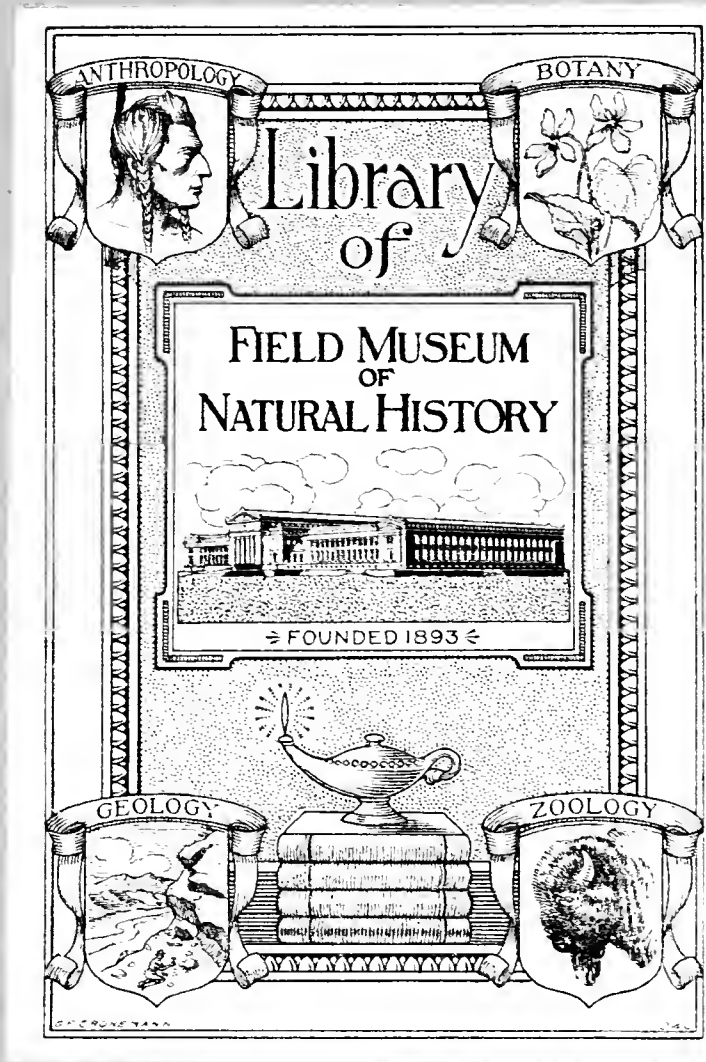
CLIFFORD C. GREGG
DIRECTOR

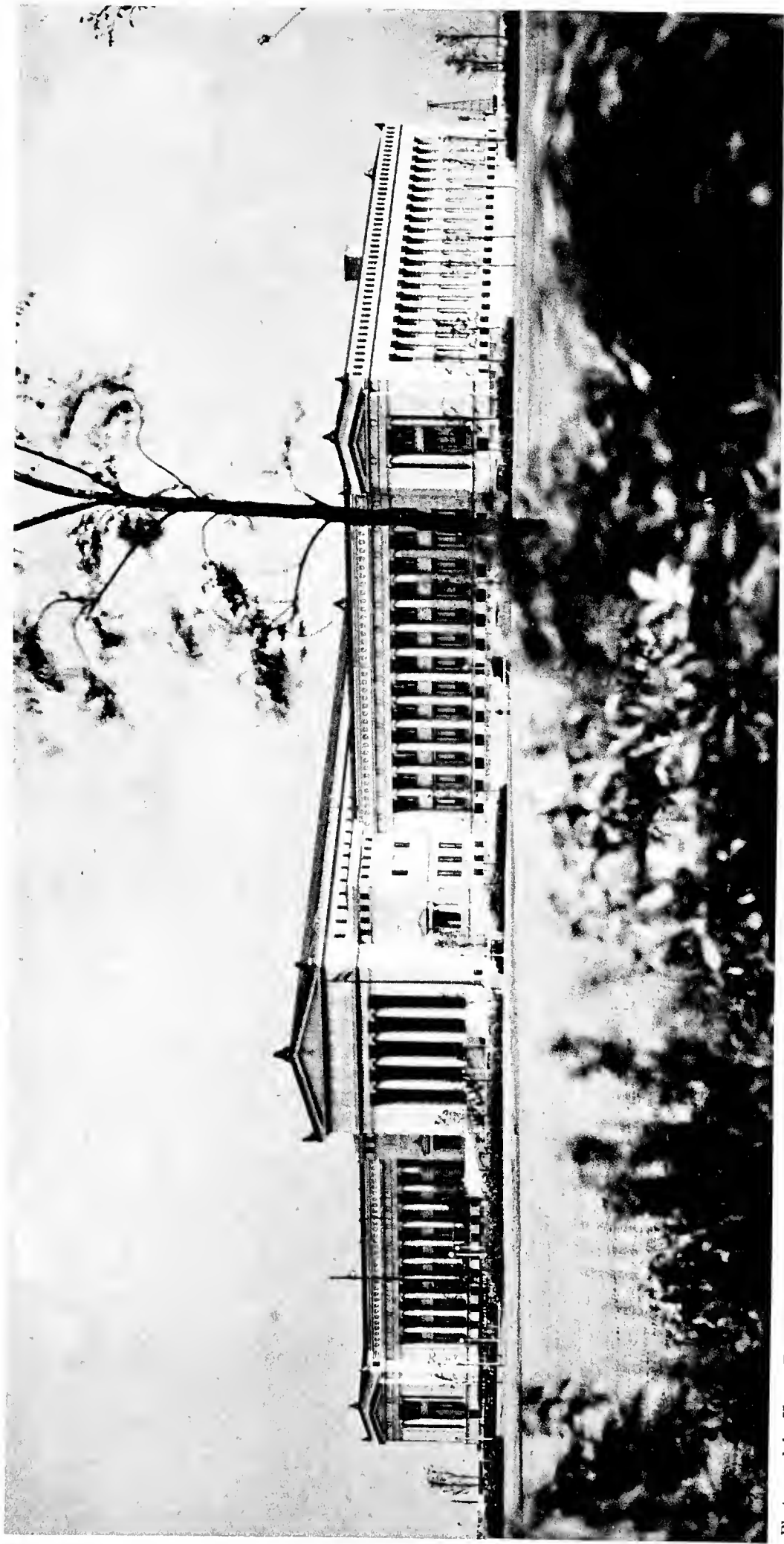
CHICAGO
1938

THE FIELD MUSEUM LIBRARY



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Photograph by Henry Fuerrmann and Sons, Chicago

FIELD MUSEUM OF NATURAL HISTORY
Roosevelt Road and Field Drive, Chicago

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FIELD MUSEUM OF NATURAL HISTORY

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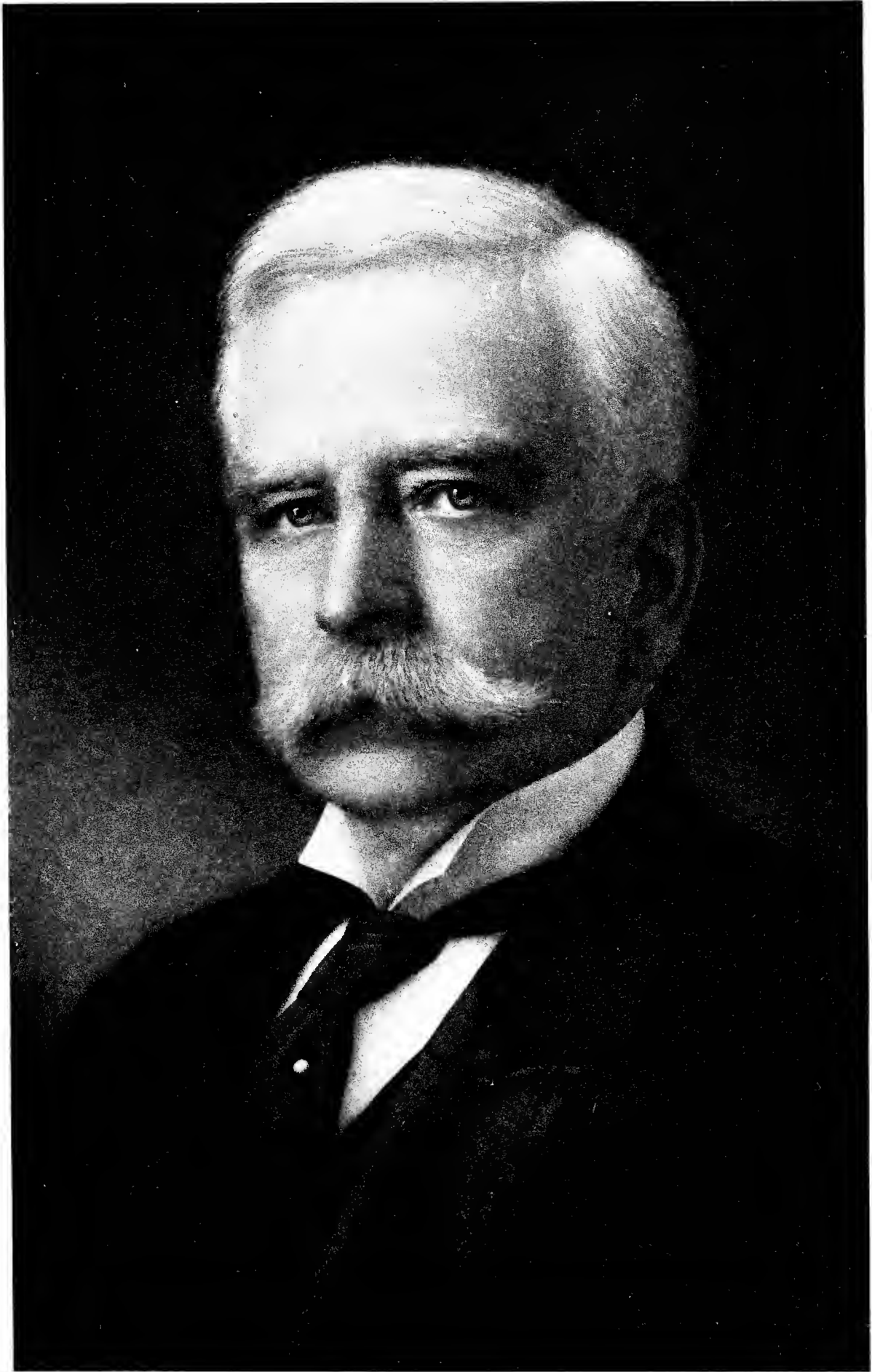
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MARSHALL FIELD
Founder of Field Museum

Field Museum of Natural History was founded in 1893, its establishment being made possible by the late Marshall Field, who gave \$1,000,000 for the purpose. A further sum of \$8,000,000 was bequeathed to the institution by Mr. Field on his death in January, 1906. Of this amount, \$4,000,000 was allotted toward the erection of the present building, and \$4,000,000 for endowment.

The Museum originally occupied the Fine Arts Building in Jackson Park, left from the Chicago World's Columbian Exposition. Since 1920 the Museum has been housed in the new building, located in Grant Park at Roosevelt Road and Field Drive. The building is 706 feet long, 438 feet wide, 104 feet high, and has over 11 acres of exhibition area. The exterior is of white Georgia marble, and is treated in a monumental manner, based on Greek architecture of the Ionic order.

Exhibits are divided into four scientific Departments—Anthropology, Botany, Geology, and Zoology. In addition to displaying material on these subjects, each department has a staff constantly engaged in expeditionary and research work, and in the preparation of scientific publications dealing with the results of the institution's work.

The Museum is open every day of the year (except Christmas and New Year's Day) during the hours indicated below:

<i>November, December, January, February</i>	<i>9 A.M. to 4 P.M.</i>
<i>March, April, September, October</i>	<i>9 A.M. to 5 P.M.</i>
<i>May, June, July, August</i>	<i>9 A.M. to 6 P.M.</i>

Adult visitors are charged an admission fee of twenty-five cents except on Thursdays, Saturdays, and Sundays when admission is free. Children and school teachers are admitted free on all days. Students and members of the faculty of any university, college, or institute, are admitted free upon presentation of proper credentials.



Photograph by George A. Greb, Jr.

STANLEY FIELD

President of Field Museum continuously since 1909

FIELD MUSEUM AND GROUP EDUCATION

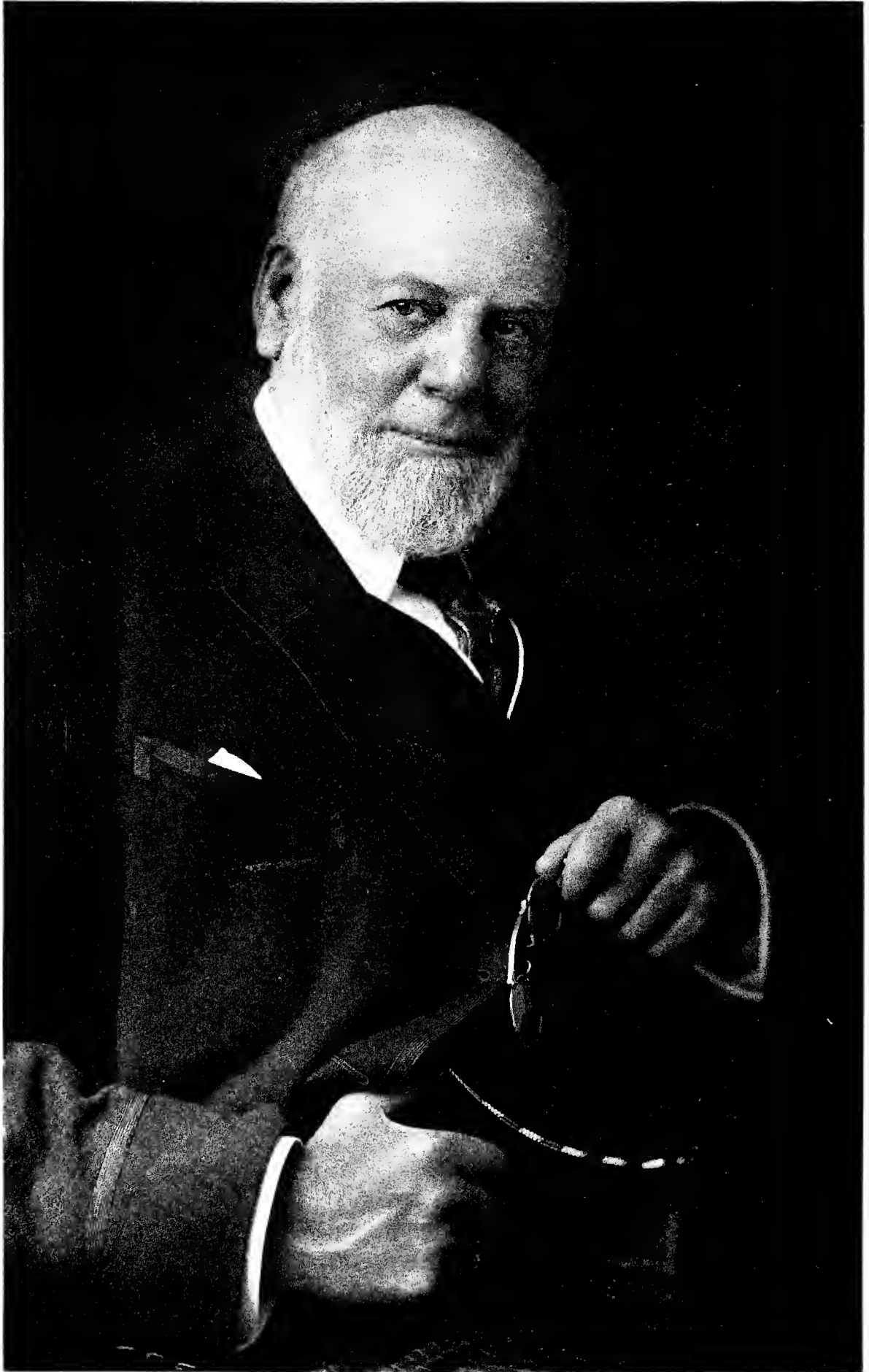
FOREWORD

The impressions obtained in childhood are most vivid and lasting, and to the child mind, knowledge is most welcome when its acquisition is sweetened with a flavor of entertainment—something different from the routine of the classroom. Realizing this, those entrusted with the administration of Field Museum have always aimed to provide education, in an attractive form, for children.

The entire Museum is a wonderland for the child, and mere admission to it opens opportunity for adventuring among the exhibits which cannot help but be fruitful in adding to his store of information. Free admission to the Museum, therefore, is granted to children, and their teachers, on all days. Students and faculty members of higher institutions of learning are accorded the same privilege.

But to make the Museum mean the most possible to the child, it is necessary to go farther than this. It has been found advantageous for the Museum to reach out into the schools themselves, by sending portable exhibits on natural history and economic subjects into the classrooms. It has also proved beneficial to send out into the schools lecturers to give illustrated talks on subjects studied by the children in their classes, and to call attention to exhibits in the Museum which further illustrate these subjects. Still other work of this nature is carried on within the Museum building itself, and includes the direction of the child's explorations in the treasure house of knowledge, the correlation of Museum studies with school-room work, and the supplementing of Museum exhibits with lectures, moving pictures, and lantern slides. Attractive printed stories in souvenir form, based on the lectures and pictures, and on related material to be seen in the Museum, are distributed to child visitors.

The preparation, maintenance, and circulation of the portable exhibits, of which more than 1,200 are now in use, are conducted by the N. W. Harris Public School Exten-



NORMAN WAIT HARRIS
Founder of the N. W. Harris Public School Extension

sion of Field Museum. The other branches of work with school children are carried on by the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures. The Harris and Raymond staffs receive assistance from the entire scientific and administrative organization of the Museum in maintaining a close-knit relationship with the schools and the children.

THE N. W. HARRIS PUBLIC SCHOOL EXTENSION

JOHN R. MILLAR, *Curator* A. B. WOLCOTT, *Assistant Curator*

Through this department Field Museum of Natural History is enabled to reach every public school in Chicago, and many other schools and institutions of the city also. In effect this department establishes a branch of the Museum itself in each of these schools, for through it the schools, during the entire length of their working year, are provided with Museum cases which bring a wide variety of subjects to the children's attention.

Early in its history it was seen that the Museum would not perform its full mission for the benefit of all the school children merely by maintaining the exhibits within its own walls and inviting the children to come and see them. While a satisfactory attendance of school children at the Museum could be, and was, promoted, nevertheless the number of children visiting the Museum, large though it was, represented only a part of the total number of children in Chicago, as shown by the school census.

In order to make the Museum a vital part of the great civic educational system of Chicago, the authorities of the institution saw that more direct methods of reaching the children must be sought. The plan of sending parts of the Museum into the school classrooms was suggested. By bringing the children into contact with the institution day after day, month after month, it was seen that the Museum could offer educational opportunities to thousands to whom it might otherwise remain a stranger. Such a

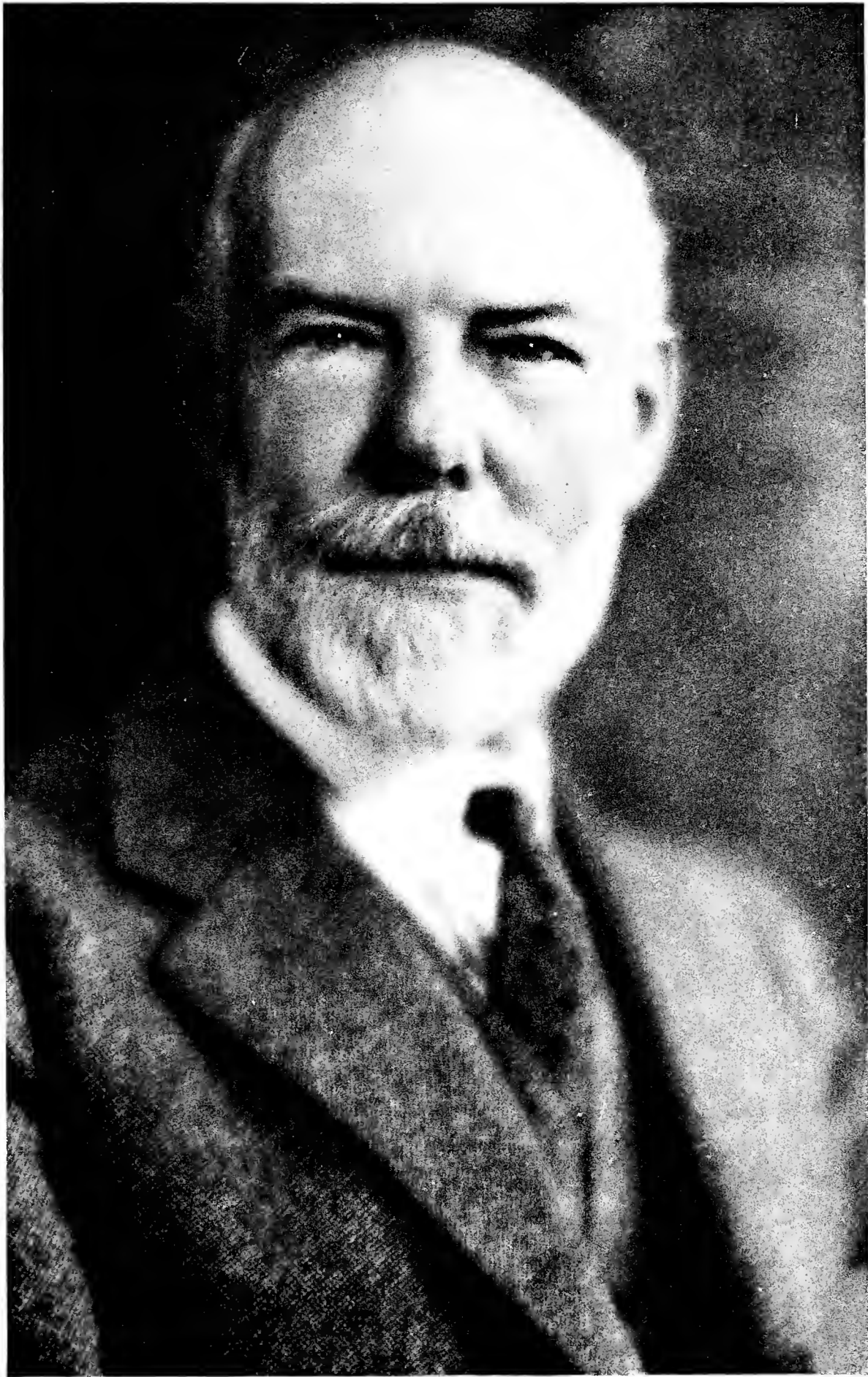
direct and practical method of effectively associating the Museum with the schools was in harmony with the views and desires of progressive teachers, who realized that it would add to the reality of their teachings, and aid the children in the understanding of many subjects.

So impressed was the late Norman Wait Harris, of Chicago, with the benefits that the children would derive from such a logical and intimate connection between Field Museum and the schools that he offered his aid." This offer resulted in his establishing an endowment with a gift of \$250,000 in 1911, the income from which was to be devoted to the creation and maintenance of a plan that would function along the lines which had previously been advocated by the Museum authorities.

Mr. Harris visioned larger things for a traveling museum than the teaching of natural history. He believed that every agency which increases the attractiveness of knowledge and the ease of acquiring it is an agency for better citizenship and greater stability in civic conditions. The original endowment has been added to by contributions amounting to more than \$224,000 from Mr. Albert W. Harris, son of the founder, and other members of the family.

In recognition of Mr. Harris's wise, far-reaching, and perpetual benefaction to the cause of education and public welfare it was decided by the Trustees of Field Museum that his foundation should bear the name, "The N. W. Harris Public School Extension of Field Museum." The department in the Museum bearing that name was organized in 1912, and a curator to direct its work was appointed. Material for all the exhibits of the Extension is collected, prepared, and installed by the curator and members of the staff of the department.

While the idea of museums co-operating with schools was not new, it was felt by Museum authorities, after a careful study of the subject, that the idea could be given new life in the manner of presentation of the exhibition materials. By 1913 the work of loaning cases to the



ALBERT W. HARRIS

Trustee and Benefactor of the Museum, and staunch supporter of the
N. W. Harris Public School Extension

schools of Chicago was well under way. Each year the facilities of the department have been expanded and improved, until today there are more than 1,200 cases available. New cases are added frequently.

The type of exhibition case first used, with minor improvements made in recent years, is still found satisfactory because it meets the need for strength, portability, and usefulness, as well as attractive appearance. All the cases conform to standard dimensions of two feet in width and height, with depths of four, seven, and ten inches, depending on the requirements of the objects to be exhibited. The cabinets are built of polished mahogany and are equipped with hangers by which they can be hung on standardized types of stands furnished by the Chicago Board of Education, or on hooks in the walls of classrooms. The cases are provided with handles on the ends and may be easily carried by children from room to room. Also at each end is a sliding frame holding a label measuring seven by ten inches. These labels, in large, legible type, state in simple language the most important facts about the exhibit. They can be pulled out when the case is in service or pushed back into a protected position when the case is being moved.

In general the plan of the Harris Extension has been, and continues to be, to show the school children exhibits chiefly of mammals, birds, insects, fishes, reptiles, plants, rocks and other natural history subjects which they are likely to encounter in Chicago and the rural areas surrounding the city. In many of the cases the habitat method of exhibition is employed. Backgrounds consist of enlarged and colored photographs of the environment of the specimens exhibited, while the foregrounds are faithful reproductions of plants, rocks, water, sections of ground and other environmental features. The realism of these habitat groups greatly enhances their effectiveness.

There are also many cases of an economic character, showing the successive steps in the preparation of food

products, the preparation and manufacture of materials for clothing, and the various stages in the making of glass, paper, chinaware, linoleum, and other industrial products that come within the daily use or observation of the child. Still other cases contain models of prehistoric animals, models of mines, and other miscellaneous subjects.

The total number of subjects is 417, and there are more than 1,200 cases, as duplicates have been made of many popular ones. Following is a list provided to facilitate loans of cases on requests from principals or teachers:

BOTANY

Adder's Tongue, White	Lotus, American
Yellow	Mallow, Rose
Anemone, Canada	May Apple
Rue	Mushroom, Common-Field
Wood	Common Puff-ball
Arbutus, Trailing	Giant Puff-ball
Aster, New England	Nightshade, Climbing
Black-eyed Susan	Oaks (eight common species)
Bloodroot	Poison Ivy
Bluets	Phlox (wild sweet William)
Bunchberry	Ragwort, Golden
Buttercup, Early	Rose, Dwarf Wild
Tall	Shooting Star
Cabbage, Skunk	Spiderwort
Coreopsis	Spring Beauty
Crab Apple	Star Flower
Cranesbill (Wild Geranium)	Strawberry, Wild
Daisy, Ox-eye (Marguerite)	Tea Plant
Dogwood, Flowering	Trillium, Red
Gentian, Fringed	White
Ginger, Wild	Tulip Tree
Golden-rod	Valerian, Greek
Hepatica	Violet, Bird-foot
Jack-in-the-Pulpit	Dog's-tooth (Lily)
Lady's Slipper, White	Violets (eight common species)
Yellow	Water Lily
Lily, Turk's-cap	Witch Hazel
Wood	

ECONOMIC EXHIBITS

Cacao	Cork
Cereals (wheat, oats, rye, rice)	Corn and Products
Celluloid	Cotton Cloth
Coconut	Thread-making
Coffee	Mercerized Thread
Combs, Rubber	Dye-woods

Flour, Wheat	Paper (various kinds)
Flax (linen, thread, etc.)	From Wood Pulp
Uses of	Paprica (plant and product)
Ivorynut (button-making)	Nutmeg (plant and product)
Jute and Products	Rubber (various kinds)
Lace, Machine-made	Sugar, Beet
Lacquer, Japanese	Silk, Artificial
Linoleum	Tea (growing and preparing)
Maple, Sugar (branch and product)	Vanilla (plant and product)
	Varnish (manufacture)
	Woods, Principal American

GEOLOGY

Coal, Origin	Fossil Plants of Illinois
Dinosaur models,	Iron, Ores
Trachodon	Metals, Ores of Common
Triceratops	Minerals, Some Useful
Fossils from Rocks near Chicago	Semi-precious Stones
	Volcanic Products

ECONOMIC GEOLOGY

Abrasives, Natural and Artificial	Gold Mine Model
Asbestos	Hydrocarbons
Coal Mine Model	Oil Well Model
	Salt (various kinds)

INDUSTRIAL EXHIBITS

Blast Furnace Model	Pigments
Chinaware (manufacture)	Plate-glass and Mirror Making
Cloisonné	Shears (manufacture)
Collapsible Tube, Making of a	Silver-plated Spoon, Making of a
Coal By-products	Steel, Structural or Mild
Pencil Manufacture (graphite)	Steel Pen, Making of a
	White Lead (manufacture)

ZOOLOGY

BIRDS

Baldpate (American Widgeon)	Sex (male and female plumage of Red-wing Blackbird, Scarlet Tanager, Indigo Bunting, Cardinal Grosbeak, Bobolink, Rose-breasted Grosbeak)
Bittern, Least	Coot (Mud-hen)
Blackbird, Brewer's	Cormorant, Double-crested
Red-winged	Cowbird
Rusty	Creeper, Brown
Yellow-headed	Crossbill, Newfoundland
Blackbirds (six species)	Crow
Bluebird	Cuckoo, Black-billed
Bobolink	Yellow-billed
Bunting, Indigo	Dickcissel
Snow	Dove, Mourning
Butcher Bird (Migrant Shrike)	Dowitcher, Eastern
Buzzard, Turkey	Duck, American Golden-eye
Cardinal	Buffle-head
Catbird	Baldpate
Chickadee, Black-capped	Canvas-back
Chicken, Prairie	
Coloration, Seasonal (Goldfinch, Scarlet Tanager, Black Tern, Red-wing Blackbird)	

- Gray (Gadwall)
 Mallard
 Old-squaw
 Pintail
 Merganser, Hooded
 Merganser, Red-breasted
 Red-legged (black)
 Ring-necked
 Scaup, Lesser
 Teal, Blue-winged
 Teal, Green-winged
 Shoveller
 Wood
 Flicker, Northern
 Flycatcher, Acadian
 Crested
 Family (nine species)
 Kingbird
 Least
 Traill's
 Gadwall (Gray Duck)
 Gallinule, Florida
 Goldfinch
 Goose, Blue
 Canada
 Snow
 Goshawk
 Grebe, Horned
 Pied-billed
 Grackle, Bronzed
 Grosbeak, Evening
 Rose-breasted
 Grouse, Ruffed
 Gull, Bonaparte's
 Herring
 Ring-billed
 Hawk, Broad-winged
 Cooper's
 Duck
 Fish (Osprey)
 Marsh
 Pigeon
 Red-shouldered
 Red-tailed
 Rough-legged
 Sharp-shinned
 Sparrow
 Heron, Little Blue
 Green
 Hummingbird, Ruby-throated
 Jay, Blue
 Junco, Slate-colored
 Kingbird
 Kingfisher, Eastern Belted
 Kinglet, Ruby-crowned
 Golden-crowned (in case with
 winter visitants)
 Lark, Meadow
 Prairie Horned
 Longspur, Lapland
 Loon, Common
 Martin, Purple
 Martins and Swallows
 Merganser, Hooded
 Red-breasted
 Mud-hen (Coot)
 Nighthawk
 Nuthatch, Red-breasted
 White-breasted
 Oriole, Baltimore
 Osprey (Fish Hawk)
 Oven-bird
 Owl, Barn
 Barred
 Great-horned
 Long-eared
 Saw-whet
 Screech
 Short-eared
 Snowy
 Partridge, Hungarian
 Peewee, Wood
 Phalarope, Wilson's
 Pheasant, Ring-necked
 Phoebe
 Plover, Black-bellied
 Golden
 Killdeer
 Upland (Bartramian Sand-
 piper)
 Plovers, Piping, Semi-palmated
 Killdeer
 Quail
 Rail, King
 Sora
 Yellow
 Rails, Virginia, Sora, King
 Redpoll, Common
 Redstart
 Residents, Permanent Bird
 Robin
 Sanderlings
 Sandpiper, Baird's
 Bartramian (Upland Plover)
 Dowitcher, Eastern
 Pectoral
 Red-backed
 Spotted
 Stilt
 Sandpipers, Baird's, Least, Semi-
 palmated

- Sapsucker, Yellow-bellied
 Scaup (Blue-bill)
 Shrike, Migrant (Butcher Bird)
 Snipe, Wilson's (Jack)
 Sparrow, Field
 Fox
 Henslow's
 Song
 Swamp
 Tree
 Vesper
 Sparrows (sixteen species)
 Starling
 Swallow, Bank
 Barn
 Tree
 Swallows and Martins
 Swift, Chimney
 Tanager, Scarlet
 Teal, Blue-winged
 Green-winged
 Tern, Black
 Caspian
 Common
 Thrasher, Brown
 Thrush, Wood
 Thrushes (seven species)
 Towhee
 Turnstone and Knot
 Vireo, Red-eyed
 Visitants, Winter (ten species)
 Vulture, Turkey
 Warbler, Blackburnian
 Prothonotary
 Yellow
 Wood—Case A contents:
 Prothonotary
 Tennessee
 Nashville
 Golden-winged
 Blue-winged
 Orange-crowned
 Wood—Case B contents:
 Northern Parula
 Yellow
 Magnolia
 Cape May
 Myrtle
 Black-throated Blue
 Black-throated Green
 Wood—Case C contents:
 Bay-breasted
 Blackburnian
 Black-poll
 Cerulean
 Chestnut-sided
 Oven-bird
 Palm
 Wood—Case D contents:
 Canadian
 Connecticut
 Mourning
 Northern Yellow-throat
 Redstart
 Water-thrush, Grinnell's
 Wilson's Blackcap
 Water-thrush
 Waxwing, Cedar
 Whip-poor-will (Eastern)
 Widgeon, American (Baldpate)
 Woodcock
 Woodpecker, Downy
 Flicker, Northern
 Hairy
 Pileated
 Red-bellied
 Red-headed
 Woodpeckers (six species)
 Wren, House
 Long-billed Marsh
 Winter
 Yellow-legs, Greater and Lesser

MAMMALS

- Buffalo (model)
 Bat, Little Brown
 Chipmunk, Gray-striped
 Gopher, Illinois Pocket
 Thirteen-lined
 Mink
 Mole, Common
 Mouse, Jumping
 White-footed or Deer
 Muskrat
 Opossum
 Porcupine
 Prairie-dog
 Rabbit, Cotton-tail
 Jack
 Snow-shoe
 Rat, Norway or House
 Skunk
 Squirrel, Flying
 Franklin's Prairie
 Western Fox
 Red
 Thirteen-lined Ground
 Weasel, New York
 Least
 Woodchuck

MOURNING DOVE

This is the commonest and one of the most beautiful birds in our country. It is found in all parts of the United States, from the Atlantic coast to the Pacific, and from the Gulf of Mexico to the Canadian border. It is a member of the family Columbidae.

During the nesting season, when the birds are paired, they are very affectionate, and the male will frequently bring the female a worm or a piece of earth. It is said that the male will even bring the female a piece of wood, which she uses to build her nest. The nest is usually made of mud and is placed in a hole in a tree or in a hole in the ground.

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No. 2 722



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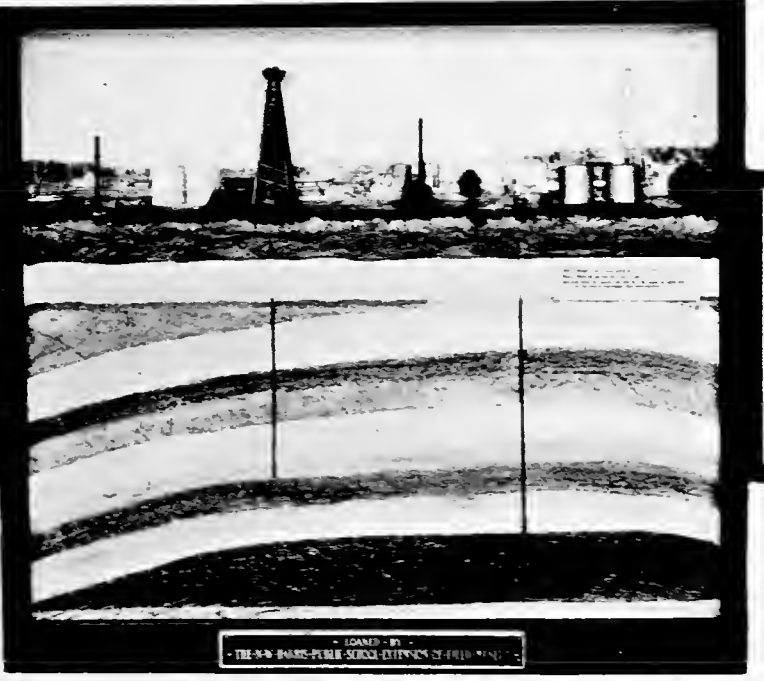
No. 2 722

LOANED BY THE N. W. HARRIS PUBLIC SCHOOL EXTENSION OF FIELD NO. 1

MODEL OF AN OIL WELL

This model shows the different parts of an oil well. It is a very important part of the oil industry. The well is drilled into the ground, and the oil is brought up to the surface. The model shows the different parts of the well, including the casing, the tubing, and the pumpjack. It is a very important part of the oil industry.

No. 2 723



MODEL OF AN OIL WELL

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No. 2 723

LOANED BY THE N. W. HARRIS PUBLIC SCHOOL EXTENSION OF FIELD NO. 1

EXAMPLES OF EXHIBITS LOANED TO THE SCHOOLS OF CHICAGO BY THE N. W. HARRIS PUBLIC SCHOOL EXTENSION

FISHES

Bass, Calico	Perch, Pike (Wall-eyed Pike)
Large-mouth Black	Yellow
Rock	Pike, Common
Yellow	Sheepshead
Bluegill	Shiner, Golden
Bullhead, Black	Sunfish, Blue
Carp	Common (Pumpkin-Seed)
Dogfish	Trout, Great Lake
Eel	Whitefish

AMPHIBIANS AND REPTILES

Frog, Leopard (with common toad)	Hog-nosed
Frogs and Toads (eleven species)	Ribbon
Garter-snake	Common Water
Lizard, Six-lined	Salamander, Spotted
Rattlesnake, Banded or Timber	Salamanders of the Chicago Area
Massasauga	Turtle, Box
Snake, Black (Blue Racer)	Painted
Fox	Spotted
Green or Grass	Snapping

INSECTS

Ant, Carpenter	Galls, Insect
Bees and Their Allies	Honey-bee
Beetle, Burying	Hornets
Potato	House-fly, Common
Beetles, Some Common	Insects, Some Beneficial
Butterflies, Common	Some Harmful
Butterfly, Buckeye	Some Common Orders
Cabbage	Winter Forms
Common Sulphur	Locust, American
Monarch	Moth, Cecropia
Monarch (in migration)	Io
Mourning-cloak	Luna
Red-admiral	Polyphemus
Swallow-tail, Eastern	Promethia
Giant	Royal Walnut
Green-clouded	Sphinx, Achemon
Tiger	Pandorus
Zebra	Tomato
Viceroy	White-lined
Violet-tipped	Moths, Some Common
Cicada, Seventeen-year	Orthoptera, Some Common
Coloration, Protective	Saw-fly, American
Damsel-fly	Silkworm (commercial)
Dragon-flies, Mournful and Chief	Tarantula
Some Common	Wasps, Common
Dragon-fly, Macromia	Walking-stick
Flies, Some Common	

CRUSTACEA

Crawfish, Burrowing

ECONOMIC ZOOLOGY

Beef and By-products	Sponges
Pearl Button Making	Tanning
	Wool, Sheep

Cases are being lent regularly to 438 schools, having a combined enrollment of close to 500,000 pupils. These include all of the public elementary schools of the city, and also many high schools, practice, continuation, parental, private, parochial, and other classes of schools which have requested the service. At the beginning of the school year two cases are delivered to each of the schools. At the end of two weeks these cases are collected and others are left. A schedule alternating the types of subjects sent to each school governs this procedure throughout the school year. A school which has a botany and a food case one fortnight, for example, may have a zoology and a textile case the following fortnight, and a geology and a paper industry case after that. Thus constant variety is maintained, and a wide range of subjects will be covered by the average of thirty-six cases each school will receive during the course of the year. Once a particular case has gone to a school it will be several years before the same case is scheduled for the same school, and so during a pupil's entire school life he will be reached by cases always new to him, never duplicating those he has seen before. In maintaining such an arrangement, 876 of the 1,200 cases are in daily use in the schools.

Besides the cases that are lent on this schedule, many others illustrating particular subjects being studied in the classroom are sent to schools on requests of teachers.

School children are not the only ones benefiting from this system of visual instruction, for, through the social centers which are being organized in Chicago's schools, their parents, other relatives, and neighbors also have opportunities for examining the cases. Many adults are believed to get their first impulse to visit the Museum from the cases seen at schools. Cases are loaned also to various organizations such as Y.M.C.A.'s, social settlements, community clubs, employes' organizations in industrial and commercial firms, and other such bodies of people. To stimulate an interest in books on nature,

branches of the Chicago Public Library have requested and are being lent various cases on schedule. Regular deliveries of cases are made also to community centers.

Following is a tabulation of the number of schools and other institutions to which cases of the Harris Extension are being delivered on a regular bi-weekly schedule.

Public schools	390
Denominational schools	39
Private schools	9
Young Men's Christian Associations	8
Chicago Public Library branches	9
Hospitals	4
Boys' clubs	2
Detention homes	2
Settlements	2
Total	<u>465</u>

Towards the end of the school year all cases that are in circulation are returned to the Museum for inspection, cleaning, polishing, and any repairs that may be needed.

Deliveries and collections of cases are made by two motor trucks, the bodies of which were especially equipped for the work they have to do—systematic loading and safe transportation of the cases. These trucks have a capacity of thirty-four cases each. They make daily trips throughout the city, averaging thirty-five miles a day each. The city is divided into two sections, one covered by each truck. Deliveries are made during school hours, near the principal's office. Receipts are signed for a loan period of ten school days, exchanges to be made at the end of each period.

Special requests have been granted for exhibition of the cases in the Art Institute of Chicago, the Chicago Normal College, and Navy Pier, as well as in the Chicago Public Library and its branches. At the Normal College cases are delivered on regular schedule, so that teachers in training may become well acquainted with their advantages. Thus when the students later qualify for teaching positions they will know how to make the best use of the traveling exhibits in their classes. Cases have also been sent on request to various institutions intending to inaugu-

rate similar systems in many parts of the United States and Canada, and plans and information on the system have been sent to Great Britain and Japan. Six cases have been permanently withdrawn for exhibition in the Museum of History, Art and Science of Los Angeles.

Authorities of Field Museum of Natural History feel that the Harris Extension makes it possible for the Museum to reach a larger number of children, and reach them oftener, than could otherwise be done, and that besides providing pleasurable instruction, it creates a greater interest in and appreciation of nature. They believe that it constantly enlarges the number of friends and frequenters of the Museum, and stimulates in them a spirit of inquiry and keen desire for the knowledge the Museum itself makes available to them.



HARRIS EXTENSION MOTOR TRUCK

Body especially adapted for the safe transportation of traveling exhibits
to and from schools



THE LATE JAMES NELSON RAYMOND

In whose memory the Raymond Foundation was established by Mrs. Raymond

THE JAMES NELSON AND ANNA LOUISE
RAYMOND FOUNDATION FOR PUBLIC SCHOOL
AND CHILDREN'S LECTURES

MARGARET M. CORNELL, *Chief*

The lectures, tours, moving pictures, and lantern slides provided for the entertainment and instruction of school children, at gatherings both in Field Museum itself and in the classrooms and assembly halls of the schools, constitute the main work of the James Nelson and Anna Louise Raymond Foundation of Field Museum. The Foundation is also in charge of special work to aid students of high schools and colleges.

Previous to 1922, work of this nature was carried on by members of the scientific staff of the Museum, in addition to their other duties. But as demands for this service increased, and at the same time the expansion of the work on expeditions, in research, in preparation of scientific publications, and in carrying on and improving the general work of the Museum left less and less time for the scientific staff to devote to these added activities, it was decided to create a special division for guide lectures and school children's work.

Accordingly this division was inaugurated at that time with one lecturer. Since then the demands have grown constantly greater and greater, until today there is a staff of five persons who devote all their time to its work.

In 1925 Mrs. James Nelson (Anna Louise) Raymond, who had become deeply interested in the work of the division, generously provided an endowment of \$300,000 to assure the widening of its sphere. As a result of this impetus the work was immediately lifted from its comparatively small beginning to a position as one of the greatest educational benefits offered the children of Chicago. A short time afterwards Mrs. Raymond, seeing

in this work an opportunity to broaden the lives of thousands of the city's children, munificently added to her gift, increasing the endowment to \$500,000.

As a result of her benefaction, the eyes of the children are being opened to more of the beauties of the world about them. The great truths revealed in the natural sciences are brought to and impressed upon the minds of the children. An influence has been created which can arouse in them a realization of the broader relationships between man and man, reaching over the bounds of nationality and race; of the relationships between man and beast—the part that animals play in human life; and of the relationships of the plant and mineral kingdoms to each other and to the lives of both men and animals. By this influence it is hoped to stir the imagination of the children, awaken their intellectual curiosity, and spur them on to the development of their latent capacities. The ultimate aim is to lead them into paths which will, when they grow up, make them happier as individuals and more valuable as citizens and members of society.

The endowment was dedicated by Mrs. Raymond as a memorial to her husband, the late James Nelson Raymond. In recognition of her beneficent provision for the Museum's educational work with school children, the division carrying on this work has been named "The James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures," and one of the Museum's exhibition halls has been designated as "James Nelson and Anna Louise Raymond Hall."

Mrs. Raymond has followed the progress of the Foundation with enthusiasm and devotion, and since 1925 has made additional gifts amounting to more than \$59,000 to promote the further success of the work.

The work of the Foundation began on the simple basis of merely conducting classes on tours of the Museum, and lecturing to them on the exhibits. From the first, the



MRS. JAMES NELSON (ANNA LOUISE) RAYMOND
Founder of the James Nelson and Anna Louise Raymond Foundation
for Public School and Children's Lectures

co-operation of the Board of Education of the city of Chicago was secured, and shortly after the establishment of the Foundation definite arrangements were made whereby teachers, at their own discretion, could bring classes to the Museum during school hours, and make Museum studies a credited part of their pupils' school work. This concession of school time to Museum work eliminates any interference with the child's free time for play or duties at home, and imposes no extra burden on the teacher. As the scheduling of classes for this work is chiefly voluntary so far as the teacher is concerned, and teachers who for one reason or another might find it inconvenient to participate are not required to, there is necessarily some unevenness in the amount of benefit derived from the plan by different schools or classes. It is felt, however, that individual teachers and principals should have the privilege of choice, and that the best results are obtainable only when participation is thus voluntary.

In addition to the work with the public schools, the Foundation extends the same benefits to private and parochial schools, to children's clubs and similar organizations, to groups from social centers, settlements, and Sunday schools, and to Boy Scouts and Girl Scouts. In fact, to any group having ten or more members, the guide-lecture service is given free of charge. In order that groups may be assured of service, the Foundation asks only that appointments be made as far in advance of the proposed date as possible. The tour may cover some specific subject of interest to the group at the time of visiting the Museum, it may be an introduction to a new subject, or it may be a supplement to one of which study has just been completed. The teacher or leader of the group is not limited to any set choice of subjects.

During the first year of the Foundation's work, a plan was worked out whereby a correlation was established between the Elementary School Curriculum, prescribed

by the Board of Education, and the Museum exhibits. Under this plan special work in the Museum was provided for every school grade from the second through the eighth, and this work correlated with the classroom studies in geography, history, science, and manual arts. The first edition of the outline of this plan was published by the Board of Education in its bulletin, *Index to Visual Aids*. Subsequent editions have been published by Field Museum.

As the years passed, the work plan was enlarged to meet the requirements of all grades from kindergarten through high school. The following outline gives an idea of the subjects included and the grades for which they are especially arranged at the present time:

PUBLIC SCHOOL CURRICULUM MUSEUM EXHIBITS

Social Sciences

GRADE I

The Home	Models of homes: Indians, Filipinos, Sumatrans, Melanesians, Malagasy, Maori. Peoples of the world: Indians, Africans, Eskimos, Chinese, Tibetans, East Indians. Animals affecting the lives of the above peoples.
The Grocery	Fruits, vegetables, cereals; coffee and tea plantations; chocolate; nuts; spices; mushrooms; flour; starch; sugar; baskets; paper.
General	Primitive musical instruments; rugs and other woven articles for homes; beds and pillows; primitive furniture; dolls and toys; stoves, cooking utensils, dishes.

Science and Nature Study

Trees	Maples, birches, alders, aspen, cherry, conifers; maps showing distribution; sections of trunks; bark, leaves, fruits, seeds.
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PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

Insects

Note: Teachers with small groups may make appointments to inspect the study collections of insects not on public exhibition.

Birds

Wild Flowers

Seeds

Weeds

Fruits

Swallow-tail, sulphur and monarch butterflies; tomato moth (eggs, cocoon, caterpillar and adult).

Beetles.

Habitat groups or systematic collections of all common birds in the Chicago area; eggs, nests, young of robins, ducks, terns, grouse, chickadees, wrens, hummingbirds, woodpeckers, loons, flamingos, etc.

Morning-glory, May apple, dandelions, shooting-star, pitcher-plant, cranesbill, Indian pipe.

Wheat, corn, rice, sunflower, rye, barley, sorghum, nuts, beans.

Ragweed (two varieties), jimson weed.

Apples, pears, plums, oranges, lemons, bananas, figs, dates, melons, eggplant.

GRADE II

*Social Sciences*Excursions
to Parks

Grant Park: Field Museum—its location, surroundings, architecture, and exhibits.

The Farm

Models showing farming in primitive lands; tea and coffee plantations; wheat, oats, beans, tomatoes, rye, barley, sorghum, cane, beets, corn, potatoes, pumpkins, grasses.

Science and Nature Study

Trees

Catalpa, horse chestnut, firs, elms, poplars, oaks, willow, birch, maple; apple bough with leaves and fruit; wild crab bough with blossoms.

Insects

Same as Grade I.

Birds

Flicker, bluejay, meadow lark, house wren, catbird, brown thrasher; nests, eggs, young and adults; winter birds of the Chicago area.

Plants

Same as Grade I.

Flowers

Weeds

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

GRADE III

Social Sciences

Living in the Home	Models of homes of Indians and other peoples.
Living in Another Land— China	Life-size bronze figures of Chinese types. Exhibits showing armor, costumes, household furnishings, writing paper, brushes and ink, printing blocks, carving, paintings, jewelry, embroideries, etc.

Science and Nature Study

Trees	Fruits of common trees: pears, apples, plums, lemons, grapefruit, figs, dates, bananas. Beverages made from fruits.
Birds	Downy woodpecker, white-breasted nuthatch, kingfisher, song sparrow, junco, swallow, ducks, geese, American goldfinch. Mounts of nests, eggs, young. Four groups: Birds that feed on the wing. Climbing and creeping birds. Birds that perch frequently. Water birds.
Insects	Same as Grade I.
Garden Plants, Wild Flowers, Weeds	Same as Grade I.
Energy and Matter	Lodestone; iron objects clinging to lodestone; crystals of numerous minerals.
Aquatic Plants and Animals	Cattails, rushes, lilies, bladderwort, pickerel weed, arrowhead, liverwort, algae, seaweeds. Frogs, toads, salamanders, snakes.

GRADE IVb

Social Sciences

HISTORY Eastern Woodland Indians	Potawatomies Sauk and Fox Seminoles Iroquois Ojibway Naskapi	Village models; clothing, masks, art, food, utensils, fire-making, weapons, tools, games, religion, picture-writing.
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PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

The First Pioneers

GEOGRAPHY

1. Foods
2. Clothing
3. How Houses are Made,
Heated, Lighted and
Furnished

Mound Builders.

Mammals, fishes, birds used by the above as food, clothing, or covers for wigwams.

Powhatan Indian exhibit.

Fruits, vegetables, tobacco.

Flax, linen, cotton.

Cereals, sugars, starches, tea, coffee, spices, flour mill, fruits, vegetables, oils, nuts, chocolate.

Cotton, flax, rubber, jute, sisal, hemp, furs.

Woods of various kinds.

Models of brick and cement plants.

Building stones, sands, clays, marbles, asbestos, iron, copper, tin, zinc, plaster, gypsum.

Coal, oil, coal-tar products.

Pueblo house.

Furnishings of primitive homes.

GRADE IVa

Social Sciences

HISTORY

How Western Lands were
Opened for Fur Trade
and Travel

Woodland Indians: homes, food, clothing, weapons, etc.

Plains Indians: the same type of exhibits as above.

Fur-bearing animals.

Plants.

Snakes; birds; fishes.

Gold, silver.

What Indians of the
Southwest Accomplish

Pueblo Indians: pueblo models, food, clothing, weapons, altars, dolls, masks, pottery, blankets.

Importance of pronghorn and mule deer in lives of these Indians.

Navaho Indians: hogan models, blankets, jewelry, masks.

GEOGRAPHY

Peoples in Hot Deserts
and Cold Deserts

Types of peoples.

Plants of desert areas.

Animals of desert areas.

Eskimos: clothing, sleds, dogs, kayak, weapons, utensils, toys.

Model showing glaciers.

Walrus caseshowingmidnightsun.

Peoples in Highlands

Types of people.

Diorama: Swiss Lake Dwellers.

Plants and animals.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

Life in Tropical Jungles

Indians of Amazon Valley.
Plants of hot areas: rubber, cas-
sava, Amazon nut.
Types of hammocks.
Amazon woods and birds.
African jungle birds.
Great anteater exhibit.

Life in Japan

Plants: bamboo, tea, rice.

GRADE Vb

Social Sciences

HISTORY

Chicago:

How the French Explored
the Region

Physical map of Illinois.
Early stages of Lake Michigan.
Potawatomi Indians: costumes,
weapons, snowshoes, games.

How Early Chicagoans
Lived

Other Indians; stone, bone and
shell objects; burial with skele-
ton; mural of ancient coral
sea; peat bog.

How Chicago Became a
Great City

Wild animals of period.
Wild flowers of period.
Swamp, soil, cement, brick, coal,
iron, oil.
Blast furnace model.

GEOGRAPHY

North Central States

Physical maps; models showing
ice-sheets; soils; swamp model.
Native woods.
Coal, oil, minerals—iron, zinc,
salt, marble, copper, asbestos.
Cereals, sugar beet, model of
flour mill, vegetables, fruits.
Animals, birds, fishes, reptiles.
Pulp paper, flax, celluloid.
Woodland Indians.
Plains Indians.
Archaeology of region.

Southern States

Seminole Indians.
Rice, sugar, peanuts, cotton, jute,
hemp, tobacco, turpentine.
Native woods.
Citrus fruits.
Animals, birds, fishes, reptiles.

Western States

Plains, Pueblo, Pomo, West
Coast Indians.
Minerals: gold, silver, lead, oil,
copper, zinc, precious stones,
salt, etc.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

	Model of Arizona gold mine. Model of Grand Canyon. Mammals, fishes, birds, reptiles. Model of mountain meadow in bloom; cacti; native woods. Vegetables and fruits.
Middle Atlantic States	Marble, granite, precious stone, coal, oil, etc. Model of Virginia Natural Bridge. Model of Niagara Falls.
New England States	Maple sugar, potatoes, cranberries, apples, tobacco, grapes, peanuts. Rayon; paper. Mammals, fishes, birds, reptiles. Archaeology of the region.

GRADE Va

Social Sciences

HISTORY How Colonists Lived in Virginia	Physical maps. Powhatan Indians. Archaeology of the region. Tobacco, cotton, flax, corn, beans, squash. Model of Virginia Natural Bridge. Mammals, fishes, birds, reptiles.
How New England Colonists Lived	Indian exhibits. Timber, flax, linen, tobacco. Fruits, vegetables, cereals. Maple sugar. Birds, fishes, mammals, reptiles.
Dutch Settlements Western Appalachian Farmers Ranchers Miners	Physical maps. Indian groups. Game animals of the regions. Fur-bearing animals of the regions. Minerals of the regions. Plants of the regions. Lumbering. Model of gold mine. Model of oil well. Precious stones; building stones.
GEOGRAPHY Use of Natural Resources in Our Island Possessions and Our Neighboring Countries	Exhibits from Hawaii, Samoa, Philippines (home models, rice terraces, life-size figures, costumes, etc.). Volcanoes. Plants: cane, pineapple, tobacco, sugar, rice, palms, corn. Woods and products.



SCHOOL CHILDREN ON TOUR OF MUSEUM EXHIBITS WITH RAYMOND FOUNDATION LECTURER

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

Industries of Northern Neighbors	Animal life of the regions. Minerals of the regions.
Southern Neighbors	Indian Exhibits. Eskimo Exhibits. Native woods; wheat, rye, oats. Salmon, halibut, cod, herring. Seals, walruses, bears, moose, etc. Wood pulp and paper. Minerals of the region.
South America	Mexican Hall: Indians of the past; Indians of today. Models of Maya buildings. Bronze head of a Maya. Native woods and products: juices, gums, dyes. Rubber. Palms, cacti, sisal, agave, cotton, yucca. Coffee, cane, bananas, cacao, manioc. Minerals, oil. South American Indians. Prehistoric animals. Minerals; precious stones. Habitat groups of mammals, birds and reptiles. Model of coffee plantation. Plants of the region: coffee, maté, sugar, nuts, corn, wheat, manioc, palms, cacao, pineapple. Asphalt, oil. Native woods: quebracho, rubber.

GRADE VIb

Social Sciences

HISTORY	
How Primitive Man Lived and Worked	Prehistoric animals. Cavemen of Old World. Swiss Lake Dwellers. Early North American Indians.
How Ancient Peoples Aided Civilization	Kish exhibits. Egyptian hall.
How People in Southern and Western Europe Developed Cultures	Swiss Lake Dwellers. Etruscan and Roman exhibits.
GEOGRAPHY	
European Countries and Their Colonies	Racial types. Physical maps. Pittdown man and artifacts; Neanderthal dioramas; Swiss Lake Dwellers.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

Australian exhibits (colonies).
 African exhibits (colonies).
 East Indies exhibits (colonies).
 India exhibits (colonies).
 Native woods; cork.
 Minerals: clay, sulphur, coal,
 iron, tin, zinc, lead, mercury.
 oil, radium, platinum.
 Volcanoes.
 Coral, sponges.
 Glaciers.
 Plants: wheat, cacao, grapes,
 olives, sugar, flax, cotton.
 Peat and products.
 Marbles and precious stones.
 Turpentine exhibits.
 Mammals, fishes, birds, reptiles.

GRADE VIa

Social Sciences

HISTORY

England

Racial types.
 Piltdown Man exhibits.
 Tin.
 Hawks.

Search for New
 Sea Routes

Marco Polo sheep.
 Spices.
 Silk (India).

How the Spirit of
 Exploration Carries On

Results of Field Museum Expe-
 ditions in all halls of the insti-
 tution.

GEOGRAPHY

How Peoples of Asia
 Adapt Their Ways of
 Living to Their En-
 vironment

Racial types.
 Exhibits of China, Japan, India,
 Tibet, Borneo, Malay, Java,
 Sumatra, Siberia, Madagascar.

Japan

Animals, birds, fishes, reptiles.

How Peoples of China,
 India etc. Make Use of
 Their Lands

Plants: rice, bamboo, mulberries,
 cacao, copal, papyrus.

Russia in Asia

Pearls.

Africa and Madagascar

Fossils and Dinosaur eggs.

Australia and New
 Zealand

Lacquer, camphor, teak wood.

Rubber, cassava, dates, palms.

Taj Mahal model.

Tea plantation model.

Minerals and precious gems.

GRADE VII

Social Sciences

HISTORY

Community Civics, Commercial
 Geography, United States
 History

Physical maps; soils; rocks; ores;
 minerals, coal, petroleum, tur-
 pentine, oil.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

ELEMENTARY SCIENCE

A. Trees of Our Country

1. Life Cycles of Trees
2. Importance to Man

B. Air and Water

1. Behavior, Use and Importance of Air to All Living Things.
2. Sources and Uses of Water, and Results of Water Action.

Forests and wood products.

Animals used in various parts of the country.

Plants: tobacco; cotton; flax; hemp; fruits; cereals; vegetables.

Indian homes and equipment.

Indians of the Chicago area.

Models of blast furnace, gold and iron mines, brick yard, Portland cement plant, and oil well.

Exhibits of ash, basswood, beech, birch, chestnut, elm, honey locust, hickory, maple, poplar, sycamore, walnut, willow, oak, cedar, cypress, fir, juniper, pine hemlock, spruce.

Case showing use of annual rings in determining the age of Indian pueblos.

Wood pulp and its uses: paper, rayon, dyes.

Tree liquids and uses: rubber; turpentine; varnish; oils; sugars.

Foods obtained from trees: fruits, nuts, seeds, roots, starches sugars.

Lumbers: soft and hard woods; boards of various cuts and grains.

Mercury as mineral and in ore.

Nitrogenous plants.

Kites of the Orient.

Maps showing results of water action.

Model of a swamp and bog.

Model of Virginia Natural Bridge.

Stalagmites and stalactites.

Boat models.

Bacteria.

Cases showing rare gases of the air.

Rocks showing (1) results of air and (2) water action *above* and *below* ground.

Soap exhibit.

Glaciers.

Animals that live in water.

Plants that live in water.

Murals showing the beginning of water and the first life.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

	Dendrite exhibit. Salts.
C. Heat Sources, Habits and Uses	Coal; oil; wood; peat; alcohol; mercury; iron; tin; steel; brass; stone; glass. Celluloid exhibit. Cork; gypsum; asbestos. Cotton; flax; jute; sisal; hemp; ramie, etc. Clothing of various lands. Primitive fire makers. Volcano models and products. Fiber exhibits.
D. Weather and Climate Causes of Weather Changes Climatic Conditions	Alpine meadow exhibit. Physical maps. Fulgurites (result of lightning in sands). Rocks and clays showing the results of heating and cooling. Habitat groups showing influence of slope, sun's rays, and altitude.
E. Magnetism and Electricity Field; Uses; Importance	Lodestone; magnetite. Iron; steel; nickel; cobalt. Gold; silver; copper; brass. Insulation materials. Ancient Chinese compass. Cotton; balsam; wool.
F. Sound	Musical instruments: strings, per- cussion, wind.
G. Birds Bird Life, Features, Habitats, and Habits	Birds of Chicago area. Birds of North America. Birds of the world. Extinct birds. Introduced birds. Prehistoric birds. Nests and eggs and young. Birds of economic value. Destructive birds. Bird skeletons. Bird habitat groups.
H. Territories and Dependencies	Exhibits illustrating physical characteristics of peoples of Hawaii, Philippines, Alaska, Samoa and West Indies.

GRADE VIII

HISTORY

Social Sciences

U. S. History and Commercial Development.	Races of mankind. Physical maps.
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PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

ELEMENTARY SCIENCE

A. Plants

Plant and animal life.
 Minerals and products.
 American Indians.
 Exhibits from the territories.
 Physical maps.
 Exhibits illustrating root systems, stems, leaves, flowers, fruits, seeds.
 Plants injurious to man and animals: ragweed, jimson weed, nightshade, fungi, bacteria.
 Beneficial friends: insects, amphibians, mammals.
 Plant enemies: insects and other animals.
 Plant products: foods, fibers, oils, extracts, pulps.
 Hall of Plant Life: bacteria to highest forms.
 Alpine meadow in bloom (diorama).
 Carboniferous forest (diorama).
 Fossil plants.

B. Fire

Types of fuels: woods, coals, oils, coke, peat.
 Blast furnace: cement mill; brickyard.
 Coal-tar products and uses.
 Primitive methods of making fire.

C. Solar System

Model of moon.
 Meteorites.
 Changes of earth's surface: volcanoes, erosion, etc.
 Mexican Indian monuments showing calendars.
 Compass; lodestone.
 Adaptations of plants, animals and man to seasonal changes.

D. Light

See exhibits for *Fire* above.
 Candles of various kinds and holders.
 Ancient Mesopotamian, Egyptian, Grecian, and Roman lamps.
 Effects of ultra-violet rays on minerals.
 Exhibits of quartz; satin spar; gems.
 Radio-active minerals.
 Mirrors: stone, metal, glass.
 Colors and components.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

E. Physiology and Health

Model of moon.
 Ancient Chinese spectacles.
 Skeletons of white, yellow, and black divisions of mankind.
 Detailed exhibit of human skull.
 Bacteria, algae, and fungi exhibits.

F. Flowers

Soil exhibit.
 Tobacco; sugar; starch.
 Herbarium exhibits.
 Exhibits showing enlarged floral parts.
 Pollination agents: bats, birds, and insects.
 Seeds; seedlings.
 Spring flowers.
 Flower friends and enemies.
 Trap plants.

EXHIBITS THAT CORRELATE WITH HIGH SCHOOL AND ACADEMY SUBJECTS

For Science Classes:

A. Astronomy

Model of moon; stone and iron meteorites; etched surfaces showing structure of iron meteorites.

B. Botany

Food plants: cereals, starches, sugars, oils, fruits, etc.
 Ancient wheat and barley from Mesopotamia and Egypt.
 Miniature flour mill.
 Coffee plantation diorama.
 Tea plantation diorama.
 Palms: types, products.
 Woods: native and foreign; products.
 Raw materials: fibers, resins, oils, pulps, gums, waxes.
 Plant life: entire range from bacteria to highest types.
 Herbarium.

C. Geology

Gems and crystals.
 Minerals; ores, metals.
 Meteorites.
 Models of blast furnaces, cement mill, brickyard, oil well.
 Physical geology: cave formations; interior of earth; glaciation; natural bridge; types of rocks.

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

D. Zoology

Industrial products: coals; oils; peats; petroleum; clays; sands; building stones; coal-tar products; abrasives; graphite; bricks; tiles; pottery; china-ware.

Marbles and alkalies.

Rarer gases of the atmosphere.

Fossil plants and animals.

Domestic animals of Great Britain (bronzes by Mr. Herbert Haseltine).

Wild animals of the world (systematic collection).

Wild animals of the world (habitat groups).

Marine invertebrates.

Insects (on third floor).

Fishes, amphibians, reptiles.

Systematic and habitat groups of birds.

Reconstructions of prehistoric birds.

Extinct birds of America.

Introduced birds.

Osteology.

For History Groups:

A. Archaeology

Mesopotamia; China; Egypt; Greece; Rome; Mexico; Guatemala; Honduras; Yucatan; North and South America.

B. Ethnology

Hall of Races of Mankind.

Hall of Stone Age Man.

Exhibits of primitive peoples: homes; utensils; costumes; industries; religions; art; musical instruments.

Halls illustrating the cultures of East Indies; China; India; Tibet.

For Art Classes:

Prehistoric art: stone carving; painting; etching; engraving.

Ancient art: Mesopotamia; Egypt; Greece; Italy; Peru; Colombia.

Modern: textiles; masks; glass-ware; pottery; paintings.

Gold and silver jewelry; painting; beadwork; costumes and ceremonial equipment; basketry; bronzes; metal work; tapestries; featherwork.



Photograph by John T. Newell, Bureau of Curriculum, Board of Education, Chicago

HARRIS EXTENSION CASES IN USE

Scene in a public school classroom where children are studying exhibits from Field Museum

PUBLIC SCHOOL CURRICULUM

MUSEUM EXHIBITS

	<i>Miscellaneous:</i>	
A. Armor		Primitive; Tibetan; Chinese; Gilbert Island; Eskimo.
B. Manuscripts		Papers; ink; wood blocks; inscriptions; printed and painted books; carved books.
C. Music		Instruments of primitive and cultured peoples.
D. Home Economics		Paintings and hangings. All steps in the development of weaving, pottery, etc. Household equipment of primitive peoples. Models of homes of primitive peoples. Chinese and Tibetan costumes. Personal decorations.
E. Drama		Shadow-play figures; puppets; marionettes; masks; costumes; head-dresses.

Classes from colleges and universities are also assisted by the Raymond Foundation in utilizing Museum material illustrative of their studies. This work is done departmentally, according to the science in which they are particularly interested. The opportunities thus afforded have been widely utilized by students in Chicago's great universities such as the University of Chicago, Northwestern University, Loyola University, De Paul University, etc. Students in private preparatory academies, and in the host of smaller universities, colleges, and other educational institutions with which the city and its suburbs abound, have likewise availed themselves of these privileges. Frequently students from institutions at considerable distance, such as the University of Illinois, and normal schools in various parts of Illinois and other states during visits to Chicago include in their programs several hours, or a day or more, in study at the Museum.

Supplementing the work done by the Raymond Foundation in co-operation with the public schools are series of Saturday morning entertainments for children. To these the children may come in classes with their teachers, or individually, either with or without their

parents or other adults. These entertainments are given in the James Simpson Theatre of Field Museum, to audiences averaging 1,000 to 1,500 children.

The entertainments originally consisted of lectures illustrated with stereopticon slides, followed by one or two reels of moving pictures. As the attendance increased, it became impossible to accommodate at one sitting all the children who came, so the entertainments were changed to motion pictures with an occasional talk illustrated with colored slides given by some authority in a particular field, or by a member of the Foundation staff. Each program is repeated at least once, thus giving all the children an opportunity to see it.

Special patriotic programs, such as those presented on Lincoln's and Washington's birthdays, are usually given three performances. The Museum is fortunate in possessing a complete series of the "Chronicles of America Photoplays" for its historical programs. These films are a gift from the late Mr. Chauncey Keep, and constitute a memorial to his son.

The motion picture entertainments for children now consist of a spring and an autumn series, special patriotic programs, and a summer series given on Thursday mornings during July and August. Following are typical programs illustrative of the subjects covered:

Lincoln's Birthday Program:

- "My First Jury"
- "The Call to Arms"

Washington's Birthday Program:

- "Washington, the Boy and Man"

An Autumn Series of Programs:

- "The Haunted House"
- "Su-Lin, the Panda"
- "Top o' the Morning"
- "Cats and More Cats"
- "Ocean Currents"
- "The Adventures of Columbus"
- "Hawaiian Songs and Dances"
- "The Strange Glow-worm"
- "Zitari—A Famous Maya Legend"
- "Grass—A Story of Persia"

“Aboard a Clipper Ship”
“How Nature Protects Animals”
“The Traveling Newt”
“Marvels of the Microscope”
“Glimpses of Philippine Life”
“The Autogiro”
“The Semang and His Poisoned Arrows”
“The Todas of the Nilgiri Hills”
“The Nightingale”
“A Visit to Greenfield Village”
“The Wild Turkey”
“Housekeeping at the Zoo”
“On a South Sea Shore”
“Underwater Champions”
“Story of the Clouds”
“The Adventures of Daniel Boone”
“Fun on the Ice”
“Desert Demons”
“Thrills of Skiing”
“The Toy Shop”

Recently, new 16-millimeter equipment has been installed making possible the showing of talking and other sound films which have high educational as well as entertainment value.

To take the place of the lectures formerly given as part of the entertainments, the Raymond Foundation now prepares and has printed “Museum Stories for Children” in leaflet form. A new story bearing directly on each specific entertainment is published. These leaflets have a threefold purpose, viz:

1. To counteract any misinformation which the films may contain. As the Museum must rely chiefly on the products of commercial producers of educational moving pictures for its films, the pictures are not always historically or scientifically correct in every detail, and the stories in such cases give the children the facts.

2. To direct the children to Museum exhibits correlating with the subject matter of the films they have just seen. Valuable and lasting impressions can be made upon the children’s minds when they view the exhibits while the moving pictures are still fresh in their memories.

3. To give the children a souvenir of their Museum visit. Such a souvenir will help them to retain what they

learned, and stimulate them to make future visits in quest of further entertainment and knowledge.

In connection with some of the programs, special exhibits of related Museum material are provided for the children. The Foundation has the complete co-operation of the various scientific Departments of the Museum in selecting, arranging, and labeling the objects in these. The special exhibits are located where all will see them upon leaving the Theatre.

The only expense to the children in connection with either the guide-lecture tours, or the Saturday entertainments, is their car or bus fare to and from the Museum. Many schools sending large groups obtain the co-operation of local transportation companies in providing chartered street cars or buses.

The work of the Raymond Foundation in sending lecturers out to the schools began toward the end of 1925. The demand for these lectures has steadily grown. The lecturers give illustrated talks on subjects studied in the classrooms and shown in Museum exhibits. Sometimes the lectures are given in the classrooms or laboratories, and sometimes before larger groups in the school assembly halls. Colored stereopticon slides are generally used. It often occurs that a lecturer visits a school which happens to have at the time exhibits loaned by the N. W. Harris Public School Extension of the Museum, in which case the lecturer may give a talk on the material in the case.

The lectures now being offered for presentation in the schools are as follows:

- | | | |
|-------------------------------------|---|---|
| 1. For Geography and History Groups | { | Glimpses of Eskimo Life
South America
North American Indians
Glimpses of Chinese Life
Native Life in the Philippines
Mexico and Its Southern Neighbors
The Romans
The Egyptians
Migisi, the Indian Lad—(for lower grades) |
|-------------------------------------|---|---|

2. For Science Groups

Field Museum and Its Work
 Prehistoric Plants and Animals—
 (for upper grades)
 Insect Life
 Amphibians and Reptiles
 The Story of Rubber
 Coal and Iron
 The Changing World
 A Trip to Banana Land
 Birds of the Chicago Region
 Animal Life in the Chicago Region
 Trees of the Chicago Region
 Wild Flowers of the Chicago Region
 Animals at Home
 Our Outdoor Friends—(for lower
 grades)

Lecturers are sent to the schools upon the application of the principal to the Director of the Museum. Applications should specify the titles preferred.

These visits of the lecturers serve to bring the Museum to the schools, and in turn bring the children of the schools ultimately to the Museum, by stimulating their interest in the full range of the exhibits waiting for them there.

Through the co-operation of local radio stations, members of the staff of the Raymond Foundation occasionally give special lectures via that medium.

The newspapers of Chicago co-operate with the Foundation by publishing announcements of the entertainments and lectures given under its auspices in the Museum building, and accounts of its other activities.

Some idea of the far-reaching effects of the Foundation's work may be indicated by statistics. During 1937, nineteen entertainments, attended by 27,775 children, were given in the Museum; nearly 1,000 lecture-tours, with an aggregate of 33,564 children in the parties, were conducted among the Museum exhibits; and almost 500 extension lectures were given in the schools, reaching 169,337 children. These, together with other activities of the Raymond Foundation made a total of 1,877 lectures and entertainments by which 239,724 children were reached. Continuance of the work on an ever increasing scale is expected to enlarge still farther the number of contacts with children in each succeeding year.



THE JAMES SIMPSON THEATRE OF FIELD MUSEUM

Constructed as the result of a benefaction of Mr. James Simpson
In this theatre are presented the Raymond Foundation entertainments for children, and also lectures for adults



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