

New York State Museum Bulletin

Published by The University of the State of New York

No. 333

ALBANY, N. Y.

February 1943

NEW YORK STATE MUSEUM

CHARLES C. ADAMS Ph.D., *Director*

**ONE HUNDRED FIFTH ANNUAL REPORT
OF THE NEW YORK STATE MUSEUM**

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THE UNIVERSITY OF THE STATE OF NEW YORK

1943

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No. 333

New York State Education Department
The New York State Museum, February 5, 1942

The Honorable Ernest E. Cole
President of the University and
Commissioner of Education

SIR: I beg to submit herewith the report of the Director of the New York State Museum for the period from July 1, 1940, to June 30, 1941.

Very respectfully

CHARLES C. ADAMS
Director



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THE UNIVERSITY OF THE STATE OF NEW YORK

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With years when terms expire

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1950	ROLAND B. WOODWARD M.A., LL.D.	- - - -	- - - -	Rochester
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1948	JOHN LORD O'BRIAN B.A., LL.B., LL.D.	- - - -	- - - -	Buffalo
1952	GRANT C. MADILL M.D., LL.D.	- - - -	- - - -	Ogdensburg
1954	GEORGE HOPKINS BOND Ph.M., LL.B., LL.D.	- - - -	- - - -	Syracuse
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1949	SUSAN BRANDEIS B.A., J.D.	- - - -	- - - -	New York
1947	C. C. MOLLENHAUER LL.D.	- - - -	- - - -	Brooklyn
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ROBERT W. G. VAIL B.A.

Director of State Museum

CHARLES C. ADAMS M.S., Ph.D., D.Sc.

State Historian

ARTHUR POUND B.A., L.H.D.

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Higher Education,

Law, JOSEPH LIPSKY LL.B.

Motion Picture, IRWIN ESMOND Ph.B., LL.B.

Research, WARREN W. COXE B.S., Ph.D.

School Buildings and Grounds, GILBERT L. VAN AUKEN B.Arch.

Secondary Education, WARREN W. KNOX M.A., Ph.D.

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THE LEGAL STATUS OF THE NEW YORK STATE MUSEUM

All scientific specimens and collections, works of art, objects of historic interest and similar property appropriate to a general museum, if owned by the State and not placed in other custody by a specific law, shall constitute the State Museum. [*Education Law*, § 54.]

The librarian of any library owned by the State, or the officer in charge of any state department, bureau, board, commission or other office may, with the approval of the Regents, transfer to the permanent custody of the State Library or Museum any books, papers, maps, manuscripts, specimens or other articles which, because of being duplicates or for other reasons, will in his judgment be more useful to the State in the State Library or Museum than if retained in his keeping. [*Education Law*, § 1115.]

THE FUNCTIONS OF THE STATE MUSEUM

"The Museum is the natural scientific center of the State government; it is the natural depository of all the material brought together by the state surveys; it is the natural custodian of all purely scientific state records; it is the natural center of the study of the resources of the State as a political unit; it must maintain its capacity for productiveness in pure scientific research—pure science has been the justification of the State Museum from the beginning of its history. * * * In brief, the distinctive sphere and scope of the State Museum corresponds with the scientific interests and welfare of the people within the geographic boundaries of the State.

"The truest measure of civilization and of intelligence in the government of a state is the support of its institutions of science, for the science of our time in its truest sense is not the opinions or prejudices, the strength or weakness of its votaries, it is the sum of our knowledge of nature with its infinite applications to State welfare, to State progress and to the distribution of human happiness."—*Henry Fairfield Osborn, an address delivered at the dedication of the New York State Education Building, October 15, 1912.*

THE FUNCTIONS OF A MUSEUM

"A museum is an institution for the preservation of those objects which best illustrate the phenomena of nature and the works of man, and the utilization of these for the increase of knowledge and for the culture and enlightenment of the people.

"In addition to local accessories, the opportunity for exploration and field work are equally essential, not only because of considerations connected with the efficiency of the staff * * * but in behalf of the general welfare of the institution. Other things being equal, exploration can be carried on more advantageously by the museum than by any other institution of learning, and there is no other field or research which it can pursue to better advantage.

"To aid the occasional inquirer, be he a laboring man, schoolboy, journalist, public speaker, or savant, to obtain, without cost, exact information upon any subject related to the specialties of the institution; serving thus as a 'bureau of information.'

"A museum to be useful and reputable must be constantly engaged in aggressive work either in education or investigation, or in both.

"A museum which is not aggressive in policy and constantly improving can not retain in its service a competent staff and will surely fall into decay.

"A finished museum is a dead museum, and a dead museum is a useless museum."—*G. Brown Goode, formerly assistant secretary, Smithsonian Institution.*

THE VALUE OF RESEARCH

"In the eyes of the world today the reputation of a country does not depend alone on the size of her armaments, the size of her empire or volume of her trade so much as upon the contribution she can make to the progress and happiness of mankind in art, in literature and in science.

"The development of industry depends more or less on the application of new ideas and discoveries in pure science. Successful industrial research is ultimately dependent on the prosecution of research in pure science with the object of adding to our knowledge of the processes of nature, and generally without regard to the practical applications."—*Stanley Baldwin, Lord President of the Council, Opening the Mond Laboratory at Cambridge, England. From the New York Times of February 19, 1933.*

RESEARCH AND EDUCATION

"The future of America is in the hands of two men—the investigator and the interpreter. We shall never lack for the administrator, the third man needed to complete this trinity of social servants. And we have an ample supply of investigators, but there is a shortage of readable and responsible interpreters, men who can effectively play mediator between specialist and layman. The practical value of every social invention or material discovery depends upon its being adequately interpreted to the masses. Science owes its effective ministry as much to the interpretative mind as to the creative mind. The knowledge of mankind is advanced by the investigator, but the investigator is not always the best interpreter of his discoveries. Rarely, in fact, do the genius for exploration and the genius for exposition meet in the same mind. . . . The interpreter stands between the layman, whose knowledge of all things is indefinite, and the investigator whose knowledge of one thing is authoritative. The investigator advances knowledge. The interpreter advances progress. History affords abundant evidence that civilization has advanced in direct ratio to the efficiency with which the thought of the thinkers has been translated into the language of the workers. Democracy of politics depends upon democracy of thought. 'When the interval between intellectual classes and the practical classes is too great,' says Buckle, 'the former will possess no influence, the latter will reap no benefit.' A dozen fields of thought are today congested with knowledge that the physical and social sciences have unearthed, and the whole tone and temper of American life can be lifted by putting this knowledge into general circulation. But where are the interpreters with the training and the willingness to think their way through this knowledge and translate it into the language of the street? I raise the recruiting trumpet for the interpreters."—*Glenn Frank.*

FORM OF BEQUEST

I do hereby give and bequeath to the Board of Regents of The University of the State of New York, in trust for the New York State Museum:

State Museum Council

PIERREPONT B. NOYES
ORANGE L. VAN HORNE
SANFORD L. CLUETT
WILLIAM OTIS HOTCHKISS
WALDEMAR B. KAEMPFERT

State Museum Staff

CHARLES C. ADAMS Ph.D., D.Sc.....*Director of State Museum*
ALVIN G. WHITNEY A.B.....*Assistant Director of State Museum*
WINIFRED GOLDRING M.A., Sc.D.....*State Paleontologist*
CHRIS A. HARTNAGEL M.A.....*State Geologist*
ROBERT D. GLASGOW Ph.D.....*State Entomologist*
HOMER D. HOUSE Ph.D.....*State Botanist*
DAYTON STONER Ph.D.....*State Zoologist*
KENYON F. CHAMBERLAIN.....*Assistant State Entomologist*
NOAH T. CLARKE.....*State Archeologist*
WALTER J. SCHOONMAKER.....*Assistant State Zoologist*
ARTHUR PALADIN.....*Museum Technical Assistant (Taxidermy)*
CLINTON F. KILFOYLE.....*Museum Technical Assistant (Paleontology)*
JOHN L. CASEY.....*State Museum Guide*

Honorary Curators

WILLIAM L. BRYANT.....*Honorary Curator of Fossil Fishes*

Collaborator

EPHRAIM P. FELT

Temporary Scientific Appointments

A. F. BUDDINGTON Ph.D.....*Temporary Geologist*
WILLIAM L. GROSSMAN.....*Temporary Geologist*
ROYAL E. SHANKS Ph.D.....*Temporary Plant Ecologist*
(Botany)
EARL T. APFEL Ph.D.....*Temporary Geologist*
ELIZABETH McCAUSLAND M.A.....*Temporary Expert*
G. MARSHALL KAY Ph.D.....*Temporary Geologist*
CHILTON PROUTY M.S.....*Temporary Geologist*
A. J. BODENLOS.....*Temporary Geologist*
ARETAS A. SAUNDERS Ph.B.....*Temporary Ornithologist*
E. J. SAWYER.....*Temporary Ornithologist*



Figure 1 New York State Education Building. The upper floors are devoted to the offices, laboratories and exhibits of the New York State Museum. Photograph by James A. Glenn.

ONE HUNDRED FIFTH ANNUAL REPORT OF THE NEW YORK STATE MUSEUM

BY CHARLES C. ADAMS Ph.D., *Director*
New York State Museum

FOREWORD

This 105th annual administrative report of the New York State Museum covers the fiscal year ending June 30, 1941. The State Museum is a research and educational agency, whose primary obligation to the people of the State is to apply the methods of science to the study of the natural and human resources of the State, in relation to its history, industries and the arts.

The wealth of information and the collections, which have been accumulated during the past 105 years of the existence of the State Museum and its antecedents, provide a reservoir of fact and inference which is of the greatest practical and educational value. The results of these prolonged fact-finding surveys and studies are cumulative and expanding. In the long perspective one sees the varied uses to which this reservoir of information is put and constantly increases as its usefulness changes. Thus information collected for one purpose passes out of date; it is replaced by later facts and inferences and the older discoveries come to play a new role, as the record builds up the perspective and reveals significant trends which are important in planning for the future. Thus the past, present and future are intimately related and integrated.

SUMMARY OF THE ACTIVITIES OF THE YEAR

1 In cooperation with the State World's Fair Commission, the exhibit of the State Museum during the previous year, with slight changes, was continued on display from July to October 1940 of this fiscal year.

2 At the close of the fair, in response to an application from the State Museum, confirmed by the Commissioner of Education, the four murals in the New York State Building depicting the history of the State, by David C. Lithgow, and a series of display cases were transferred by the Fair Commission and the Director of the Budget to the State Museum, on condition that a Hall of New York History be established in the State Museum, and a tablet be erected stating

when and where these murals were exhibited at the fair. As indicated, this transfer included wall and table cases for the same Hall of History. This is the most important single acquisition which the State Museum has received in many years and will permit this neglected aspect of the Museum's exhibits to make a creditable start in illustrating the history of the State.

3 Important additions have been made to the historic collections, and with the assistance of the Work Projects Administration the survey of Shaker buildings has been continued and important collections from the Second Family at Mount Lebanon were secured. A very valuable collection of biographical material related to the artist E. L. Henry was secured and its study initiated. In Indian archeology the indexing of the study collection was continued.

4 The report on the botanical literature of the State is in process of publication and an important addition was made bringing it to date. The report on the flora of Columbia county has not been printed. The ecological survey of the vegetation of Monroe county, with the Division of Planning of Monroe county, has been continued with the assistance of the Work Projects Administration. The report on the flora of Newcomb has not been completed.

5 Field and laboratory work has been continued on various insect problems, including mosquitoes and black flies, as well as on various insects injurious to trees and shrubs.

6 Field and laboratory work has been continued on the oil and gas developments in the State. The popular report on the geology of the Lake George region has been approved for publication and the Indian Lake report is still in process. The report on the glacial geology of the vicinity of Syracuse is nearing completion. The field work on the Saranac Lake quadrangle was continued for the second season.

7 The report on the Coxsackie quadrangle has been completed and has been approved for printing, as were the reports on the Catskill and Kaaterskill. Progress has also been made on the graptolite monograph.

8 Zoological studies have been continued on the bank, barn and cliff swallows by the banding method. The report on the birds of Washington Park, Albany, is nearing completion. A summary report on the summer birds of the Alleghany State Park has been approved for publication. The report on bird song is nearing completion.

Studies of the local mammals of Rensselaer county and the woodchuck have been continued.

9 The basal scientific surveys of the geological and natural history resources of the State, upon which the State Museum has been engaged for 105 years, provides a fund of information which is not only essential for comprehensive state planning, but as well for a national defense program. Any program for the utilization of the electric power from the St Lawrence must build to an important degree on the mineral resources of the Adirondack region. The U. S. Army and Navy continue to call upon the State Museum for information bearing upon their problems.

10 About 20 cooperative projects have been conducted with various agencies, such as state departments, colleges, universities, museums, federal bureaus and with individuals.

11 There has been outstanding cooperation with the Work Projects Administration Project No. 56,456, which has provided technical and clerical assistance supplementing the State Museum budget. This cooperation has resulted in preparation of catalogs and indexes, photographic work, inventory of publications, care of the historic collections, binding of books and periodicals, architectural drawings of Shaker and other historic buildings and drafting.

COOPERATION WITH STATE AND OTHER ORGANIZATIONS

During the past year the State Museum has cooperated with the following agencies or individuals:

1 New York State Department of Agriculture and Markets. The State Entomologist has continued a cooperative entomological study of the European pine shoot moth and of other insect pests of ornamental trees and shrubs.

2 New York State Conservation Department. The Director of the State Museum is a member of the State Council of Parks. The geologists of the Museum staff advise the Conservation Department on the purchase of lands when mineral resources are involved. The State Entomologist has continued his study of the Pales weevil and related weevils injurious to Scotch and other pines, and of the European pine shoot moth. The Division of Fish and Game has cooperated with the State Entomologist on the relation of black fly control and mosquito control to wild life.

3 The State Department of Health. The State Entomologist of the Museum staff has continued cooperative studies of problems relating to the control of blood-sucking flies on the grounds of the State Tuberculosis Hospital at Ray Brook, and of the relation of mosquito control to wild life on Long Island.

4 State Law Department, Office of the Attorney General. The Museum geologists cooperate with the Office of Land Titles on the purchase of mineral lands in the Adirondacks and on other legal problems.

5 State Executive Department, Division of State Planning. The State Museum has cooperated with the Division of Planning.

6 Colgate University, Department of Geology and Geography, Hamilton, N. Y., cooperated on a geological survey of the Morrisville quadrangle.

7 Cooperation within the Education Department: State Library, conducting exchanges of Museum publications; department editor, on the publication of Bird and Arbor Day numbers of the Bulletin to the Schools.

8 Dana Natural History Society, Albany, N. Y. Cooperation on a lecture on birds to Albany school children on Bird Day, April 25, 1941, by Allan D. Cruickshank.

9 United States Department of Agriculture, Bureau of Entomology and Plant Quarantine, has cooperated on scientific studies to determine the relation of mosquito control operations to wild life conservation. This cooperation is a continuation of the work begun as a state branch of the federal Civil Works Administration (C.W.A.) mosquito control relief program and has been extended to include cooperation with the United States Fish and Wild Life Service on the same series of studies and with neighboring states.

10 National Research Council, Committee on the Preservation of Natural Conditions, Washington, D. C. The Director is a member of this committee which has been studying the facilities devoted to the preservation of natural conditions for scientific and educational purposes.

11 Fish and Wild Life Service, United States Department of Agriculture, cooperated in furnishing bands for the bird-banding studies of the State Zoologist, and as mentioned has cooperated with the State Entomologist on the relation of mosquito control work to wild life conservation.

12 City Health Department of New York City. The State Entomologist has cooperated with this department on the control of mosquitoes and on their relation to wild life.

13 Suffolk County Mosquito Extermination Commission has cooperated with the State Entomologist on methods of controlling mosquitoes in relation to wild life conservation.

14 The Nassau County Mosquito Extermination Commission has cooperated with the State Entomologist on studies of mosquitoes and their relation to wild life.

15 Eastern States Association of Official Mosquito Control Workers. The State Entomologist has participated in activities of this interstate association in which the following states are represented: Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts and New Hampshire, as is also the Federal Bureau of Entomology and Plant Quarantine of the United States Department of Agriculture.

16 Monroe county, Division of Regional Planning. The State Museum has cooperated on an ecological vegetational survey of the county.

17 The American Humane Association, Albany, N. Y. This organization has been conducting a prize competition in order to

secure a more humane trap for catching animals. In this worthy endeavor the State Museum has cooperated. This work has been under way for 13 years.

18 Work Projects Administration, Federal Art Project. A loan of paintings was made which formed a temporary exhibit.

19 Work Projects Administration. Cooperation on Project No. 56,456. By means of this assistance a large amount of clerical and other work has been performed for which the State Museum budget was unable to provide; professional services in several lines have materially contributed to the needs of the Museum.

STATE AND COUNTY PLANNING

The State Museum stands ready, despite the limited means and personnel at its disposal, to contribute help toward state and county planning, since the Museum is in hearty accord with all efforts to develop public policies based on sound scientific and technical studies looking toward public interest and social advantage.

An example is the survey being continued in Monroe county in cooperation with the local Division of Regional Planning.

The facilities of the State Museum can be used to prevent many avoidable errors by engineers and administrators. This has been particularly true of defense plans which have neglected the long-range programs for research on natural resources.

For general statements on the functions and relations of state planning to the National Resources Board and their relation to the State Museum, see in the 30th Annual report "The Relation of Natural Resources to Regional and County Planning" (State Museum Bulletin 310, p. 121-41), and in the 29th Annual Report "Suggestions and Recommendations in Planning for the Use and Administration of Water Resources" (State Museum Bulletin 306, p. 87-96, 1936).

STATE COUNCIL OF PARKS

The State Council of Parks, in the Department of Conservation, is the "central advisory agency for all parks and parkways, and all places of historic, scientific and scenic interest." The Director of the State Museum is a member of the council and has attended regularly the monthly meetings and inspection trips through the parks and parkways.

The attendance for the past 14 years, as recorded by the State Museum Guide, is as follows:

<i>Year</i>	<i>No. classes</i>	<i>No. students</i>	<i>No. counties</i>
1927-28.....	200	3 500	13
1928-29.....	175	4 750	21
1929-30.....	235	6 308	25
1930-31.....	264	7 128	30
1931-32.....	253	6 726	28
1932-33.....	309	7 981	31
1933-34.....	301	8 769	28
1934-35.....	333	8 364	36
1935-36.....	445	12 315	39
1936-37.....	402	12 444	38
1937-38.....	387	11 697	41
1938-39.....	402	10 912	36
1939-40.....	361	10 474	47
1940-41.....	377	10 453	31

The number of classes for each county is shown on the map (figure 2). As is to be expected, the largest number came short distances, and progressively fewer with increasing distance. Such maps indicate where local or branch museums should be located to meet the needs of our schools. This is a subject worthy of careful study and a constructive program for local museums.

Monthly Class Attendance, 1937-41

	<i>No. of Classes 1937-38</i>	<i>No. of Classes 1938-39</i>	<i>No. of Classes 1939-40</i>	<i>No. of Classes 1940-41</i>	<i>Attend- ance 1937-38</i>	<i>Attend- ance 1938-39</i>	<i>Attend- ance 1939-40</i>	<i>Attend- ance 1940-41</i>
October	29	47	39	58	802	775	1 072	1 569
November ..	22	32	18	24	711	876	414	529
December ...	11	13	6	12	344	282	104	239
January	17	7	19	14	373	136	456	334
February	20	11	9	17	497	403	263	401
March	47	46	26	35	1 443	1 236	734	1 221
April	48	83	43	37	1 453	2 671	967	1 075
May	94	91	120	88	3 303	2 505	4 300	2 594
June	99	72	81	92	2 771	2 028	2 164	2 491
	<hr/> 387	<hr/> 402	<hr/> 361	<hr/> 377	<hr/> 11 697	<hr/> 10 912	<hr/> 10 474	<hr/> 10 453

Classification of Visiting Groups

	<i>1937-38</i>	<i>1938-39</i>	<i>1939-40</i>	<i>1940-41</i>
City schools	61	63	67	86
Rural schools	141	159	131	125
High schools	76	53	66	38
Junior high schools	43	31	37	39
Scout groups	10	21	10	14
Clubs	16	27	18	20
Sunday schools	9	11	11	17
Normal schools	15	20	12	23
Colleges	16	12	8	15
Agricultural colleges .....	..	5	1	..
	<hr/> 387	<hr/> 402	<hr/> 361	<hr/> 377

A far greater use of the Museum by schools is possible, it is fair to deduce from these records. It is believed one reason that the many school officials who call at the Education Building each year do not consider the possibilities of the State Museum for their schools is that the Museum is on the top floor and all the Department's administrative offices are below it.

Popular and technical publications of the State Museum form additional means of contact for both teachers and pupils with the Museum. Teachers frequently ask for loans or donations of natural history materials for their classes or for the determination of specimens for teaching purposes. To meet this need satisfactorily, additional staff, funds, traveling automobile exhibits and loan exhibits would be required, an expansion urged for many years.

Members of the State Museum staff continue their regular annual assistance to the Department Editor in obtaining and preparing material for the Bird and Arbor Day number of *The Bulletin to the Schools*. In continuing its cooperation with the Dana Natural History Society of Albany, the Museum supplied the speaker, Allan D. Cruickshank, on April 25th, who lectured on birds to local school children.

Adult education is obviously a field of the State Museum's activity, through its publications, exhibits, correspondence and conferences.

ANNUAL ATTENDANCE IN EXHIBITION HALLS

Actual counts of classes visiting the Museum exhibits and conservative estimates of other visitors give an approximation of the numbers attending during the year. No means has been devised to measure easily the qualitative benefits of the visits.

Many of the individual visitors seek special information, studies, conferences or inspection of the exhibits in minute detail. Through their questions and the cooperation given them in every way possible, they gain a wholly new idea of the State's resources and what the State Museum is doing continually for its patrons.

The attendance has dropped from the predepression year figures of approximately 200,000 to about 173,000. The attendance between November 1940 and April 15, 1941, was below normal but returned to normal thereafter. Sunday and holiday attendance from June 16, 1940, to September 2, 1940, inclusive, 11 Sundays and 3 holidays, was 8890. The count on these days is accurate. Sunday attendance for 1939 was 11,506 and for 1938 was 13,497.

Visitors during August were estimated at 45,000 and for June and July, each at 35,000.

INFORMATION AND PUBLICITY

As indicated in the foregoing and further evidenced by the number of requests received by mail, the public regards the State Museum as a bureau of information on the State's natural resources. Staff members, cooperating with other agencies, also serve to spread information in the possession of the Museum. Current aspects of work in the Museum are described in releases to the press.

Acceptance of only 19 requests to give lectures, reaching only 500 persons during the past year, was the result of limited travel funds and lack of official automobiles.

PRINTING AND PUBLICATIONS

"If you would not be forgotten as soon as you are dead and rotten, either write Things worth reading or do Things worth the writing."

—*Benjamin Franklin.*

"After all it is the written word that lives."—*Dr W. M. Beauchamp.*

The following is a list of the regular serial publications of the State Museum printed during the fiscal year:

Adams, Charles C.

1941 One Hundred Third Annual Report of the New York State Museum. N. Y. State Mus. Bul., 323: 1-141

1941a New York State Museum's Historical Survey and Collection of the New York Shakers. N. Y. State Mus. Bul., 323: 77-141

Dearness, John, and House, H. D.

1940 New or Noteworthy Species of New York Fungi-V. N. Y. State Mus. Cir., 24: 25-60

House, H. D., and Gordon, R. B.

1940 Additions and Corrections to the Flora of the Allegany State Park Region, Cattaraugus County, New York (1927-38). N. Y. State Mus. Cir., 24: 1-24

Accompanying this report, pages 80-81, is also the annual Museum Bibliography, which includes papers by members of the staff and also papers by others which are based at least in part on the collections of the State Museum, or which are the result of some form of cooperation with it.

It is now estimated that \$25,000 would be needed to reprint the various out-of-print State Museum publications for which there are the greatest demands and no funds with which to meet them. Neither the interest of the general public nor that of the State can be given proper attention until the larger problem of a general print-

ing policy for the State Museum publications, such as these, has been solved. An outstanding example of the delay caused by the present program is that of Dr H. A. Pilsbry's monograph on the land and fresh water mollusca of the State which remains in manuscript form after 17 years, a fact to which repeated attention has been called in previous Annual Reports. Publication of this monograph, with its superb colored plates, would make it a fitting companion piece for the wild flower and bird reports, but the cost of an estimated \$25,000 for 2000 copies has been among the reasons for delaying its being printed. It is anticipated there would be a demand for it for many years.

CONDITION OF THE EXHIBITION HALLS AND EXHIBITS

The show or display windows of a modern retail store give the general public a good idea of its general management. A fine display generally implies superior merchandise and superior management. Visitors to the exhibition halls of the State Museum are likely to draw similar conclusions regarding the administration of the Education Department. When, however, the visitor finds water-stained window shades, curtains, ceilings and walls, with peeling paint or plaster, it does not give him a favorable impression. Likewise, soiled glass, dust and debris on the floor or dust on and in cases, cases with the paint worn off, illegible labels and exhibits that remain unchanged for five, ten or more years certainly give unfavorable impressions and conclusions and do not encourage the visitor or arouse his interest, and do not put the Education Department in a favorable light.

The unfortunate pessimistic tone of each Annual Report touching upon these conditions for 20 years can not be greatly changed until the leaky roof is repaired, cleaners and painters are provided to care for the exhibition halls and the scientific and technical staff is increased and provided with facilities to change and improve the exhibits. The leaky roof has continued to make the usual trouble throughout the current year.

A few years ago a renovation of the Education Building was begun in the basement and has gradually been extended upward, so that on December 24, 1940, the Work Projects Administration workers began cleaning and painting the rooms and halls of the State Museum and continued during the remainder of the fiscal year. A large number of the offices and hallways were painted and the floors

cleaned, and work was begun on the walls and ceiling of the Hall of Zoology.

The regular Department painters repaired and repainted the topographic map of the State in April, a much needed improvement.

With the very unfortunate decline of support for the Federal Art Project, it was no longer possible to secure the loan exhibits which have been so welcome for temporary loans during recent years.

The last one received was a series of paintings which were displayed in the rotunda of the State Museum during Federal Art Week, November 28 to December 2, 1940.

PHOTOGRAPHY AND DRAFTING

The continued lack of proper care of files of negatives, drawings, maps and similar material—which lack renders many items unavailable for study—underscores the need, emphasized many times in these reports, of a full-time photographer, a full-time scientific artist and a full-time draftsman. Despite the employment of a Department photographer, it is impossible for him to substitute in all the capacities mentioned for the highly specialized work of the State Museum.

MUSEUM COLLABORATORS

The only Museum Collaborator presently engaged under the April 18, 1929, authorization of the Board of Regents, Dr E. P. Felt, has had the revision of his Museum Bulletin 200, Key to American Insect Galls, printed outside the Department, because funds were not available for its reprinting under Museum auspices.

STATE MUSEUM COUNCIL

The State Museum Council is an advisory group appointed by the Board of Regents to advance the general welfare of the Museum.

There was no meeting of the council called this year.

THE HISTORIC AND ART COLLECTION

(Figures 3-15)

"I warmly sympathize with the ambition expressed in your annual report to have this Museum more than a mere zoologic or scientific museum. It should be a museum of arts and letters as well as a museum of natural history.

* * * "There should be here a representation of all our colonial and revolutionary life. There should be in this Museum for the instruction and inspiration of our people, a full representation of American history since the time when New York cast off its provincial character and became an integral portion of the American Republic."—*Theodore Roosevelt's address at the opening of the New York State Museum, December 29, 1916.*

The outstanding developments in the condition and expansion of the Historic and Art Collection have been due to the assistance from the Work Projects Administration, the transfer of the murals and the cases from the World's Fair, and the acquisition of the E. L. Henry Collection.

Much progress has been made in the cataloging, cleaning and storing of the collection. The architects and the photographer have continued their survey and records of the Shaker buildings and structures at Watervliet and at Mount Lebanon. As the properties are rapidly passing out of Shaker control, the buildings and structures are being changed or destroyed, and for this reason emphasis has been placed on hastening as much as possible the historic survey.

In the past the Historic and Art Collection has been expanding primarily along the lines of the industrial arts, such as agriculture, manufactures and the household industries, including pottery, glass, textiles and allied materials. As a result of the lack of exhibition space very few historic and art objects were displayed and most of these were used as temporary exhibits. The fine arts, including painting, sculpture, prints and architecture, have long been unduly neglected, so that many visitors were given the impression that these subjects were not included within the field of activity of the State Museum. As there is little visual evidence to the contrary they did not realize that the law authorizing the State Museum included the history and art as definitely as the natural history sciences.

Some of the general public and friends of the arts have been outspoken, even resentful of this lack of emphasis and neglect. Naturally there was objection to any change of the *status quo* and the "vested interests" in the older procedures objected because it involved the rearrangement of exhibits and the storage of certain exhibited material. It was not possible to overcome this inertia and resistance until with the closing of the World's Fair the transfer was made by the Fair Commission and the Director of the Budget to the State Museum of the historic murals used at the fair, with certain display cases and other materials—on *condition* that a Hall of History be established in the State Museum. The following quotations from the Minutes of the September 19, 1940, meeting of the World's Fair Commission regarding the Disposition of Exhibit Material to the State Education Department, p. 28-30, make clear the disposition and obligations involved in the acceptance of the materials as follows:

The Chairman [John J. Dunnigan]: "I do not see that the commission has any objections to giving all these things to the State Museum, Department of Education." . . . The Chairman: "I think

that these murals belong in the History Room of the Museum of the State Department of Education and no place else." . . . The Chairman: "I do not think the commission—and it will be subject to the approval of the Budget Director—will have any objection to giving them to the State, and if we do, I think that the State Department of Education should place a plaque on the wall of that History Room saying that the exhibits were given to the State Department of Education by the New York World's Fair Commission where they were on exhibit at the World's Fair for the past two years." . . .

The Chairman: "Mr Weber, will you tell us for the record just what these exhibits will consist of that we wish to give the State Department of Education to be placed in the History Room?"

Mr Weber: "That includes the four historic mural paintings in the main lobby here, the 28 table cases, the 30 wall cases." . . .

The Chairman: "Have you any other suggestions? Is it not the best and wise way and the easiest way for us to give them to the State Department of Education for the History Room?"

Mr Torsney made the motion, seconded by Mr Burchill, that the above recommendations be made to the Director of the Budget.

The Chairman: "Gentlemen, you have heard the motion, which has been seconded. All in favor will please say Aye; opposed No. The motion is carried."

The Education Department accepted the materials and therefore its obligations. This transfer of historic materials was made originally in response to the application by the Director of the State Museum, confirmed by the Commissioner of Education, to the World's Fair Commission for the following material:

- 1 The four historic mural paintings by David C. Lithgow
- 2 28 table cases
- 3 30 wall cases

The importance of the acquisition of these historic murals merits further attention elsewhere in this report (p. 27).

The third item calling for special attention is the donation to the History and Art Collection of the art and biographical materials of Edward Lamson Henry, National Academician, by relatives of Mrs Henry: Mr and Mrs Lawrence Stetson, Mr and Mrs E. C. Wells and Miss Margaret L. Wells of Johnstown, N. Y. This acquisition is the most important series of art and biographical materials yet secured by the State Museum and it came through the friendly services of Wilfred Thomas and Frank M. Thomas. This also merits special mention (p. 37).

Now that provision is made for a Hall of History which is to be devoted to the achievements of the people of the State, a selection of

historic materials from the hundreds of boxes and drawers and the crowded storerooms must be assembled and so arranged as to portray significant and interesting phases of the life of the people of the State. The available space, however, will permit only a brief synopsis of New York History, but an adjacent hall will be made available for temporary exhibits, and provision for the fine arts.

When the present quarters of the State Museum in the Education Building were dedicated in 1916, Theodore Roosevelt expressed the wish, quoted at the head of this section, that the State Museum should be expanded to include history and the arts—as was of course already provided by law—but conservatism and poverty have already delayed this expansion for nearly 25 years! Before, however, such a program can be executed, a new building devoted solely to the State Museum will be necessary.

THE WORLD'S FAIR HISTORIC MURALS

(Figures 3-6)

The acquisition of materials from the New York State Building at the World's Fair reinforced another important advance in the exhibition policy of the State Museum. The artist, David C. Lithgow, who is also the artist of our famous Iroquois Indian groups, describes these murals, depicting the history of New York State (Pictorial Souvenir, New York State Exhibits, Official Guide, 1939, p. 7-10) as follows:

Historic Murals. Lift your eyes to the walls around you. There in four mural paintings you have, dramatized, the history of New York State. These murals symbolize Exploration, Trading, Charter Making and the Birth of a New Nation, a completely outlined story: birth, development and the inheritance of a new and richer life—that is, the history of New York State in a few representations. Each of these murals is divided into three panels, each panel depicting some incident relating to the general subject of the mural.

You may remember that Verrazano, the Florentine, in 1524 discovered New York Bay, later to become the harbor of the commercial center of the New World. Champlain and Hudson, shown in the *first* mural, explored Lake Champlain and the Hudson river, Champlain descending from the north, Hudson ascending from the south. In the center panel you see Father Isaac Jogues, the missionary, blessing the Lake of the Holy Sacrament, now called Lake George. These are the explorers who opened up the vista of commerce in the new land, and the missionaries who came to interpret its spirit.

The *second* mural—Trading—shows at the left the early occupation of Castle island, near Albany, by the Dutch in 1614. They were great colonizers, the Dutch, and a decade later saw them making their first settlement at Fort Orange, the site of Albany. On sylvan Manhattan island, too, they built shelters and named the trading post New Amsterdam. Little did they dream

how it would grow and grow into a sprawling metropolis. But alas, forty years later, in 1664, along came the English to take it from them.

In the center panel stands Director Peter Stuyvesant, listening to the terms of surrender. You should not wonder that he capitulated when you see the British fleet riding at anchor in the bay beyond.

To the glory of the Duke of York, New Amsterdam then became New York and it remained a British colony for over a century. Farms and villages sprang up like mushrooms on the islands about New York and up the Hudson and Mohawk valleys. The axe resounded through the woods. Smoke lifted to the skies from fires clearing the way for further advance. Foundations were building, foundations for population, wealth, commerce, culture. In the third panel you observe the signing of the Fort Stanwix Treaty of 1768. This treaty drew a definite line between the territory of the red men and of the whites.

The *third* mural—Charter Making—in the left panel, shows the formulation of the Charter of Liberties of 1683 by the first Assembly of the people's representatives. At the right is shown the historic Albany Congress of 1754 at which, first, an alliance with the Indians against the French was made by Sir William Johnson, and, secondly, Benjamin Franklin proposed a "Plan of Union" for the colonies. Significant this last, for it marked the first step toward the Federal Republic.

In the center panel you see the final act in New York's separation from the British Empire, that intensely dramatic moment when the Declaration of Independence of July 4, 1776, adopted by the representatives of the people of the State on July 9, rang out from the steps of the Court House at White Plains. Through that document a new nation was born in a new land.

Birth of a New Nation, the *fourth* mural, depicts the consummation of a new free commonwealth. After the acceptance by New York of the Declaration of Independence, its Convention proceeded to form a State Constitution which was adopted, one year later, at Kingston. George Clinton was elected first Governor of the new State and the right panel shows him taking the oath of office.

But despite it all, the emphatic expression of the will of the people in a perfectly just declaration, the British still contested the right of their colonies to a separate political existence. The surrender of Burgoyne after his defeat at Saratoga in 1777, so realistically portrayed in the left panel, was but a prelude to Yorktown and the Treaty of Peace.

The center panel of this mural, water below, land above, is a startling illustration of startling change. The growth from settlement to city in three centuries, the miracle of the city's upsurge since the turn of the century here is visualized. You see the amazing transformation from the Dutch village below with the Himalayan peaks about it; the quaint looking DeWitt Clinton locomotive below, the streamlined engine above, and in the water, at bow and stern of an ocean leviathan of today, Fulton's Clermont and Hudson's Half Moon. And in the sky an airplane.

This series of murals provides a satisfactory background for an exhibit of historic objects which will visualize significant aspects of the history of the State. It is intended not merely to present the political history of the State, but as well its industrial and cultural development.

EXPLORATION



From the North came
SAMUEL De CHAMPLAIN
1609



FATHER ISAAC JOGUES
Explored this lake and named it
St. Sacrement, now Lake George
1646



From the South came
HENRY HUDSON
Discovered the river which bears his name
1609

Figure 3 The David C. Lithgow historic mural "Exploration," 1609-46. Copyright by the artist. Photograph by James B. Lloyd

TRADING



DUTCH TRADING POST
Castle Island
1614

STUYVESANT SURRENDERS
New Netherland to the British
1664

First Treaty of
FORT STANWIX
1768

Figure 4 The David C. Lithgow historic mural "Trading," 1614-1768. Copyright by the artist. Photograph by James B. Lloyd

CHARTER MAKING



David C. Lithgow
Albany 1776

THE CHARTER OF
LIBERTIES
1683

READING OF THE
Declaration of Independence
At White Plains
1776

ALBANY CONGRESS
1754

Figure 5 The David C. Lithgow historic mural "Charter Making," 1683-1776. Copyright by the artist. Photograph by James B. Lloyd



BIRTH OF A NEW NATION

The Surrender of
GENERAL BURGOYNE
SARATOGA 1777

INAUGURATION of GEORGE CLINTON
First Governor of the State of New York
KINGSTON 1777

Figure 6 The David C. Lithgow historic mural "Birth of a New Nation," 1777. Copyright by the artist. Photograph by James B. Lloyd

THE STETSON-WELLS E. L. HENRY ART COLLECTION

(Figures 7-15)

The outstanding acquisition in the recent history of the fine arts in the State Museum, excepting of course, the four Lithgow World's Fair murals, was the donation in the fall of 1940 to the State Museum, as previously mentioned, by Mr and Mrs Lawrence Stetson, Mr and Mrs E. C. Wells and Miss Margaret L. Wells, residents of Johnstown, N. Y., of an extensive collection of biographical materials, sketches, paintings, notebooks, photographs and memorabilia of Edward Lamson Henry, National Academician. The donors are relatives of Mrs Henry.

This donation was made through the friendly and intelligent services of Wilfred Thomas and Frank M. Thomas of Albany. It was Wilfred Thomas who made the suggestion to the relatives that this material be made a family memorial. Both Thomas brothers have, in addition, donated valuable memorabilia to this collection.

It is very appropriate, and I welcome this opportunity to mention that this is merely the latest and most important instance of their devotion to the improvement of the History and Art Collection of the State Museum, which has covered a period of several years and has had many favorable ramifications because of their extensive knowledge and appreciation of American art history and their devotion to its preservation and its recognition by the public.

This collection is to be known as the "Stetson-Wells E. L. Henry Collection." It includes a biographical sketch of Henry by Mrs Frances L. Henry, hundreds of photographs of his paintings, and related materials which he had accumulated. This material is so extensive that it has provided an excellent foundation upon which to prepare a careful and critical study of Henry and his work. For this study I was very fortunate in being able to secure the services of Elizabeth McCausland, an art critic and author of New York City, who is well qualified to conduct the research and who has been conducting it along original lines and not solely as a library study.

In the prosecution of her studies excellent cooperation has been granted by many institutions and numerous individuals, for which the State Museum is very grateful.

Mr Henry lived in New York City and spent his summers at Cragmoor, near Ellenville, N. Y., south of the Catskills, and was primarily interested in rural life and scenery. He was also much interested in history and painted a number of historic events. His

sense of humor and interest in people gives a unique charm to his pictures. His sketches and paintings portray every step in the transportation methods of the State from oxcart, horse and buggy, stage coach, canal, railway, bicycle and on to the automobile! This is an outline of the history of transportation in the State. No artist has given us a more intimate and complete picture of the rural life of the State than Henry and that in itself makes his work particularly welcome to the State Art Collection.

The Henry Collection is a good example of the kind of material which should be developed in the State Museum. It indicates the kind of materials which the State should acquire. This should include materials bearing on the biography and work of the artist; his letters, correspondence, sketch or note books, drawings or paintings and models of all kinds, so that it would be possible to understand how he worked, as well as the final results of his efforts, and finally his influence upon society. It is this comprehensive picture that would be a most valuable record of his life and work.

There is a surprising amount of such material in the State, and in the past it seems that this comprehensive approach has been somewhat neglected and therefore it now needs emphasis.

The present economic depression has caused many persons to take smaller houses, with the result that a vast amount of material of historic and artistic importance has been concentrated or discarded and thus much of value has risked destruction. Museums and libraries should be consulted at such times or valuable material is likely to be destroyed.

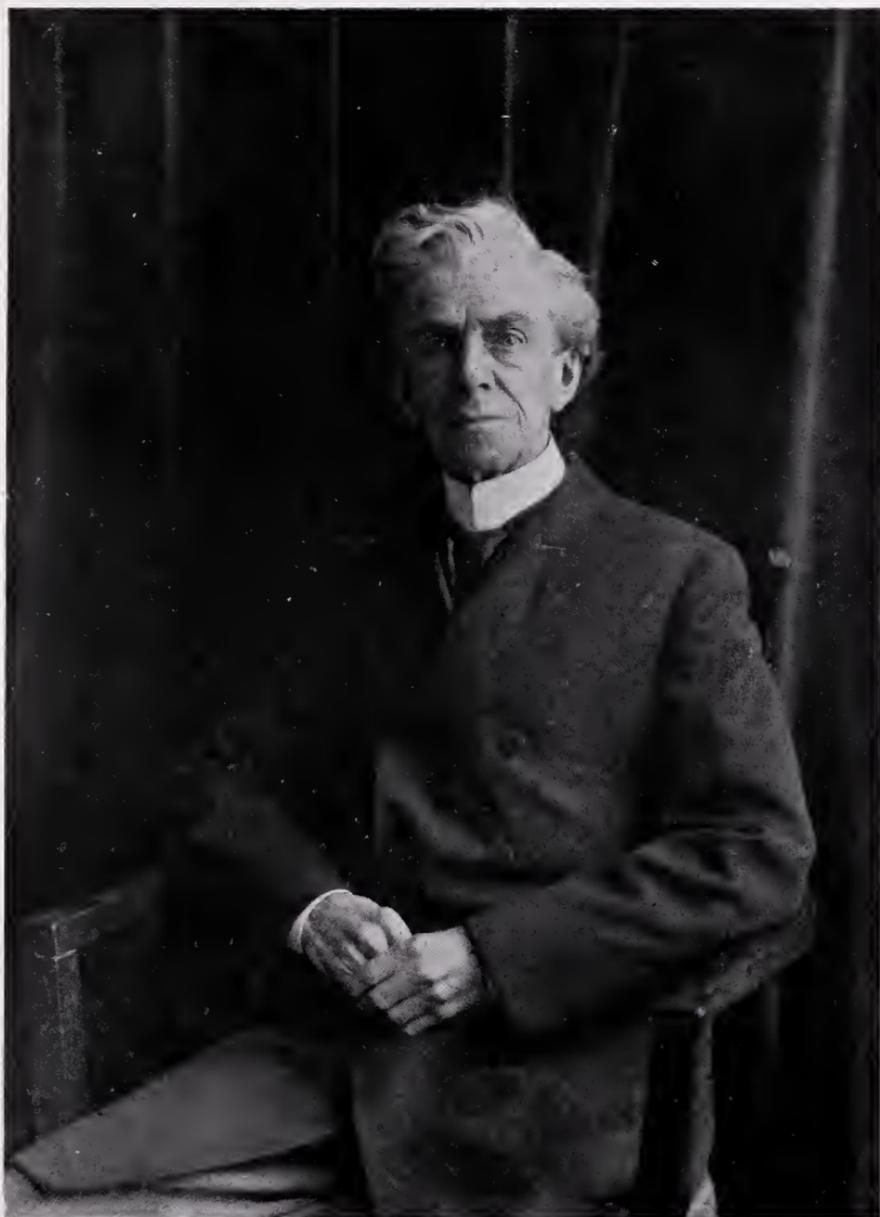


Figure 7 Portrait of Edward L. Henry, N.A. Photograph by Jessie Tarbox Beals.



Figure 8 Sunday Morning, Old church at Bruynswick, E. L. Henry, 1898. Photograph by N. E. Baldwin



Figure 9 Burgoyne's Army on the March to Saratoga, September 1777. E. L. Henry. Photograph by N. E. Baldwin

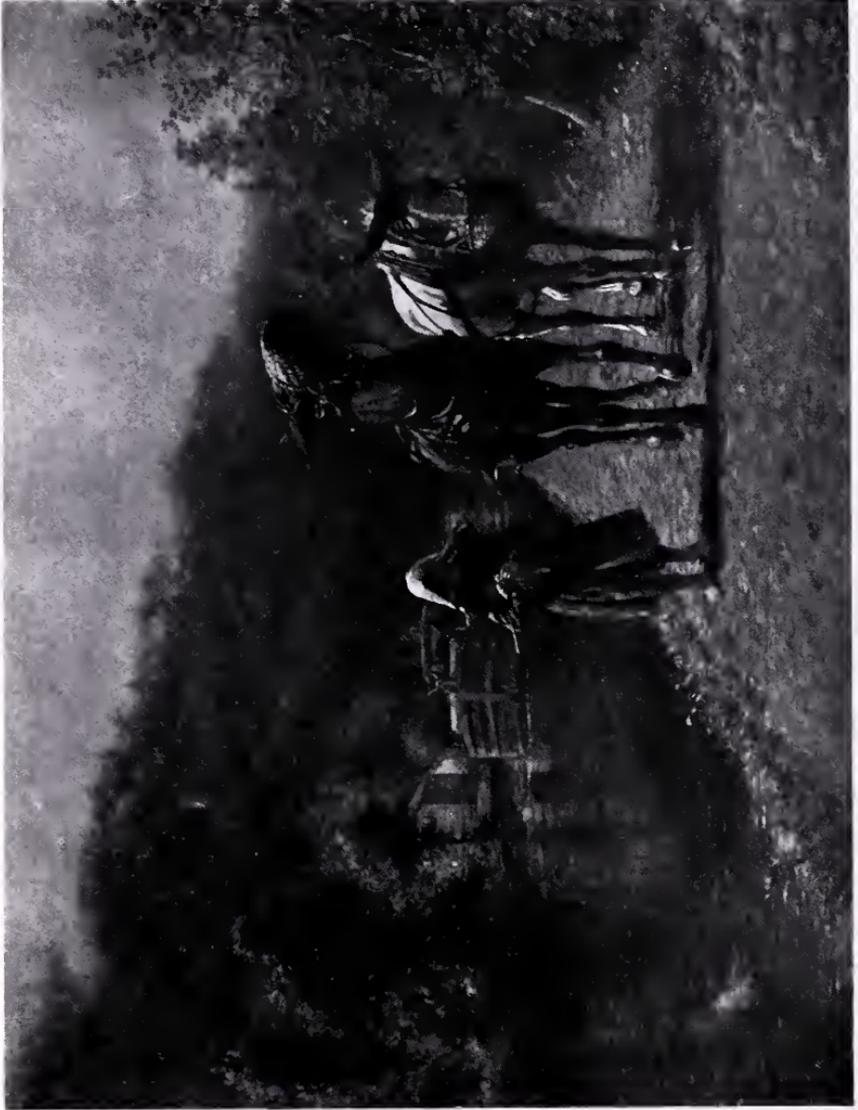


Figure 10 On the Tow Path. E. L. Henry. Photograph by N. E. Baldwin



Figure 11 Testing His Age. E. L. Henry Collection, N. Y. State Museum.
Photograph by N. E. Baldwin.



Figure 12 Taking a Rest. E. L. Henry Collection, N. Y. State Museum.
Photograph by N. E. Baldwin.

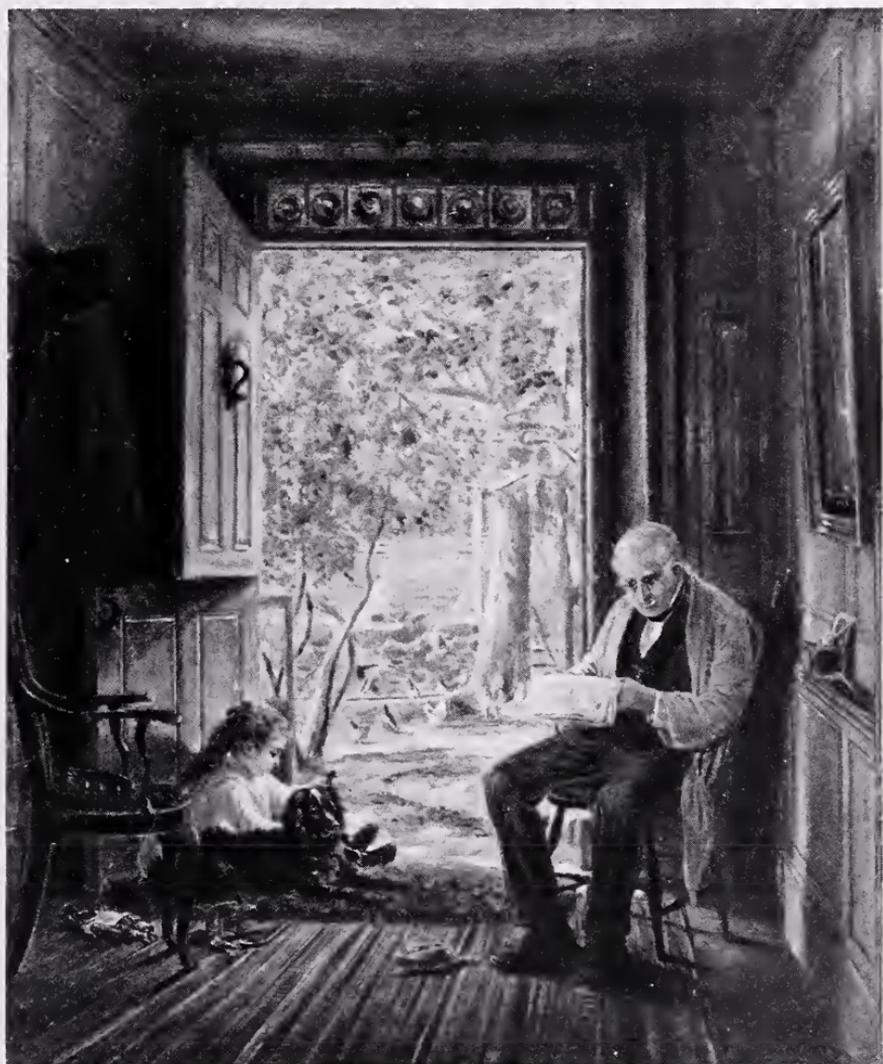


Figure 13 A Quiet Corner. E. L. Henry. Photograph by N. E. Baldwin



Figure 14 Feeding the Ducks. E. L. Henry Collection, N. Y. State Museum.
Photograph by N. E. Baldwin.



Figure 15 A Country Lawyer. E. L. Henry. Photograph by N. E. Baldwin

SUMMARY OF THE ACTIVITIES OF THE MUSEUM STAFF

(Figures 16-27)

"It is essential that this Museum should command the service of many different men for work in many different fields, and that its work should be so closely related to work of the same kind elsewhere that it shall all represent a coordinated whole. This is true of all departments of the work, but especially so of those departments which have a direct utilitarian bearing.

"This Museum like every other institution of the type should do everything to develop large classes of workers of this kind. And yet, friends, we must never forget that the greatest need, the need most difficult to meet, is the need to develop the great leaders, and to give full play to their activities. In the entirely proper effort to develop numbers of individual workers there must be no forgetfulness of this prime need of individual leadership if American achievement in this scientific field is to be really noteworthy. Yet in scientific as well as in historical associations and academies, this fact is often forgotten.

"The really great works must be produced by some individual great man who is able to use to the utmost advantage the indispensable preliminary work of a multitude of other observers and investigators. He will be the first to recognize his debt to these other observers and investigators. If he does not do so he will show himself a poor creature. On the other hand, if they are worth their salt they will be proud to have the great architect use all of the results of their praiseworthy and laborious and necessary labor in constructing the building which is to crown it."—*Theodore Roosevelt's address at the opening of the New York State Museum, December 29, 1916.*

From an administrative point of view the following is a summary of the activities of the technical staff:

History, art and archeology. The Director, assisted by William L. Lassiter and several relief workers, has, as in recent years, continued to give special attention to the history and art collection. The detailed list of accessions to the Historic Collection is given elsewhere in this report. The State Museum historic survey of Shaker buildings and structures, in cooperation with the Work Projects Administration, made considerable progress, particularly on the measurement of the buildings at Mount Lebanon, at the North, Second and Church families. K. F. Chamberlain also assisted in this Shaker project. Photographs accompany all these architectural studies. Substantial progress has also been made by indexing and improving the historic files and records and over 1900 objects have been cataloged. David Grant has continued to secure valuable historical industrial objects and related materials.

Noah T. Clarke, State Archeologist, has made progress on the index to the archeological material in storage and a list of Iroquois words has been made.

Elsewhere in this report reference is made to the acquisition of the World's Fair historic murals and display cases for a new Hall

of New York History (p. 27), and to the donation of the E. L. Henry materials (p. 37). This is the most important history and fine arts collection so far acquired by the State Museum.

Botany. Dr Homer D. House, State Botanist, has completed a supplementary report on the bibliography of the botany of New York State, has practically completed the report on the Newcomb region in the Adirondacks, has made progress on the revision of the State Annotated List of Plants, and has, with Dr R. B. Gordon, published as Museum Circular 24, a report on the additions to the flora of the Allegany State Park. With Work Projects Administration assistance much progress has been made in improving the condition of the herbarium and arranging the collection in the new storage cases.

Dr Rogers McVaugh, Temporary Botanist, has continued his work on the flora of Columbia county.

Dr Royal E. Shanks, temporary ecological botanist, continued the third season's work on the study of the vegetation of Monroe county, in cooperation with the Monroe County Division of Regional Planning, through J. Franklin Bonner, director.

Entomology. Dr Robert D. Glasgow, State Entomologist, has continued his studies of the black flies and mosquitoes, particularly their relation to economic conditions. He has also continued his studies of the Pales weevil and the European pine shoot moth.

Doctor Glasgow has devoted much time to the general supervision of the Work Projects Administration Project No. 50,470. The Work Projects Administration assistance has aided in indexing the entomological literature, in translating, in photography and in bookbinding.

Several of these Work Projects Administration workers have also devoted their time to general museum work for the various other offices, such as bookbinding, photography, drafting, inventory of publications, arranging office files of correspondence.

Kenyon F. Chamberlain, Assistant State Entomologist, has continued the transferring of the insect collection to the new insect boxes in the steel cabinets and through field trips has made important additions to the insect collection, as well as assisted in securing historic materials.

Geology. Dr David H. Newland, State Geologist, retired June 30, 1941, after many years of faithful work in the field of economic geology. His report with Henry Vaughn on the geology of the Lake George region was approved for printing.



Figure 16 The oak fern. *Phegopteris dryopteris* (L.) Fee. Frequent in mossy woods, swamps and shaded woodlands, throughout most sections of the State, especially northward. Photograph by N. E. Baldwin.



Figure 17 The dissected grapefern, *Botrychium dissectum* Spreng., and its variety *B. dissectum* var. *obliquum* (Muhl.) Clute. Frequent in moist open places throughout the State. Photograph by N. E. Baldwin.



Figure 18 The Virginia grapefern, *Botrychium virginianum* (L.) Sw., common in moist woodlands throughout the State. Photograph by N. E. Baldwin.



Figure 19 The sensitive fern, *Onoclea sensibilis* L., very common in moist or wet open or partially shaded situations throughout the State. Photograph by N. E. Baldwin.



Figure 20 Blackfly larvae on a rock taken from an Adirondack Mountain stream. The bloodthirsty adult blackflies emerging in June and early July make life miserable in the north woods. Photograph by Robert D. Glasgow.

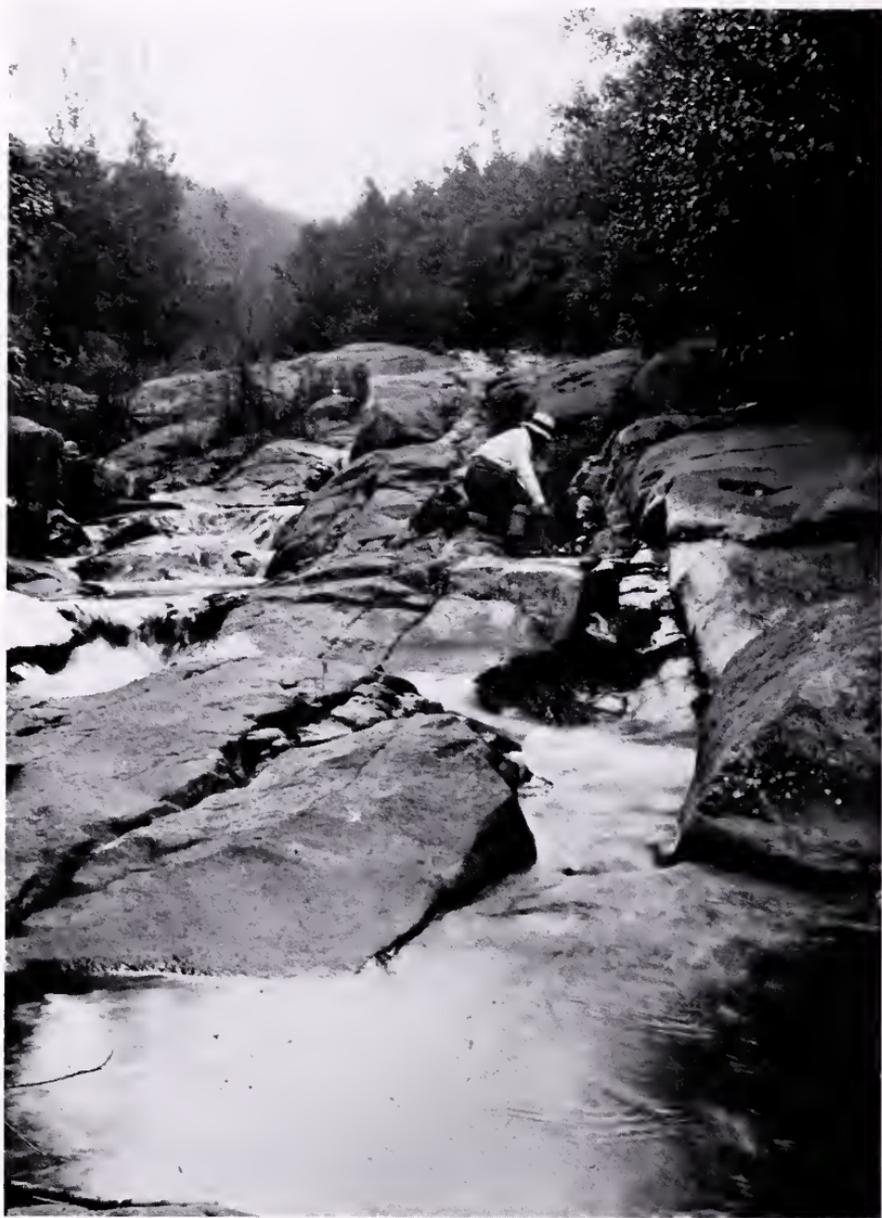


Figure 21 A blackfly stream in the Adirondacks. A choice trout stream, the fish prefer the deeper pools, while the blackfly larvae attach themselves to rocks and other submerged objects in swift shallow water. This is important in the practical control of blackflies. Photograph by Robert D. Glasgow.

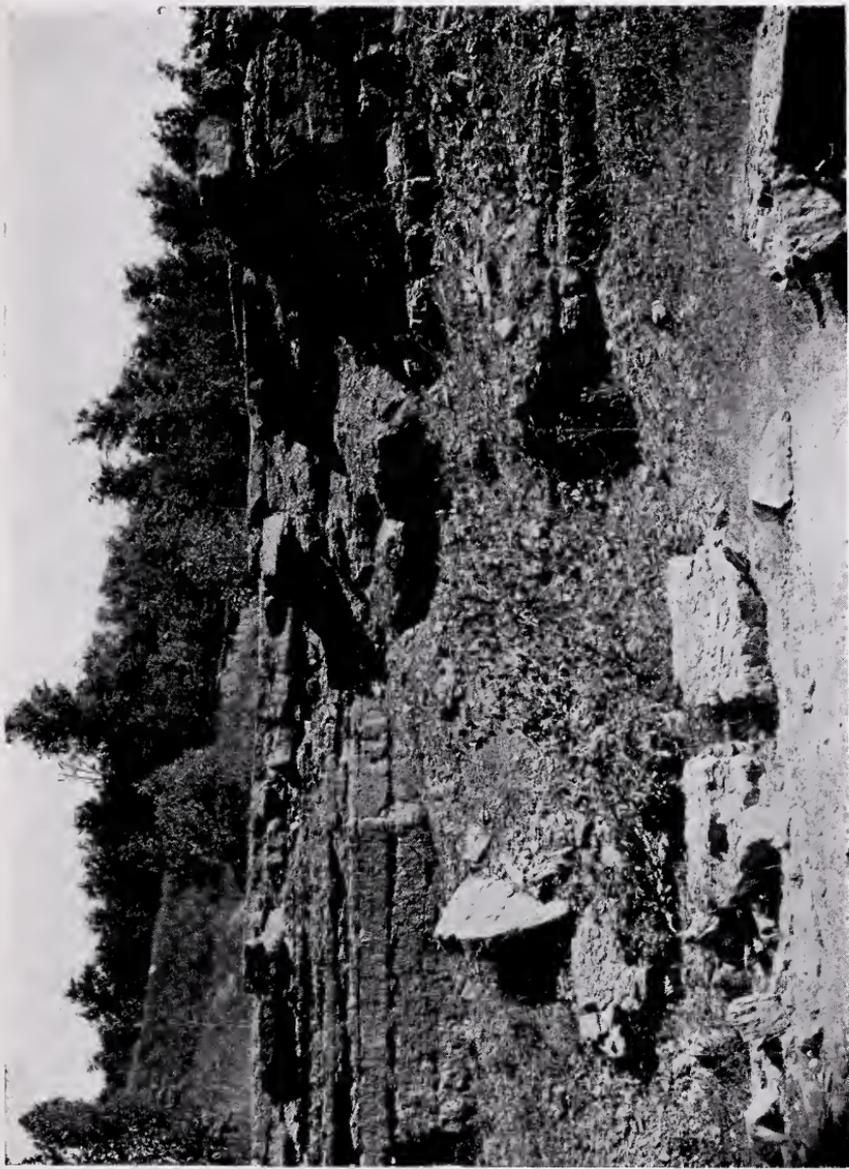


Figure 22 Sharon Springs formation at the type section in a quarry one mile east-northeast of Cobleskill. A three-inch band of glauconite at the top of the section separates this formation from the Schoharie beds. Photograph by W. J. Schoonmaker, August 28, 1941.



Figure 23 Near view of the Sharon Springs formation capped by the Schoharie formation. The head of the hammer marks the three-inch band of glauconite which is succeeded by nine inches of soft thin-bedded shale beneath 35 inches of massive siliceous Schoharie limestone. Photograph by W. J. Schoonmaker, August 28, 1941.



Figure 24 View of the Leeds type section of the Schoharie formation exposed in the falls of the Catskill in the gorge at Leeds, N. Y. Photograph by W. J. Schoonmaker, September 2, 1941.



Figure 25 About 18 feet of the upper part of the Leeds facies of the Scholharie formation showing the characteristic bands of chert and cherty nodules. West of Saugerties, N. Y., three-eighths of a mile west of the railroad underpass. Photograph by W. J. Schoonmaker, September 2, 1941.

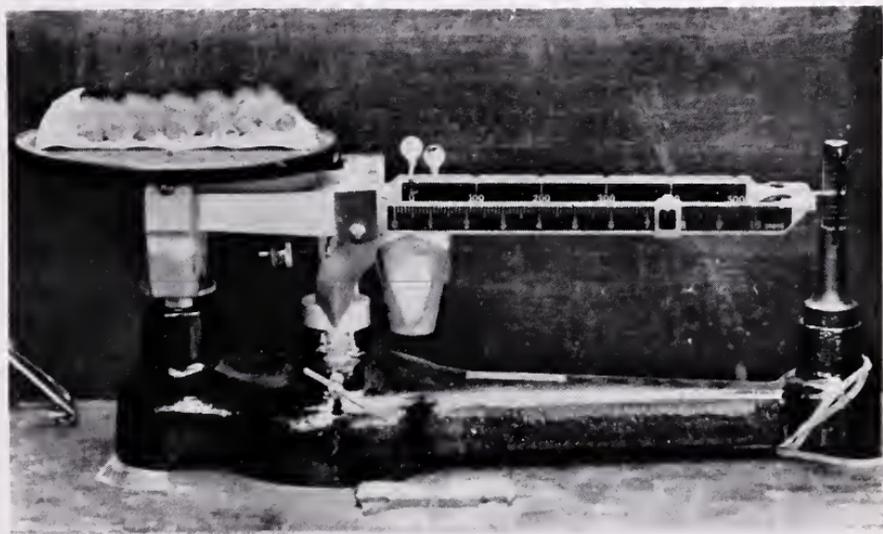


Figure 26 The weight of the members of this family of seven nestling eastern phoebes was taken thrice weekly from the time of hatching until they were old enough to leave the nest. Albany, N. Y. Photograph by Dayton Stoner.



Figure 27 A pair of eastern phoebes constructed this nest and reared a family of young in it in 1934. The following year a pair of barn swallows added a mud rim and a lining of white feathers and reared a brood of young in it. Voorheesville, N. Y. Photograph by Dayton Stoner.

C. A. Hartnagel, Assistant State Geologist, was promoted to the position of State Geologist and has continued his careful attention to the development of oil and natural gas within the State and has nearly completed his report on the Randolph mammoth.

Dr Arthur F. Buddington, temporary geologist, is continuing his field work on the Saranac Lake quadrangle. The report he completed in collaboration with Dr Lawrence Whitcomb, temporary geologist, on the Willisboro quadrangle has been approved for publication.

Mrs Medora H. Krieger, temporary geologist, continued her work on the report of the Indian Lake quadrangle.

Dr Earl T. Apfel, temporary geologist, has devoted his time to field work on the glacial geology of the quadrangles in the general region about Syracuse.

Dr Chauncey D. Holmes, temporary geologist, has cooperated with Doctor Apfel in the Syracuse region.

Paleontology. Dr Winifred Goldring, State Paleontologist, who has completed her report on the Coxsackie quadrangle which has been approved for publication, has continued studies also of Devonian stratigraphy.

Dr Rudolf Ruedemann, retired, is continuing his report on graptolites and the general chapters of the monograph are in preparation.

John H. Cook, temporary geologist, has completed his report on the glacial geology of the Coxsackie quadrangle.

Clinton F. Kilfoyle, technical assistant, has continued the catalog of the type collection and the catalog of pamphlets in the office collection.

Dr Rousseau H. Flower, temporary geologist, made progress on his report on Devonian cephalopods.

Dr George H. Chadwick, temporary geologist, has completed his report on the geology of the Catskill and Kaaterskill quadrangles and it has been approved for publication.

Dr A. C. Tester, temporary geologist, has not yet completed his report on the geology of the Randolph quadrangle.

Dr Gordon I. Atwater, temporary geologist, has not yet completed his report on the revision of the geology of the Salamanca quadrangle.

Professor L. W. Ploger, temporary geologist, has continued his study of the geology of the Cattaraugus quadrangle.

Colleagues in the Department of Geology, Columbia University, of Dr R. J. Colony, temporary geologist, who died March 26, 1936, will complete the report on the complex geology of the Schunemunk

quadrangle on which he was engaged for many years. The field work was practically completed.

Professor N. C. Dale, temporary geologist, is completing his report on the geology of the Oriskany quadrangle.

Professor H. D. Whitnall and his colleagues of Colgate University have continued their cooperative study of the geology of the Morrisville quadrangle.

Dr John C. Woodruff, of Colgate University, completed his report on the geology of the Wellsville quadrangle, studied in cooperation with Colgate University, and the report has been approved for publication.

Zoology. Dr Dayton Stoner, State Zoologist, has continued his study of the bank swallows of the Oneida Lake and Albany regions, by the banding method. The report on the birds of Washington Park, Albany, is nearing completion as is also his report on the barn swallow. He assisted in the preparation of the Bird Day Bulletin to the Schools.

Walter J. Schoonmaker, Assistant State Zoologist, has continued his study of the woodchuck and of the mammals of Rensselaer county.

Aretas A. Saunders, temporary ornithologist, completed his report on the summer birds of the Allegany State Park.

Dr Wallace Craig, temporary ornithologist, has continued the preparation of his report on bird song.

ANNUAL FINANCIAL AND STATISTICAL SUMMARY

THE STATE MUSEUM BUDGET

The following budget does not include the cost of heat, light, janitor service, orderlies (watchmen), carpenters, painters and elevator men. Certain other items also are furnished by the Education Department, such as postage, stationery, express, drayage in part, telegraph and telephone, and are therefore not included in the budget.

Facilities provided by cooperative projects supplement to an important degree the state appropriation. It is impossible to estimate the amount of these funds precisely, since they include the federal franking privilege, cooperation with many individuals, with organizations and with other state departments. Labor, supplies, expert services, use of automobiles etc. have been provided by this cooperation. Such financial assistance is of the greatest value, but the funds do not pass through the Museum. The annual statistical summary for the fiscal year July 1, 1940, to June 30, 1931, follows:

APPROPRIATIONS AND FUNDS FOR FISCAL YEAR

(July 1, 1940, to June 30, 1941)

Appropriations

Salaries:	
Administrative staff	\$9 720 00
Scientific staff	33 170 00
Temporary expert service	2 522 00
Scientific assistants	3 720 00
Clerical, labor etc.	11 780 00
<hr/>	
Total salaries	\$60 912 00
Equipment and supplies (General expense)	1 706 78
Traveling (of which \$100 for out-of-state)	2 323 51
Printing	12 500 00
<hr/>	
Total budget	<u>\$77 442 29</u>

DIRECTORY DATA

Name of Museum: New York State Museum*Location:* Albany, New York, U. S. A.*Name of Director:* Charles C. Adams*Name of Assistant Director:* Alvin G. Whitney*Date of Founding:* The Museum is the outgrowth of state surveys begun in 1836; formal organization of the Museum was effected in 1843. (See State Museum Bul. 313, p. 85-121, 1937, for historical sketch.)*Open to the public:* Open week days from 9 a.m. to 5 p.m. Closed on Sundays and legal holidays, except from June to September. Total number of hours open to the public for the year, about 2485.*Staff:*

Administrative officers	2
Permanent scientific staff	9
Technical and clerical assistants etc.	10
Part-time employes	10
<hr/>	
Total staff	31

Salary schedules, 1940-41

Administrative	\$3 270-\$6 450
Scientific professional staff	2 280- 5 000
Technical assistants (nonprofessional grade)	1 860

*Hours and vacation:*Hours of work per week, $36\frac{3}{4}$

Vacation allowance, 22 working days and all legal holidays

NEEDS OF THE STATE MUSEUM

Frequent mention is made throughout this report of the lack of funds for carrying on the immense amount of work which should be given attention by the State Museum in connection with the extensive natural resources of New York State. As has been pointed out in several earlier Annual Reports, this situation has been continued with little or no change in all the years since 1912 when the State

NEW YORK STATE MUSEUM

Summary of the State Museum budgets and allotments for the fiscal years 1931-32 to 1940-41

	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39	1939-40	1940-41
Salaries.....	\$60 870 00	\$60 720 00	\$60 370 00	\$60 370 00	\$60 670 00	\$60 670 00	\$62 720 00	\$65 040 00	\$67 700 00	\$60 912 00
Equipment and supplies (General expense).....	5 000 00	3 000 00	2 400 00	3 000 00	2 800 00	4 100 00	3 000 00	General expense 2 690 00	1 990 00	1 706 78
Traveling expenses.....	3 300 00	2 450 00	2 550 00	2 700 00	2 790 00	2 600 00	2 600 00	No allotment (150 00)	2 500 00	2 323 51
Traveling expenses (out of State).....	(200 00)	(200 00)	(200 00)	(200 00)	(310 00)	(250 00)	(275 00)	(150 00)	(150 00)	(100 00)
Sunday opening.....	1 020 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing.....	10 000 00	8 500 00	5 300 00	5 300 00	5 300 00	6 367 00	5 000 00	5 000 00	5 000 00	12 500 00
Total.....	\$80 190 00	\$74 670 00	\$70 620 00	\$71 370 00	\$71 470 00	\$73 737 00	\$73 320 00	\$72 730 00	\$77 190 00	\$77 442 29

Museum was moved into its present quarters. Budgets rose gradually to a peak of \$80,190 in 1932, declined in the depression years to \$70,620, as shown in the accompanying table, and came back to \$77,442.29 for the year covered by this report.

This almost static condition has not permitted the Museum to expand its operations in proportion to the growth of other phases of state activity. On a comparative basis, the support for the State Museum has suffered a decline. The effectiveness of the Museum as a contributory influence in the whole educational system of the State has thus actually retrogressed while other phases of education have shown great progress. The research activities themselves of the Museum merit the greater financial support needed.

In the geologic field alone, other states, as has been shown before, spend much more or almost as much as the State of New York spends for the entire State Museum operations. The ridiculously inadequate State Museum budget is revealed as even worse by these comparisons.

The careful, comprehensive, scientific study of the role of research in New York State, urged now for many years in the reports of the State Museum, becomes increasingly urgent with the passage of time. Out of such an inquiry should come a more constructive administrative policy, contrasted to the present relatively confused one.

Readers are respectfully referred to the Annual Reports of the past several years to understand the full scope of the needs which have been reiterated so far with little avail.

GENERAL BACKGROUND PROBLEMS

"We are at the parting of the ways. And we may define the two ways—the old one which we have been going and may continue to our destruction, and the new one which we shall have to try out if we are to survive—by comparing two senses in which the machine 'saves labour.'

"At present it means that the machine *saves labourers* and their pay. That is, it reduces costs of production by reducing the number of wage-earning workers. But, inevitably, it thereby swells the ranks of the unemployed and automatically diminishes the number of consumers of the product of the machine. Increase of products, decrease of population; enormous power of production with ever-shrinking power of consumption—that is why we live in an era of starvation in the midst of plenty and of depression in the midst of the greatest productive power which the world has ever seen.

"The other meaning of 'saving labour' through the machine is that machines save labourers from labouring, *i.e.*, they work for men in the literal sense of lifting the old curse from their shoulders, of releasing their energies and setting them free for other activities—for play, for self-cultivation, for study, for the pursuit of all sorts of hobbies, for that noble leisure which Aristotle tells us is the pre-condition of the highest mental activities. If the machine is thought of as working for and in place of the man, then it becomes absurd to deny to the man his share of the good produced on the ground that he has done no work (p. 168).

"I can imagine the leisured men of the future spending their day according to their taste and ability in countless wholesome and morally satisfying activities, which under the present system are threatened by a machine civilization but which then will be not only compatible with it but positively promoted by it. I can envisage a return of skilled handicrafts—not for the market, but for personal enjoyment in the exercise of skill and the making of things of beauty. I can imagine more people giving more time to music, wanting to learn to play for themselves music to which the wireless has first introduced them. I can imagine a renaissance of the arts, just because those who have artistic gifts will be able to devote themselves to their cultivation, without having also to practice that other art which Plato calls the "art of wages," *i.e.*, without having to think of "making a living" either by their art or else by some bread-and-butter occupation which ultimately kills the artistic impulse within them. More people will have time to cultivate their gardens or to enjoy Nature, let alone penetrate her secrets by scientific research." (p. 169) "*Old Truths and New Discoveries*" by R. F. A. Hoerul . In "*Our Changing World-View.*" *Johan-nesburg*, p. 168-69. 1932.

"In general, the material progress, which growth of knowledge makes possible, necessitates the transfer of labour and of capital from such industries as the advance of knowledge has made more efficient into other, and, in many instances, entirely new industries. As the old staple industries find it increasingly easy to meet all the demands of a community growing in wealth, it is both desirable and necessary that there should be a comparative slackening in the rate of growth of these industries, a comparative acceleration in the rate of growth of other industries. As food supply becomes more adequate, it becomes possible to develop manufacturing more rapidly, and later, when supplies of manufactured goods also are abundant, the field which calls for most rapid development is the field of 'tertiary' production. Unless these transfers are made, the conditions which make material progress possible are rendered ineffective and confer no advantage upon anybody. On the contrary, they will cause dislocation and the delusive appearance of over-production. The complications of international trade will affect the relative importance of primary, secondary and 'tertiary' production in different countries, but will in no way diminish the applicability of the general trend here described to every type of national economy. So long as the objective conditions for material progress are present, there will always be a tendency for the relative importance of primary production to diminish, and the relative importance of 'tertiary' production to increase." "*The Clash of Progress and Security,*" by Allan G. B. Fisher, p. 32-33. 1935.

(*l.c.* p. 63). "Sometimes there is a feeling almost of contempt for educational and social services and similar 'tertiary' activities which tend to be regarded as parasitic, instead of being, as they must be, the inevitable fruit of the processes of increasing wealth. * * * (p. 64). Ultimately the only satisfactory solution of problems of technological unemployment lies in the more rapid expansion of professional services and other types of work akin to personal services."

(*l.c.* p. 15). "We soon reach a limit beyond which the vigour and keenness of our work and the accumulations of our thrift cannot be pushed; the limits to the discovery of new natural resources are also clearly defined, but no limits can be set to the expansion of knowledge, either in the natural and social sciences or in their technical applications or in the field of organization and administration."

The preceding quotations indicate clearly the intimate relation existing between research and the natural and human resources, in the present emergency. It is only an understanding of these relations, as applied to our own conditions, that will permit the practice of

sound private and public policies and provide for intelligent public planning.

Under these anticipated conditions the influence of pressure groups will call for careful evaluation, as these may represent almost every degree of merit, favorable and unfavorable, and they may resist favorable changes that should be made toward improved conditions. Dependable knowledge of our natural resources in relation to our economic and social system is thus a permanent obligation toward which the work of the State Museum should be directed. When the broad basal relations are given due weight, the relative importance of local problems can be more clearly estimated.

In New York State the dominating economic influences are finance, manufactures and commerce, and agriculture plays a secondary role. Which of these approximate a properly adjusted stage; which are expanding and which shrinking? What is a proper balance between them for a given condition? Without approximate answers to these questions it is difficult to recognize which of the natural resources merit special emphasis and attention. Pending satisfactory answers it seems best to continue the general fundamental surveys and studies, which appear to have the greatest permanent value, for as Fisher remarks "no limits can be set to the expansion of knowledge." Finally within the field of the State Museum the *transfer* of attention to new or neglected fields of activity will broaden its base for usefulness, and to concentrate its efforts on important public policies, and thus increase the chances of finding new opportunities for advancement and public service, is an urgent procedure. (*cf.* C. H. Grattan. "Living Standards in Tomorrow's World." *Harpers Magazine*, 174: 312-20, 1937; 183: 206-16, 1941.)

Following the present depression will come a period of adjustment that is likely to call for a reestimate, not merely of all our natural resources and the advantages of our geographic position, but as well all our methods of using them. It is this transitional period that will call for an application of the methods and ideals of science, as well as of democracy, to such a degree as we have probably never before experienced. And as a part of the same picture we should recall that we also have, in all probability, as able a group of informed and trained men and women, as at any time in our national history. The supreme test will therefore be how to use this ability to the best public advantage.

With these conditions in mind let us consider their application to our own problems. Outstanding fields, worthy of special attention may be mentioned, such as the following:

1 The continuation of the scientific surveys and studies of the natural resources of the State, its minerals, rocks, fossils, plants, animals and human cultural materials produced by the industries and the arts. We must give special attention, however, to relating these to the life of our people to a greater degree than ever before. This is concerned with the research program which underlies the major work of the State Museum and is the foundation upon which, as a bureau of information, the State Museum depends and upon which its publications are based. This necessitates the newer methods of study as well as much more careful selection of the problems undertaken for study.

2 That all educational activities of the State Museum keep in mind constantly the fundamental importance of stressing the *scientific method* and bringing out explicitly that this is the only basis upon which to build a firm economic and social system. The application of this method to the natural and human resources of the State remains our major obligation and opportunity.

HISTORY AND ART POLICIES

In previous Annual Reports attention has been called to the need of revised or new policies relating to certain historic and art matters intimately related to the work of the State Museum, such as the following:

1 The unsatisfactory status of state-owned historical and scientific reservations and the need of a comprehensive constructive policy for their administration, care and use. (Cf. State Mus. Bul. 228, p. 51-56. 1931.)

2 The unsatisfactory status of the battleships that lie upon state land, in public waters of the Atlantic ocean, the Great Lakes, Lake Champlain and Lake George. (Cf. State Mus. Bul. 313, p. 123-36.)

The solution of this situation is a simple one. It requires merely a request from the proper authorities to the United States Treasury Department asking if it will assert a claim for the Federal expenditures devoted to the cost of the construction of these war vessels. If the Treasury Department makes no claim these vessels automatically become the property of the State of New York, and as they are on state land, in New York waters, the Education law reads as follows: "All scientific specimens and collections, works of art, objects of historic interest and similar property appropriate to a general museum, if owned by the State and not placed in other custody by a specific law, shall constitute the State Museum."

3 The present emergency has revealed, as never before, the desirability of a more definite policy of the State Government toward the fine arts. Vast quantities of valuable history and art objects have been destroyed because of the lack of space in private homes and the lack of a realization that public institutions, such as the State Museum, desire to preserve them. Phases of this subject are discussed elsewhere in this report.

A PUBLIC UP-STATE ART CENTER

An encouraging start has been made in the program to make the State Museum a public up-state art center, with the acquisition of the Stetson-Wells E. L. Henry art collection (*cf.* page 37 of this report). This is the first outstanding evidence in many years leading toward fulfilment of the 50-year-old legal provision made for the Museum to build up an art collection.

Further progress in this project is expected as soon as satisfactory space is available for exhibiting and storing the material which undoubtedly will be donated to the State Museum.

The mere mention of a few names of the older artists of the State, such as Vanderlyn, Sully, Morse, Church, Durand, Weir, Henry, Innis, Cole, Inman, Mooney, Elliot, the Audubons and Rodgers, Powers and Palmer, indicates how important a role the New York state artists have played in the early history of art in the State as well as in that of the Nation.

In this connection, the previously stated suggestion that the State Museum collection should not be limited to the finished work, but should include sketches and all other appropriate materials illustrating how the finished work was produced, gains added weight. As a consequence, it is hoped that artists and artists' groups will cooperate in providing the material which will make the State Museum an important repository of valuable art materials.

The cogency of the discussion presented in the 104th Annual Report (p. 56-60, 1942) is increased by the beginnings already made.

DONATIONS TO THE STATE MUSEUM

It is desirable to inform the public that the State Museum welcomes donations of certain kinds, under the following conditions:

1 In all cases it should be borne in mind that the Museum primarily seeks New York state material, because this is a New York State Museum and because space is lacking for other materials. Per-

sons contemplating such donations should call at the State Museum or write in advance about such proposed donations.

2 The State Museum has no desire to monopolize all such materials, but at present in many localities there are no local organizations able to care properly for such collections and the State should give reasonable assistance in preserving them and in making them available for future study and display.

The following types of donations are desired:

1 Scientific collections of natural history materials, minerals, fossils, rocks and specimens of plants and animals, particularly when accompanied by scientific data.

2 Historical collections of objects illustrating the history of New York Indians, objects of the Colonial period and the Revolutionary periods, household, agricultural and industrial equipment are desirable. Materials illustrating the history of the professions are especially desired, such as illustrate the history of medicine and surgery, dentistry, architecture and engineering in their various aspects, and the tools and equipment used in various trades. Aviation should also be properly represented.

3 Finally, collections of art as already mentioned.

SPECIAL MUSEUM PROBLEMS

STATE MUSEUM AND STORAGE SPACE

(Figures 28-29)

With nothing done to relieve the situation during the past year with respect either to storage space for material not on exhibition or for exhibition of material which should be taken out of storage, the need for such storage and exhibition space remains acute. Conditions in this respect were carefully analyzed in last year's report, to which the reader is referred.

A NEW STATE MUSEUM BUILDING

(Figures 30-32)

For many years the overcrowding of the State Education Building has been a constant source of embarrassment. It has become necessary to rent outside office space, and additional storage space has become a necessity as well. Various solutions have been proposed,



Figure 28 Temporary storage room of the State Museum in the abandoned St Agnes School, showing crowded condition of the geological collections. Photograph by N. E. Baldwin.

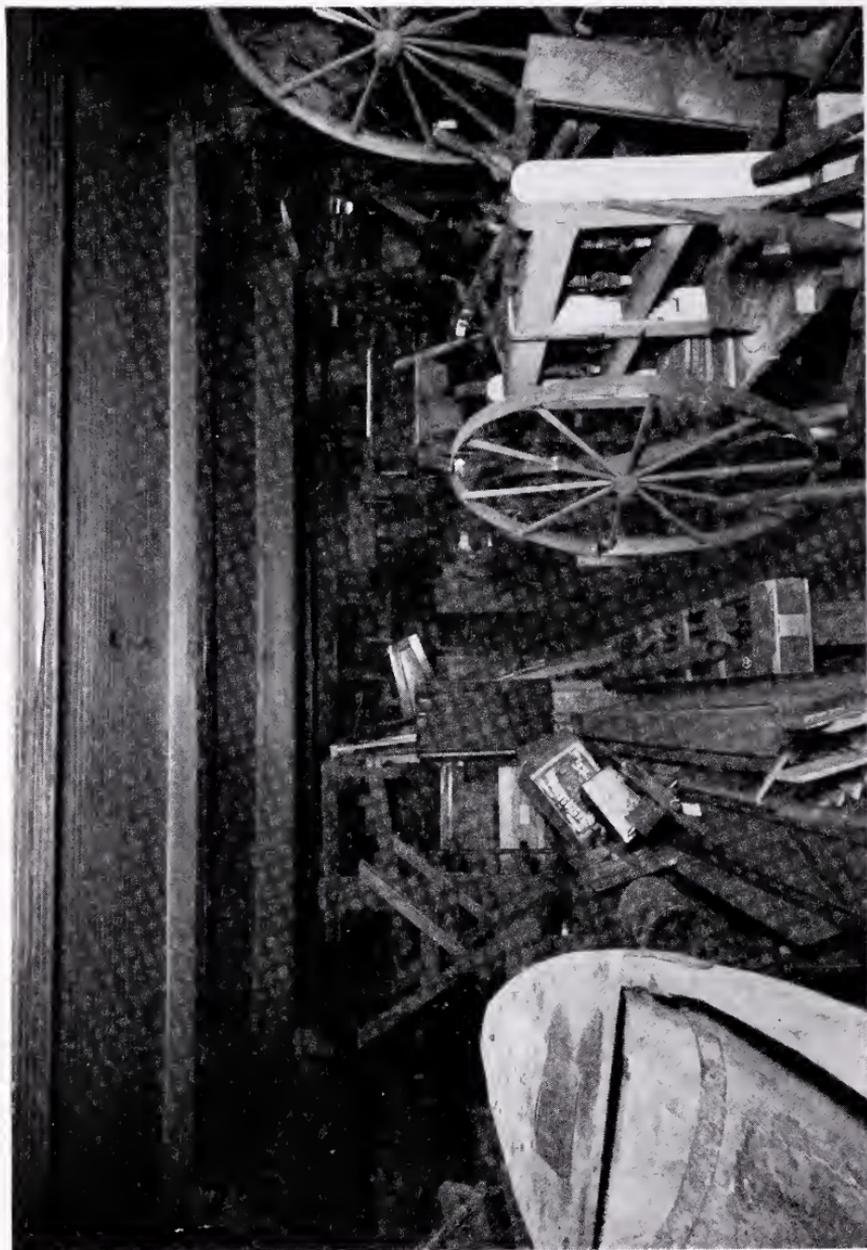


Figure 29 Another view of the temporary storage in the St Agnes School, for the industrial and historical collections. Photograph by N. E. Baldwin.

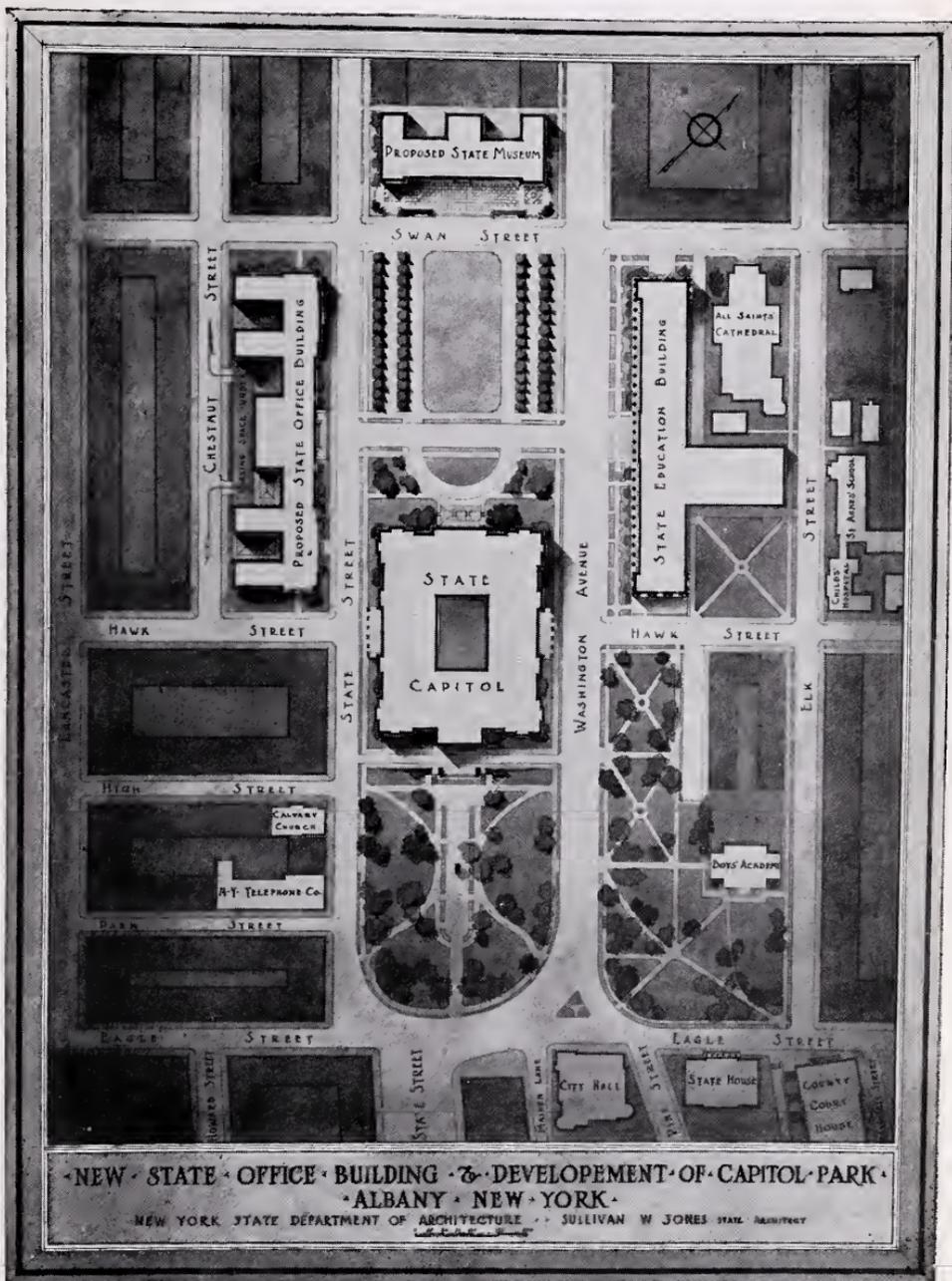


Figure 30 Development of Capitol Park, as proposed by the 1925 Legislative Commission, showing location formerly suggested for the new State Museum Building. It is now suggested that the Museum Building be placed on the site indicated for the State Office Building in the above diagram. [Legis. Doc. (1925) no. 71] (From State Mus. Bul. 293.)

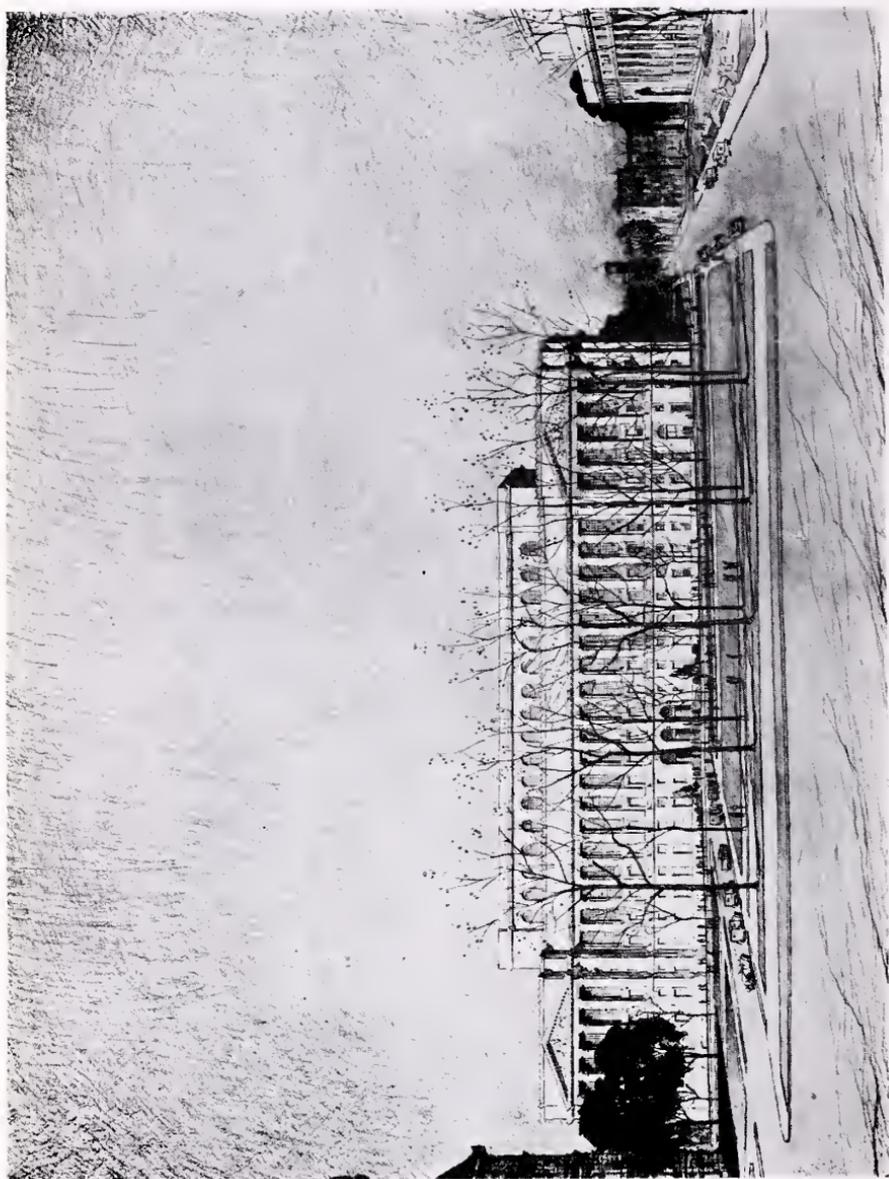


Figure 31 Architect's drawing of the type of building proposed by the 1925 Legislative Commission as suitable for the site of the new State Museum Building. [Legis. Doc. (1925) no. 71]



Figure 32 Rear view of the Department of Interior Building, Washington, D. C., showing type of wings making suitable laboratory, office and storage space. (From State Mus. Bul. 293.)

including the building of a new State museum building, thus releasing office space within the Education Building.

The type of architecture of the Education Building is not satisfactory for the State Museum. There were a number of fundamental errors that made the rooms unsuited for a museum. The large skylights of the exhibition halls are not suited to this climate with its heavy snows. The leaky roof has been a constant menace, as the Annual Reports have for years indicated. The windows in all the offices and laboratories are too small, and there is a vast amount of waste space that can never be utilized, and, finally, no satisfactory provision was made for storage near the workrooms. A new building, utilizing the best modern knowledge and adapted to the functions of this particular institution, is what is needed. As has been said, many proposals have been made for a new State Museum Building, but most of these have been complicated by accessory considerations not directly related to the functions of the State Museum.

A summary of several of these proposals has been given elsewhere (25th Report of the Director, State Museum Bul. 293, p. 81-110, 1930), to which reference should be made.

It is very important that all extraneous elements should be eliminated from the plans and that a modern building should provide for adequate display space, workrooms and storage, with adjacent laboratories and offices. The exhibition halls, the laboratories and the storage should be planned for easy changes, so that expansion would be possible and changes of exhibits should be the normal procedure rather than permanent exhibits. No exhibit should be made a part of the building. Now that there is a definite expectation of another Public Works program to prevent unemployment, the construction of a new State Museum building might well form a part of such an undertaking.

GROUND WATER RESEARCH

The problem of an adequate statewide study of ground water in a State where water is one of the most important mineral resources remains in just the situation it has been for the past ten years. Funds, men and equipment are necessary to make the proper research.

AN EXTENSION PROGRAM

In June 1926, two proposals were presented to the Regents for a program for State Museum extension; one for the conduct of the Allegheny School of Natural History, and the other for loans and cooperation with the schools. The first proposal was accepted and

the second was not approved. In the 104th Annual Report this suggestion was again made, "School Museums, Field Trips and Travel as Phases of Objective Education," (State Mus. Bul. 330, p. 75-116, 1942), in the hope that it might now be given attention.

Finally, there is a perennial problem, which will not down until it is squarely faced and solved in a reasonably and practicable manner. For many years now, the State Museum has urged that a comprehensive study be made of the *research functions of the State Government*, in order to determine the role and functions which the New York State Museum should perform in the State Government. Upon official request the Director, after consulting the outstanding agencies and leaders in this field, made a preliminary report with suggestions as to methods of procedure. This proposed research—that is really what is needed and not a casual survey—has not been made and the role which the State Museum should play during the next ten years of reconstruction will almost certainly be below what it should be until such a study has been made. Although partial studies have been made of this general subject, as in California and in Illinois, no complete research has ever been made of the role of research in our State Government.

A new era is at hand and there are certain functions of the State Government which will call for strictly scientific fact-finding studies and work of an advisory nature, bearing on public policies, which naturally fall within the general field of the State Museum, but are not permitted under our present organization. This is particularly true of the natural resources, of certain cultural activities as in history and the arts. New problems and new situations are almost certain to arise that will call for assistance not now provided for in the present organization of the State Museum.

The preceding suggestions are not intended as a complete list, but merely a few of the outstanding proposals that merit special attention at this time.

ANNUAL BIBLIOGRAPHY OF THE STATE MUSEUM

Publications by the Museum staff for the fiscal year ending June 30, 1941, or based, at least in part, on the Museum collections, or made in cooperation with the State Museum, are as follows:

Adams, Charles C.

- 1940 A Historical Sketch of the Allegany School of Natural History. *Hist. Annals of Southwestern New York*. p. 775-86. New York.
- 1941 New York State Museum. In 36th Ann. Rep't of the Education Department, v. 1, p. 213-14.

1941a One Hundred Third Annual Report of the New York State Museum. N. Y. State Mus. Bul., 323: 1-141.

1941b New York State Museum's Historical Survey and Collection of the New York Shakers. N. Y. State Mus. Bul., 323: 77-141.

Dearness, John, and House, H. D.

1940 New or Noteworthy Species of New York Fungi-V. N. Y. State Mus. Cir. 24: 25-60.

Hartnagel, C. A.

1940 The Geology and Physiography of Southwestern New York. The Historic Annals of Southwestern New York, p. 1-13.

1941 Petroleum and Natural Gas in New York in 1940. Trans. Am. Inst. Min. & Met. Engrs., 142: 368-71.

1941a Oil and Gas Developments in New York State for 1940. National Oil Scouts and Landsmen's Association Year Book, p. 313-19.

Heady, H. F.

1940 Annotated List of the Ferns and Flowering Plants of the Huntington Wildlife Station. Roos. Wild Life Bul. 7: 234-369.

House, H. D., and Gordon, R. B.

1940 Additions and Corrections to the Flora of the Allegany State Park Region, Cattaraugus County, New York (1927-38). N. Y. State Mus. Cir. 24: 1-24.

Stoner, Dayton

1940 Noteworthy (Bird) Records for Northeastern New York, Winter 1939-40. Auk, 47: 406-7.

1940a Unreported New York State Specimens of Passenger Pigeon. Auk, 57: 415-16.

1940b Author's Summary of His "Temperature, Growth and Other Studies on the Eastern Phoebe." (N. Y. State Museum Circular, 22.) Biological Abstracts, 14: 1091.

1940c The Canada Porcupine as a Highway Casualty. Jour. Mammalogy, 21: 360-61.

1940d Author's Summary of His "Parasitism of the English Sparrow on the Northern Cliff Swallow." (Wilson Bulletin, 51: 221-22, 1939.) Biological Abstracts, 14: 1366.

1941 Feeding of Nestling Bank Swallows. Auk, 58, no. 1: 52-55. [Joint (senior) author].

1941a American Egrets Observed from a Hudson River Steamer. Wilson Bulletin 53, no. 1: 41-42.

1941b Bird Casualties on the Highways. Univ. State of New York Bulletin to the Schools, 27, no. 7: 229-32.

1941c Historical Data on a Specimen of Sooty Tern from Oswego, New York. Auk, 58: 258-59.

MUSEUM ACCESSIONS FOR THE YEAR

Accessions are new additions to the Museum. These are classified into the following groups:

- 1 By donation: objects presented to the Museum
- 2 By exchange: for other Museum materials etc.
- 3 By purchase: payment from the Museum budget
- 4 By the staff: collected by the staff during official duties of any kind

- 5 By transfer: from other state departments or other divisions of the State Government, as provided by law

Gifts to scientific and educational institutions are listed at the end of this section.

BY DONATION

- Akin, A. D., Jasper, Arkansas
Polished celt, north of Valley Falls, Rensselaer county, N. Y.
- Albany Institute of History and Art, Albany, N. Y.
Leather worker's thimble pad
Old wooden horse collar
- Allen, Henry Q., White Creek, N. Y.
Corn plow
Charcoal kettle stove
Old buggy whip
Old sickle
Dutch oven
Hand-forged lathing hatchet
Wooden bridge pin
Telephone (nonelectric)
- Arnold, E. J., Albany, N. Y.
Wooden model of brick-making machine
- Arnold, Robert, Albany, N. Y.
Specimen of velvet ant (*Dasymutilla occidentalis* L.) Madison, Conn.
- Aspinwall, Dr F. E., Miami, Fla.
Brass bell
Brass door plate
- Baker, J. W., Huntington, N. Y.
70 faceted pebbles, Huntington, L. I., N. Y.
- Baker, Pauline, Albany, N. Y.
Yellow-bellied sapsucker, Albany, N. Y.
- Barker, Eugene, Slingerlands, N. Y.
Hematite from the Saxe ore bed near Crown Point Center, N. Y.
- Barlow, Sister Lillian, Second Family of Shakers, Mount Lebanon, N. Y.
Large valuable general Shaker collection
- Becker, Dr Theodore, Albany, N. Y.
2 big brown bats, Albany, N. Y.
- Bishop, J. G., New York, N. Y.
Specimen of gouty oak gall (*Plagiotrochus punctatus* Bass), New York, N. Y.
- Brackett, F. S., Cambridge, N. Y.
2 hand-made spikes
Hand-forged spud
- Brown, L. Prescott, Albany, N. Y.
Granite with fluorescent hyalite, Stone mountain near Atlanta, Ga.
- Burden Iron Company, Troy, N. Y.
Old keys
- Bureau of American Ethnology, Washington, D. C.
67 photographs of Iroquois masks in the New York State Museum. (Copies made from negatives by Dr William N. Fenton)
- Butehard, Edward, Roslyn Heights, L. I., N. Y.
Specimens of periodical cicadas, Roslyn Heights, L. I., N. Y.
- Butler, Jesse, Albany, N. Y.
Artillery bell
- Chambers, Stephen H., Brewster, N. Y.
Specimens of weevils (*Calomycterus setarius* Roel.), Brewster, N. Y.
- Cheney, Dr L. L., Albany, N. Y.
Old coffee grinder

- Claxton, N. F., Rensselaer, N. Y.
Stone pestle, Aiken Avenue, Rensselaer, N. Y.
- Cluett, Peabody & Company, Troy, N. Y.
Story of collar industry of Troy, N. Y.
- Cook, John, Voorheesville, N. Y.
Specimen of strawberry root weevil (*Brachyrhinus ovatus* L.) Voorheesville, N. Y.
- Craig, Edna, Newburgh, N. Y.
Specimens of black carpet beetles (*Attagenus piceus* Oliv.), Newburgh, N. Y.
Specimen of long-horn beetle (*Neoclytus caprea* Say.), Newburgh, N. Y.
- Cramer, W. S., Allentown, Pa.
2 fossil crinoids, Auburn, Pa.
2 fossil crinoids, Stroudsburg, Pa.
2 fossil crinoids (*Ancyrocrinus* sp.), Deer Lake, Pa.
Plaster cast of a fossil crinoid, Deer Lake, Pa.
Fossil crinoid, Swatara Gap, Pa.
- Deats, William, Barryville, N. Y.
69 fossil plant specimens, near Pond Eddy, N. Y.
11 section slides of fossil plants, near Barryville, N. Y.
- Droms, Mrs John, Scotia, N. Y.
Specimens of jumping plant-lice (Chermidae), Scotia, N. Y.
- Eggleston, Clarence, Theresa, N. Y.
Fluorite. Three large groups of crystals from Muskalonge lake, Jefferson county, N. Y.
- Federal Art Project, New York, N. Y. Through Mrs Audrey McMahon.
Large collection of photographs, "Changing New York," by Berenice Abbott, New York, N. Y.
- Ferguson, Judge A. E., West Sand Lake, N. Y.
Model of mowing machine
- Filkins, Thomas R., Berne, N. Y.
Civil War sword
- Fisher, J. W., Troy, N. Y.
Joiner plane
Moulding plans
Broad axe
Cast iron charcoal kettle stove
Charcoal pail furnace
- Flanagan, James, Cambridge, N. Y.
Wood screw die
- Geer, William C., Troy, N. Y.
Columnar wood stove
- Germain, Powers, Waterford, N. Y.
Old Dutch oven shovel
- Gilbert, L. A., Rochester, N. Y.
Specimens of ash timber beetles (*Leperisimus aculeatus* Say), Ivoryton, Conn.
- Gilmore, Charles B., Troy, N. Y.
Two leather fire buckets
- Grant, David, Troy, N. Y.
Specimen of ambush bug (*Phymata erosa* L.), Troy, N. Y.
Mortar and pestle
3 old stove catalogs
Calf bow
17 illustrative stove plates
Piece of bolting cloth
- Greeley, John R., Delmar, N. Y.
Land-locked salmon, Schroon Lake, N. Y.
- Hagerty, Gilbert, Endicott, N. Y.
Netsinker; 2 potsherds, Endicott, N. Y.
- Harrington, Forrest, Albany, N. Y.
Graphite in calcite on road between Pottersville and Schroon Lake, N. Y.

- Harris, P. S., Dannemora, N. Y.
 Specimen of maple borer (*Plagionotus speciosus* Say), Dannemora, N. Y.
- Hasbrouck, Mary K., Watertown, N. Y.
 60 plants from northern New York
- Hempstead, William, Thayer Corners near Westerlo, N. Y.
 2 fossils from the vicinity of Thayer Corners near Westerlo, N. Y.
- Holcomb, Joel, Troy, N. Y.
 Eyelet socket hoes
 Old brass key
- Horan, Richard A., Syracuse, N. Y.
 Specimens of elm leaf beetles (*Galerucella luteola* Mull.), Syracuse, N. Y.
- Ingraham, David, Cambridge, N. Y.
 28 historical objects
- Judt, W. G., Albany, N. Y.
 Specimens of dog fleas (*Ctenocephalus canis* Curt.), Albany, N. Y.
- Klein, Carl, Hudson, N. Y.
 Monazite in microcline, Goodelle feldspar quarry, Batchellerville, N. Y.
- Knox, Mrs Charles B., Johnstown, N. Y.
 Pamphlet "The Uplands of Bow, birthplace of Mary Baker Eddy."
- Kopf, Max J., Lancaster, N. Y.
 Rubber cast of a type specimen of fossil crinoid (*Ancyrocrinus bulbosus*),
 Windom, N. Y.
- LaBelle, Rev. Giles C., Loudonville, N. Y.
 Specimens of rose chafers (*Macrodactylus subspinosus* Fab.), Watertown,
 N. Y.
- Launt, David S., Albany, N. Y.
 Barn owl, Albany, N. Y.
- Livingston, George, Petersburg, N. Y.
 Cabinet maker's saw
 Builder's auger
 Copper porringer
 Small auger
 Cobbler's sole polisher
 Hand-wrought tongs
 Hank of linen thread
 One pound butter print
- Long, Mrs Frank R., Delmar, N. Y.
 Specimens of larvae and pupae of the European willow leaf beetle (*Plagiodera versicolora* (Laich.), Delmar, N. Y.
- Longworth, Duncan E., Rockville Centre, N. Y.
 Specimens of the periodical cicada, Rockville Centre, L. I., N. Y.
- Loomis, W. H., Gouverneur, N. Y.
 25 large specimens of talc from mines of the Talc Corporation in St Lawrence county, N. Y.
- Losse, Byron, Poughkeepsie, N. Y.
 50 pyrite crystals in dark shale, Poughkeepsie, N. Y.
- Mansfield, William K., Waterford, N. Y.
 Bell pestle
 2 long pestles
 Broken pestle
 Chipped celt
 2 celts
 Gouge
 Stone disc
 Worked glacial pebble
 Obsidian blade
 Unfinished plummet
 Drill
 Serrated arrowpoint
 Broken semilunar knife
 6 stemmed spearpoints
 15 notched arrowpoints

- 17 miscellaneous chipped implements
 22 triangular arrowpoints
 4 brass arrowpoints
 23 stemmed arrowpoints. All from near Crescent, N. Y.
 Bone harpoon
 3 grooved axes from Genesee valley
 Scrapbook of 1826
 Old magazine "The Revolution," 1868-69
 Map of Saratoga county, 1856
- Manton, W. H., Millerton, N. Y.
 Specimens of weevils (*Calomycterus setarius* Roel.), Millerton, N. Y.
- Matthews, W. A., Rochester, N. Y.
 7 plants from western New York
- Montgomery, James M., Delmar, N. Y.
 Stalactites. 10 small specimens from old shaft of talc mine at Talcville,
 N. Y.
- Moore, Dr Emmeline, Albany, N. Y.
 Specimens of strawberry root weevils (*Brachyrhinus ovatus* L.), Albany
 N. Y.
- Murray, Wilmur, Schoharie, N. Y., through Frank Robinson, Schoharie, N. Y.
 Fossil starfish, Schoharie, N. Y.
- Neale, Sisters Sadie and Emma, Church Family of Shakers, Mt Lebanon, N. Y.
 Shaker-made oil can
- Nolan, Blanche M., Saratoga, N. Y.
 4 glass-beaded Indian bags, New York State
- North Family of Shakers, Mt Lebanon, N. Y.
 Architectural drawings of the stone barn at the North Family of Shakers,
 Mt Lebanon, N. Y.
- Nowacki, Joseph, Albany, N. Y.
 Specimen of dog-day harvest-fly, Albany, N. Y.
 Northern gray squirrel, Albany, N. Y.
- Nowacki, Stanley, Albany, N. Y.
 Northern gray squirrel, Albany, N. Y.
- Oliver, George, Albany, N. Y.
 Yellow-bellied sapsucker, Albany, N. Y.
- Palmateer, George R., Waterford, N. Y.
 Collection of stonecutters tools
- Pattison, E., Troy, N. Y.
 Record and genealogical book
- Pauly, K. A., Schenectady, N. Y.
 41 thin section slides of Trenton limestone from several localities in New
 York State
- Peck, Howard, Gloversville, N. Y.
 Hematite from outcrop near Bennett lake, Hope, N. Y.
- Perry, Dr Eleanor, Huntington, L. I., N. Y.
 Specimens of elm leaf beetles (*Galerucella luteola* Mull.) Huntington, L. I.,
 N. Y.
- Perry, H. F., Melrose, N. Y.
 Wooden corner joint
- Phillips, Edward, Petersburg, N. Y.
 Butcher's cleaver, old
- Pitcher, F. C., Troy, N. Y.
 Homemade fork, old
- Quillan, Fred E., Albany, N. Y.
 Leech, Lake George, N. Y.
- Read, Edith, Round Lake, N. Y.
 Cannon ball captured 1813
 Oak tray from War of 1812
- Richards, Marjorie, Castleton, N. Y.
 Stone pestle, 9 potsherds, nodule of pyrite, iron fish hook,
 2 freshwater mollusks, Castleton, N. Y.

- Riley, Henry A., Albany, N. Y.
Specimens of ants, Albany, N. Y.
- Rivenburg, J. and P., and Walker, B., Albany, N. Y.
English sparrow, Albany, N. Y.
- Rowley, Elmer, Glens Falls, N. Y.
Specimen of quartz and actinolite from Saxtone river, Vermont
2 radiograms of uraninite associated with feldspar perthitic, Grafton, N. H.
- Sabbathday Lake Shaker Colony, Sabbathday lake, Me.
Large valuable general Shaker collection.
- Sanderson, W. E., Loudonville, N. Y.
Eastern vesper sparrow, Albany, N. Y.
Yellow-bellied sapsucker, Albany, N. Y.
Northern flicker, Albany, N. Y.
Red-eyed towhee, Albany, N. Y.
Eastern screech owl, Milford, Pa.
Eastern turkey, Loudonville, N. Y.
Guinea fowl (juv.), Blairstown, N. Y.
- Schafer, Alice P., Albany, N. Y.
Northern blue jay, Albany, N. Y.
- Schreiber, G. L., Oneonta, N. Y.
30 plants from New York and New England
- Shepard, Margaret, Albany, N. Y.
Yellow-bellied sapsucker, Albany, N. Y.
- Smith, George D., Ringwood, N. J.
Spinel in limestone from near Sloatsburg, N. Y.
- Smith, Stanley Jay, Erin, N. Y.
50 plants from south central New York
- Snow, Mrs C. W., Albany, N. Y.
English sparrow, Albany, N. Y.
- Stephens, Sister Rosetta, North Family of Shakers, Mt Lebanon, N. Y.
2 Shaker books
Shaker vegetable paring knife
2 Shaker pancake turners
4 Shaker pewter spoons
Tin funnel
Shaker oval box pattern
- Stetson, Mr and Mrs Lawrence, Johnstown, N. Y.
Contributions to the Stetson-Wells E. L. Henry Collection
- Strickland, L. F., Lockport, N. Y.
Specimens of maple spindle galls (*Phyllocoptes aceriscrumena* Tiley),
Lockport, N. Y.
- Stone, D. D., Coolidge, Arizona
Eastern sooty tern, Oswego, N. Y.
Saw-whet owl, Oswego, N. Y.
Little short-tailed shrew, Scriba, N. Y.
Smoky shrew, Scriba, N. Y.
Pocket mouse, Coolidge, Arizona
Arizona skunk, Arizona
- Stoner, Mrs Lillian, Albany, N. Y.
Northern gray squirrel, Albany, N. Y.
- Titus Eddy Estate, Troy, N. Y.
Old sewing machine
Old wood-burning stove
Surveyor's chain
2 ox yokes
Old Franklin stove
- Van Auken, Seward, Duanesburg, N. Y.
Specimen of wave marks on sandstone
- Van Houten, E. O., and Lilly, J., Albany, N. Y.
Eastern sparrow hawk, Albany, N. Y.
- Vance, John, Northumberland, N. Y.
Calf yoke

- Vladykov, V. D., Quebec, Canada
 Lac de Marbre trout, Quebec, Canada
 Watson, Mrs C. Huber, Andover, N. Y.
 40 plants from Allegany county, New York
 Wells, Mr and Mrs E. C., Johnstown, N. Y.
 Contributions to the Stetson-Wells E. L. Henry Collection
 Wells, Margaret, Johnstown, N. Y.
 Contributions to the Stetson-Wells E. L. Henry Collection
 Wells, Sister Jennie, North Family Shakers, Mt Lebanon, N. Y.
 Shaker door latch
 Wetmore, P. E., Schenectady, N. Y.
 White-footed mouse, Schenectady, N. Y.
 Whitney, W. R., Niskayuna, N. Y.
 Specimens of weevils (*Callomycterus setarius* Roel.), Niskayuna, N. Y.
 Wood, Bessie, Albany, N. Y.
 Baltimore oriole, Delmar, N. Y.
 Great horned owl, Eagle Mills, N. Y.
 Wood, King, Cambridge, N. Y.
 Old lantern

BY EXCHANGE

- Clokey, I. W., South Pasadena, Calif.
 300 Nevada plants and 216 California plants
 Cramer, W. S., Allentown, Pa.
 Fossil crinoid (*Megistocrinus depressus*), Deer Lake, Pa.
 Fossil crinoid (*Arthracantha* cf. *eboracea*), near Stroudsburg, Pa.
 Latex cast of the head of a fossil crinoid (*Ancyrocrinus bulbosus*), Deer Lake, Pa.
 Specimen of crinoid and a specimen of *Devonaster eucharis*.
 Gray Herbarium, Harvard University, Cambridge, Mass.
 121 specimens of American plants
 Kelin, Carl, Hudson, N. Y.
 Feldspar, species microcline with biotite, Batchellerville, N. Y.
 Picrolite, Tilly Foster, N. Y.
 Malachite, Ancram Lead Mine, Ancramdale, N. Y.
 Rose, L. N., San Francisco, Calif.
 250 plants from the western United States
 Ward's Natural Science Establishment, Rochester, N. Y.
 29 fragments of *Hydnoceras*

BY PURCHASE

- Barlow, Sister Lillian, Second Family of Shakers, Mt Lebanon, N. Y.
 Large valuable general Shaker collection
 Garrison, John N., Cherryvale, N. Y.
 7 old stereoptican views
 Sabin's Antique Shop, Boyntonville, N. Y.
 2 Indian baskets
 Stephens, Eldress A. Roretta, North Family of Shakers, Mt. Lebanon, N. Y.
 Large valuable general Shaker collection

BY MUSEUM STAFF

- Casey, John L., Albany, N. Y.
 Big brown bat, Albany, N. Y.
 Chamberlain, K. F., Albany, N. Y.
 Several hundred specimens of miscellaneous aquatic beetles from Albany and Columbia counties, N. Y.
 Gedney, Elsie, Albany, N. Y.
 Starling, Albany, N. Y.

- Glasgow, Dr Robert D., Albany, N. Y.
 Specimens of parasitic wasps (*Pelecinus polyturator* Dru.), Albany, N. Y.
 Specimens of blackfly larvae, pupae and adults from North Elba, Wilmington, Ray Brook, and Sabael, N. Y.
- Goldring, Dr Winifred, and Kilfoyle, C. F., Albany, N. Y.
 400 to 500 fossils from the Hamilton beds in the Helderbergs and the Schoharie valley, collected for exchange and gift collections
- Hartnagel, C. A., Albany, N. Y.
 25 specimens of Olean conglomerate, Rock City, N. Y.
 30 specimens of titaniferous magnetite, Sanford Hill, Tahawus, N. Y.
 20 specimens of anorthosite, Lake Sanford, N. Y.
 10 specimens of hematite from Caledonia mine, St Lawrence county, N. Y.
 Large specimen of graphite, Popes Mills, N. Y.
 4 specimens of Granville limestone, Gouverneur, N. Y.
 Series of small specimens of fluorite from Muskalonge lake, Jefferson county, N. Y.
 10 specimens of hexagonite, Talcville, N. Y.
 15 specimens of talc, Talcville, N. Y.
 20 specimens of zinc ores, Edwards, N. Y.
 30 specimens zinc ores from Hyatt mine, St Lawrence county, N. Y.
 20 specimens feldspar from quarry near DeKalb Junction, N. Y.
 25 specimens of magnetite from Benson Mines, N. Y.
 50 specimens of pegmatite minerals, including feldspar, rose quartz and black tourmalines, from Overlook quarry, 2 miles southwest of Conklingville, N. Y.
 Pegmatite minerals, including quartz, feldspar, beryl and spodumens from quarries near Portland, Conn.
- House, Dr Homer D., Albany, N. Y.
 Eastern cowbird, Loudonville, N. Y.
 Specimens of miscellaneous insects, Loudonville, N. Y.
- Kilfoyle, C. F., Albany, N. Y.
 Little brown bat, Albany, N. Y.
- Paladin, Arthur, Albany, N. Y.
 Skull of Virginia opossum, Ohio
 6 skulls of American black bear, eastern New York
 2 skulls of southern woodchucks, Ohio
 4 skulls of red squirrels, Ohio
 Skull of northern gray squirrel, Selkirk, N. Y.
 14 western fox squirrels, Ohio
- Schoonmaker, W. J., Albany, N. Y.
 Veery, Albany, N. Y.
 Smoky shrew, Masked shrew, 2 Short-tailed shrews, 2 Woodland jumping mice, Meadow jumping mouse, 4 White-footed mice; 4 Red-backed mice.
 Pine mouse, Rensselaer county, N. Y.
- Stoner, Dr Dayton, Albany, N. Y.
 Starling, Voorheesville, N. Y.
 2 starlings, Albany, N. Y.
 Eastern crow, Stockport, N. Y.
 Eastern song sparrow, Eastern robin, 2 catbirds, Albany, N. Y.
 Bank swallow, Vienna, N. Y.
 Black-crowned night heron, Crescent, N. Y.
 Red squirrel, Eagle Mills, N. Y.
 Cottontail, Saratoga lake, N. Y.
 Muskrat, Guilderland Center, N. Y.
- Whitney, A. G., Albany, N. Y.
 Specimens of elder borers (*Desmocerus palliatus* Forst.), Albany, N. Y.

BY TRANSFER

- Division of Archives and History, Albany, N. Y.
 2 old holsters
 Old decorated horse collar
 Old bridle
 Old saddle
 New York State Library. Albany, N. Y.
 Colonial trunk
 Old cannon ball
 2 old ferry tickets
 8 continental notes of Rhode Island

GIFTS TO INSTITUTIONS AND INDIVIDUALS

- Augsburg Home, Pikesville, Md.
 11 specimens of rocks and minerals
 Camp Ranachque, Ten Mile River, N. Y.
 Specimen of autunite from New Hampshire
 DeWitt, M. J., Rochester, N. Y.
 24 specimens of rocks and minerals
 Eagleville High School, Eagleville, Tenn.
 Specimen of anorthosite
 Fitzhugh School, Smyrna, Ga.
 Specimens of hematite, magnetite and calcite
 Haasakler, Bennie, Willow Creek, Mont.
 Specimen of marble from Westchester county, N. Y.
 Specimen of clay from Chemung county, N. Y.
 Midwood High School, Brooklyn, N. Y.
 13 specimens of rocks and minerals
 6 specimens of rocks
 Roff, Leon, Paterson, N. J.
 7 specimens of rocks and minerals
 St Catharine Academy, New York, N. Y.
 29 specimens of rocks and minerals
 Sioux Falls Chamber of Commerce, Sioux Falls, S. D.
 19 specimens of rocks and minerals
 Swain, Rev. Joseph R., New Canaan, Conn.
 Specimen of hiddenite from Hiddenite, N. C.
 Thomas, Horace D., University of Wyoming, Laramie, Wyo.
 Collection of 11 graptolites and 2 pieces of Hydnoceras
 Turner, Filmore, Oak Park, Ill.
 11 specimens of rocks and minerals
 Collection of 7 fossils

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