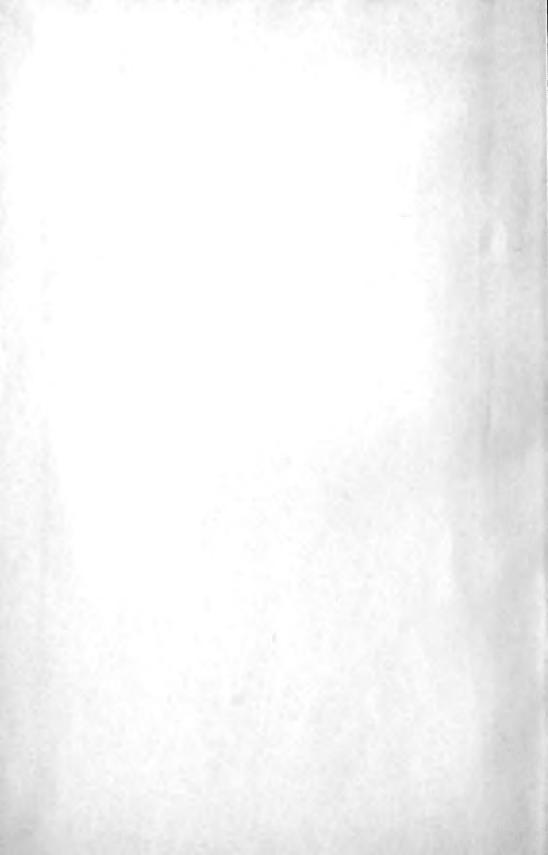
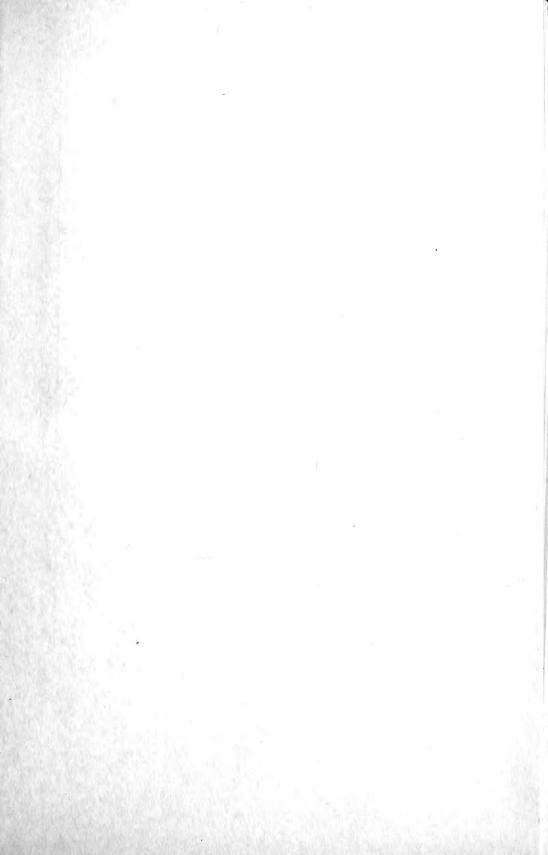


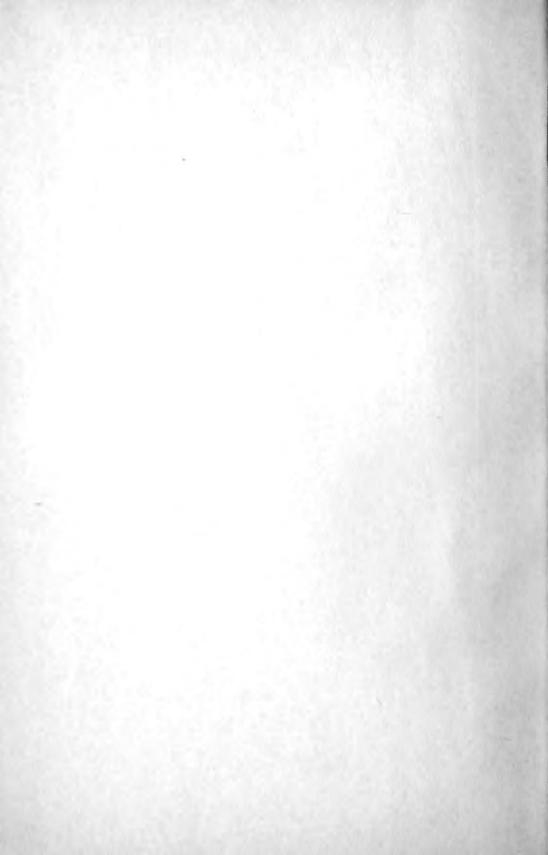
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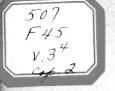
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FIELD MUSEUM OF NATURAL HISTORY.

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REPORT SERIES.

Vol. III, No. 4.

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ANNUAL REPORT OF THE DIRECTOR

TO THE

BOARD OF TRUSTEES

FOR THE YEAR 1909.



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ANNUAL REPORT OF THE DIRECTOR. 1909.

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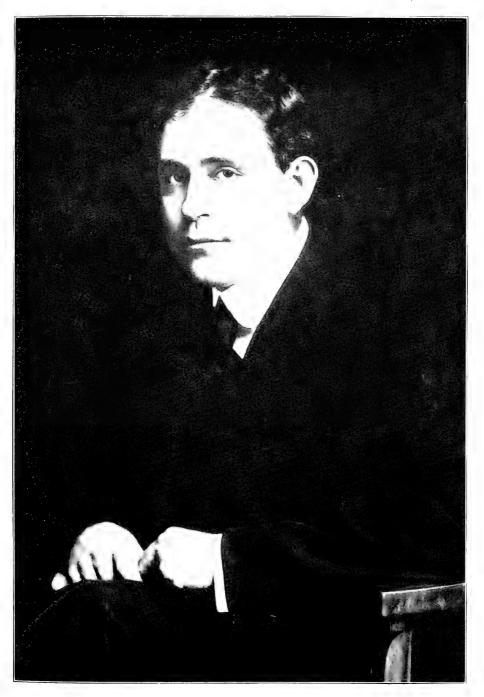
I have the honor to present a report of the operations of the Museum for the year ending December 31, 1909.

In the extension of its scientific operations into remote lands, and in the accumulation of material of great value from new fields consist the more important activities of the Museum for 1909. The expedition into Tibet, in the South Pacific Islands, and in the Philippines, and the acquisition of material by purchase from Egypt and German New Guinea, the Rothrock herbaria and library, and the collections made by subordinate Museum expeditions in Guatemala, British New Guinea, Bermuda, Fiji Islands, etc., have unitedly brought to the stores of the institution the most valuable material from every point of view that any year has recorded. This has been done without interference with the work of rearranging and labeling and recasing old material and the installation of new material in accordance with the plans for the occupation of the new building, inaugurated four years ago. In the introduction of new material to the exhibition series in all departments, and the consequent extension of geographical areas, scientific discrimination has resulted in considerable elimination of material in all departments, both because of space requirements and because of the transfer of apparent duplicates to the study collections, whereby the latter were rendered more complete in themselves without detracting from the interest of the exhibited collections, at least from a popular standpoint. In all the scientific departments increased storage facilities for duplicates and for exchange material have been provided and the spaces and systems for the accommodation of study material have been enlarged and improved. It will be observed too, that in response to the demands for reference books, necessary for the identification and description of material, the departmental libraries have had gratifying addi-The capacity of the printing shop has been doubled to meet the requisitions for labels, the output of which this year has greatly increased. The generous appropriations for exhibition cases for all departments have hardly equaled the requirements, but the provision made has resulted in a noticeable improvement in the physical to the solution half timoucher the building, more to Department of Rotany and Goology, which now present as near an appearance of completeness as it is desirable or possible for an active Museum to attain.

In the publications of the Museum for the year, Curator Cory's "Birds of Illinois and Wisconsin" has attracted much favorable and while the descriptive satalogue, by Prof. Tarbell, of the collection of reproductions of the bronzes in the Naples Museum, selected by Mr. Edward E. Ayer, constitutes by general consent a bird is a tribution to the literature of classical archaeology.

The murder of Dr. William Jones of the Department of Anthropology, while on an expedition for the Museum among the Hongots of the Philippine Islands, was a shock to his associates in the Museum, no greater, however, than it was to his compeers and to student ethnologists throughout the world. Dr. Jones was a young man of the very best attainments in his chosen field, whose death came while performing service fully as patriotic and high in purpose as that actuating any man whose career has had a tragic close. The Museum has just learned of the intended return of Assistant Curator S. C. Simms, who visited the scene of Dr. Jones' last work and has secured the material and notes gathered by him and caused a suitable monument, funds for which were privately provided, to be erected at the spot where the body of Dr. Jones was buried. The Trustees have caused a bronze memorial tablet designed by Theodore Lescher to be cast for insertion in the wall surrounding the Philippine collection in the Museum.

The engagement of Curator Dorsey to prepare a series of articles on the ethnology and sociology of the Old World for publication in the Chicago Tribune, while depriving the Museum for a time of the important service of a much valued member of the scientific staff, is nevertheless so closely allied with the purposes and possibilities of the Department of Anthropology, that the arrangement might be said to enlarge its scope. The letters thus far published have attracted mile attration and there can be no doubt of the importance of this contribution to the knowledge of those concerned in the sociologic antitrons of the world and those specially interested in the rapidly changing intellectual and moral averages of the United States by traism of the mireduction into its body politic of the peoples undergoing the capable scrutiny of Dr. Dorsey. Among other changes in the staff is the acceptance by Mr. Wilfred H. Osgood of an appoint-



The Late Doctor William Jones.

OF THE

ment to the Assistant Curatorship of Mammalogy and Ornithology. Mr. Osgood brings to the Department of Zoölogy an established reputation of high order. He is a scholar, an author, and an educator. His better known labors have been with the mammals of the Northwest Coast, and he is an acknowledged authority among the younger group of mammalogists. He is at present in London working up the Museum African material, in which it is believed a number of new types will be found. Prof. B. E. Dahlgren, the well known modeler in wax and glass, especially assigned to the Department of Botany, is an acquisition of importance. A number of striking pieces resulting from the art, skill, and scientific knowledge of Prof. Dahlgren have already been placed on exhibition in the Botanical gallery. One or more minor resignations have been offered in the scientific departments, capable men accepting advancement to higher positions in other institutions.

The creation by the Board of Trustees of an Administration Committee to which was assigned some of the duties theretofore imposed upon the Executive Committee, and the monthly meetings of this new Committee at the Museum, has been of distinct advantage in the more prompt consideration of important questions by the corporation authorities.

The President (Señor Don Manuel Estrada Cabrera) of the Republic of Guatemala requested the United States Bureau of Fisheries to recommend some person to make a survey of Lakes Amatitlan and Atitlan, for the purpose of determining whether and how the quantity and quality of the food and game fishes of those lakes could be increased. Assistant Curator Meek was recommended, because of his knowledge of and interest in Tropical fresh-water fishes. The survey was made by Dr. Meek while on a Museum expedition to Central America. The scientific result of this survey was recorded in a publication of the Museum, Vol. VII, pages 159 to 206. Three other Museum publications with a total of 75 pages resulted from this expedition.

By consent of President Higinbotham of the World's Columbian Exposition, the collection of sketch models loaned to the Museum by the World's Fair of 1893, which have been on exhibition in the Rotunda since 1894, were presented to the West Chicago Park Commissioners for exhibition in the public parks of the city, excepting a few pieces selected by and presented to the Art Institute. A number of these models have been installed in Garfield Park, and add a distinct note of artistic culture to the grounds.

Massessace. The Annual Budget authorized by the Board f Trustees provided the sum of \$174,290 for the maintenance of the Museum for the usual year. The actual amount expended was \$140 to beaving a balance within the anticipated expense for the year of \$28,778. In a blittom to the cost of maintenance, sums were expended for sollections and new installation, expeditions, etc., that by ught the total to \$108,472. As will be observed from the details to the maintain statement, the total sum of \$21,163, in individual number one has also been disbursed for special collections and extended.

terron Counsel. The Spring and Autumn Lecture Courses, indicating course number thirty in March and April and course number thirty-one in October and November, seventeen lectures in all but the same gratifying attendance that has now become the list on. There have been few lectures when the demands for admission have not exceeded the capacity of the hall, and in no case has the attendance been unsatisfactory.

F. Howing is the Thirtieth Free Lecture Course, with the subjects and Io turers, delivered during the months of March and April. 1909; March 6. The R. F. Cummings' Philippine Expedition: Travels Among the Bataks, Apavaos, and Tinguians."

Mr. F. C. Cole, Ethnologist.

March in "The Nation's Resources and the Nation's Future" Prof. Joseph A. Holmes, Geological Survey, Washington, D. C.

Mar J. 5 "An Ancient Delta and its Fossil Treasures." Prof. E. C. Case, University of Michigan.

Mar 5, 27 "The Yosemite National Park."

Mr. William E. Gurtis, Washington, D. C.

Atr' : 'Cross Roads in Evolution.'

Dr. N. Dearborn, Assistant Curator of Ornithology.

April at Evolution of Swimming Animals."

Mr. E. N. Gueret, Assistant Curator of Osteology.

April 17 The German South Seas - I. Solomon Islands and New Ireland."

Prof. George A. Dorsey, Curator of Anthropology.

April 24 The German South Seas - II. New Guinea."

Prof. George A. Dorsey, Curator of Anthropology.

Following is the Thirty-first Free Lecture Course, with the subjects and becturers, delivered during the months of October and Nevember, 1929

Oct. 2. — "The Bermuda Islands."

Prof. Oliver C. Farrington, Curator of Geology.

Oct. 9. — "Canadian Lakes."

Rev. Frederic Campbell, Brooklyn, New York.

Oct. 16. — "Savage Mutilation and Ornament."

Dr. Walter Hough, United States National Museum, Washington, D. C.

Oct. 23. -- "Patterns and Colors of Marbles."

Prof. Henry W. Nichols, Assistant Curator of Geology.

Oct. 30. — "The Plant Life of the Sea."

Dr. Marshall A. Howe, Curator New York Botanical Garden.

Nov. 6. — "The Indians of the Painted Desert."

Mr. Frederick I. Monsen, New York City.

Nov. 13. — "Our Present Knowledge of Human Lineage."

Dr. William Albert Locy, Department of Zoölogy,

Northwestern University.

Nov. 20. — "Zoölogical Collecting in Alaska."

Prof. Wilfred H. Osgood, Assistant Curator of Mammalogy and Ornithology.

Nov. 27. — "Southern Florida and its Fishes."

Dr. Seth E. Meek, Assistant Curator of Zoölogy.

Publications.— The following list is presented of the publications issued since the date of the last report, with the number of pages and illustrations:

Pub. 129. — Geological Series, Vol. III, No. 7. Notes on Various Minerals in the Museum Collection. By O. C. Farrington and E. W. Tillotson, Jr. 32 pp., 17 illustrations (1 colored plate), edition 1,500.

Pub. 130. — Anthropological Series, Vol. VII, No. 3. Catalogue of Bronzes, etc., in Field Museum of Natural History. By F. B. Tarbell. 144 pp., 300 half-tones, edition 2,500.

Pub. 131. — Zoölogical Series, Vol. IX. The Birds of Illinois and Wisconsin, by C. B. Cory, 764 pp., illustrated, edition 2,500.

Pub. 132. — Zoölogical Series, Vol. VII, No. 7. New Species of Fishes from Tropical America. By S. E. Meek. 5 pp., edition 1,500.

- Personnel Review Series Vol. III, No. 3. Annual Report of the Detector to the Board of Trustee, for the year 1908, it sopposes a fillustrations chalf toness, edition 2,500.
- Put array Go Canad Series, Vol. IV. No. 1 New Echinoids from the Ripley Group of Mississippi By A. W. Slocom, 19 pp. 4 half tones, edition 1,520.
- Published Ornithological Series, Vol. I. No. 4. Catalogue of a Collection of Birds from British East Africa. By Ned Dearborn. 49 pp., 1 map, edition 1,500.
- Pulser 16 Botanical Series, Vol. II, No. 7. Prænunciæ Bahamenses 11. Contribution to a Flora of the Bahamian Archipelago By C. F. Millspaugh, 32 pp., edition 1,555.
- Public; Ornithological Series, Vol. I, No. 5. The Birds of the Leeward Islands, Carribbean Sea. By C. B. Cory 63 pp., 1 map, edition 1,500.
- Pub 138 Zoological Series, Vol. X. No. 1. A Peculiar Bear from Alaska. By W. H. Osgood, 3 pp., 1 half-tone, edition 1,500.

The Museum exchange list now numbers 1,241 names, of which 640 are in foreign countries and 502 in the United States and its possessions.

The following table shows the number of exchanges with each of the foreign countries:

Argentine Republic	1.2	Great Britain	1 - 5
Australia	2.3	Greece	2
1:12:11.	18	Italy	1.2
Belgium	1.8	India	2 %
Hornes	1	Japan	7
Brazil	5	1.25.4	8
British Guiana	2	Liberta	1
1. 1. 1. 1. 1. 1. 1.	2.8	Malta	1
Contrat America	h	Mexico	17
Carry in	2	Netherlands	18
6 " 7 1 7 " 2	a	New Brunswick	3
China	1	New Zealand	6
C + 2 3 + 13	1	Norway	8
Denmark	-	Peru .	2
East Africa		Portugal .	6
El gray of	1	Roumania	3
F 3 22 742	5.7	Russia	19
Fire Islands		Spain .	5
termany	7 3 3	Sweden	1.4

JAN., 1910. ANNUAL REPORT OF TI	HE DIRECTOR. 337
	uguay
	est Indies 4
	icatan
Trinidad	
U. S. Colombia r	649
The following table shows the r	number of foreign exchanges
receiving the different publications:	
Anthropological	
Botanical	
Geological	001
9	
Zoölogical	
Report	649
The publications are distributed	to the different States and
Insular Possessions as follows:	
	ew Jersey
Arkansas	ew York 83
California 26 No	orth Carolina 6
Colorado	ew Mexico 2
	nio
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	regon ,
	nnsylvania 41
	node Island 5
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351 1 1	
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	orto Rico
NT 1 1	awaii 6
Nebraska	501
Nevada 2	
New Hampshire	
The following table shows the ne	umber of domestic exchanges
receiving the different publications:	
Anthropological	247
Botanical	
Geological	
Ornithological	* , ,
7	
Report	
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The Library new contains 50,039 volumes distribute Labrary was

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Gentlem di Markov	5.984
I have the transfer	1.594
Learning I Hyperation Literature	703
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	(0,630

The a blittons for the year consist of 3.152 books and pamphlets In In ling books received with collections, gratifying additions have been made, though the continued source of growth is through exchanges, the publications received in this way being quite an element in the library's accessions. During the year approximately 500 letters have been written soliciting exchanges from contemporary societies not on the exchange list. A number of favorable replies have already been received and exchanges effected. The largest single acquisition received was that which accompanied the Rothrock herbarium, the the straight books and (8) pamphlets. Many of the books filled gaps in the Museum collection, and where they duplicated, the corresponding copy was placed in the Departmental library. The Rothrock library is valuable in that it is representative of the botan-The first these temany years and contains a dumes of rare works. It is also interesting and significant to note that the price has advanced over the original cost of many of the books in the collection from fifty to seventy-five per cent. Other noteworthy acquisitions were re cived from the following: Madame Leo Errera, Brussels; Mrs. Henry Dibblee, Mr. Edward E. Aver; Academie des Sciences de L'Empercur Francois Joseph I. Prague; Botanic Gardens, Copenhagen. Deutsch Natur Medisin, Verein für Bohm; K. Universitets Bibliotek. Lund, Royal Botanic Gardens of Calcutta; Royal Gardens, Kew. and Superintendent of Documents, Washington. Twenty-five voltimes of Linneana were loaned by the University of Chicago to the Museum for use in the Department of Botany. Collaboration has been repleted in the second edition of the Union List of Serials for the libraries of Chicago, and 1,517 titles have been supplied. The list in preparation is to be published by the John Crerar Library. The first edition of this publication has proven of value both to the stati and students generally. An earnest effort is being made to hs; se of the unaccessioned duplicate material now in the Library. A list of this material was submitted to each Curator from which

to select such material as might be desirable to retain. The remainder was then classified and twenty-five typewritten lists were sent to as many societies and libraries, with request for exchange. It was evident from replies received that the majority of these institutions did not have their duplicate material available for exchange. However, small exchanges were effected, and as several of the lists are still out, it is possible that some further exchanges may be made. By request of the United States Department of Agriculture 375 duplicate bulletins and circulars received from that department were returned for redistribution. Fourteen thousand two hundred and twenty cards have been written and inserted in the card catalogues. Monthly installments of the John Crerar Library catalogue have been received. To accommodate the ever increasing card catalogues in the library it became necessary to again add to the card cabinet. In view of the future use of these cabinets it seemed wise that, instead of adding to the wooden cabinets now in use, purchase be made of steel cabinets. A satisfactory type has been adopted.

DEPARTMENTAL CATALOGUING, INVENTORYING, AND LABELING.—The most important collections catalogued in the Department of Anthropology have been the R. F. Cummings' Philippine Collection, secured by Mr. F. C. Cole among the Tinguian and near-by tribes of Northwestern Luzon, and also among the pigmy Bataks and the Tagbanua of Palawan; the collections secured by the Curator in 1908 in India, Ceylon, Sumatra, Java, New Ireland, Admiralty and Solomon Islands; also the superb Parkinson collection from German New Guinea, the gift of Mr. Joseph N. Field of Manchester, England. Additions have been made to the classified Tribal Lists, and the Card Catalogue for the same has been maintained. 5,400 catalogue cards were written and entered in the Inventory Books, which now number 33. The work of labeling has also continued with gratifying results. 3,725 new black labels were placed in the department, distributed as follows: 525 in the Igorot collection; 930 in the Tinguian, Apayao' and Kalinga collections; 835 among the Bella Coola, Tsimshian, and Haida exhibits. The work of labeling the North Court, with its alcoves, has practically been completed. For this purpose 1,350 standard black labels, in aluminum ink, were used. About 85 other large case and hall labels of varying size were placed here and there throughout the department.

The Curator of the Department of Botany reports that the labeling of specimens in cases being installed, and those previously

to keny labels, has been more satisfactory than in previous years; 12 yes have been fully labeled with the prospect of a completely labels in callate a by Spring During the addition of the labels to previously installed collections a number of these were rearranged, and the cases entirely reinstalled, to meet the demands of better med it. The mounting and cataloguing of the smaller accessions of the year is complete, while heavy inroads upon the material in the Lever herbaria have been made. 31,079 specimens have been sacial good in the 54 record books of the department, of which 13,050 were from the University of Chicago herbarium and 6,000 from the Rothrock collection. The Geographic index and that of the Collectors are both complete to date. The card indices of the department library and of economic plant names have multiplied, 1,250 cards having been written and organized into the 15,850 now in the cases.

All specimens in the Department of Geology received during the year have been inventoried and catalogued, as received, the number of entries for the year being 4,102 and the total number on the Department books 103.081. Sixty cards have been added to the catalogue of vertebrate fossils and a complete card catalogue of the Department library has been made. This numbers to date 1,816 cards. A considerable number of temporary written labels have been prepared and placed in the collections to serve until printed ones can be provided. About 400 such labels were prepared for the collections in Halls 65 and 66, and about 300 for the collections in Hall 72. Some of the latter are more or less descriptive. Sixty-two printed labels have been prepared and distributed in the gem collection in Higinbotham Hall, completing the labelling of this collection, and 271 paleontological labels, some of them descriptive, have been made and distributed in the paleontological collections. In addition, voter for about 800 labels chiefly relating to the economic collections has been prepared and placed in the hands of the printer.

The cataloguing and labeling of specimens in the Department of Zo logy has continued and at a rate exceeding that of the increase of the collections and encourages the belief that this work, which has fallen behind on account of sudden large accessions in the past, will The state of the state of the work During the year, about 8,000 regular catalogue entries were made, including 6,700 in Ornithology, The second of the specimens thus catalogued have required new labels and these have been supplied. while a large tercentage of the entries have been recorded in the systematic card -atalogues. Labels for exhibition specimens have OF THE UNIVERSITY OF ULINOIS



been prepared and installed from time to time as required. The entire collection of both mammals and birds has been critically examined with regard to possible damage by insects and found to be in excellent condition. Material in pickle has been carefully examined and supplied with fresh preservative. This material, which consists mostly of skins of large mammals secured by Museum expeditions, is being removed from pickle and dressed as fast as possible. Since July 1, about 150 of these large skins have been treated by the tanners.

The year's work on catalogues and inventorying is shown in detail below.

	No. of Record Books.	Total No. of Entries to Dec. 31, 1909.	Entries during	Total No. of Cards Written.
Department of Anthropology	33	99,543	5,403	103,933
Department of Botany	54	276,421	31,679	
Department of Geology	20	103,081	4,102	6,740
Department of Zoölogy	40	82,206	9,077	28,718
The Library	12	72,037	8,116	90,300
Section of Photography .	6	80,762	11,344	

Accessions. — Among the most important accessions of the year in the Department of Anthropology should be mentioned the two collections from German New Guinea, one from Huon Gulf, numbering 500 specimens; another, a general collection of more than a thousand pieces, from the central coast region. The latter includes carved posts, large carved canoes, and two rare dance masks from Hansa Bay, the larger one more than 16 feet in height. These valuable acquisitions were the gift of Mr. Joseph N. Field of Manchester, England. The material obtained by Mr. Ayer last year but not prepared for exhibition until last Spring consisted of 18 strings of beads, composed of carnelian, glass, and glazed earthenware; 18 mortuary stone vases and jars of great beauty and value, among which is a beautiful alabaster vase for ointment; 49 weights of a wide range of sizes, made of stone and copper; a mirror and bottle, each of bronze; 16 stone statuettes, some in a more or less fragmentary condition, among which is a beautiful figure of Osiris and also a fine red stone statue of the twelfth dynasty (inscribed "His father Teta, His mother Nefertari''); 4 mortuary cloths (in frames upon the east wall of Hall 9); I coffin lid of wood; 8 coffin lids of stone, all somewhat fragmentary, with one exception; a large, inscribed brick; 4 burnt clay mortuary offerings; 2 wooden mortuary boxes; 2 small mortuary figures of wood, one containing a rectangular cavity for receiving a papyrus; a mummied hawk; 2 mummied antelopes;

the head of a community and a rectangular coffin. In a blift in the second weed carvings and stone tablets there are colored lasts, they stones in Hatshepsa Temple, representing the procession of the Salve I Blat. Of very special interest is a small wax figure, of the Problems Period, in the form of Osiris, Lord of Bekha (the Eastern Mountain, tound at Tehneh, Province of Mirich, Upper Egypt. Without is the mummy of a falcon. With the figure are images of a genu, along with cakes of an undetermined substance. A particular this accession consisted of a small group of cinerary vessels trim Etruria and ancient Roman bronze vessels, now installed in the North Court. The two large Mastaba tombs, excapated under the direction of Mr. Edward E. Ayer at the Necropolis of Sakara, one of them being the gift of Mr. Martin A. Rverson, reterred to in the 1928 report as anticipated accessions, were received at the Museum the past year and given storage in a special brick the research that the east mass beatrage of the Museum, as it was not considered advisable to erect the tombs in the present building. The tombs filled 206 large cases, some of them ten feet in length. the total shipment weighing 90 tons, the installation of one of the stella in Egyptian Hall is referred to in another part of this report Among rafts from Mr. Edward E. Aver were two rare, carved wooden mages from New Ireland. Mr. R. F. Cummings gave a small Mangvan collection, made by Dr. Fletcher Gardner, Bloomington, Indiana, while serving as a surgeon in Mindoro. This accession is valuable, swing to the extreme scarcity of cave material in the Philippines. about 55 specimens of the lot coming from the burial cave of Pokanin. military between the towns of Bulalacao and Mansalay in Southern Mindoro Other interesting gifts were 8 paintings of Hopi Indians by E. W. Burbank, presented by Mr. Stanley McCormick, and a unique woven garment, ornamented with tufts of human hair, found in an old mission of Lower California by Mr. W. H. Dupce of Chicago and by him given to the Museum. Of the important and interesting ascessi hs by purchase, were an Egyptian sarcophagus of granite, a stelle tion of Kabyle (Algiers) jewelry, and several Assanian and Babyloman scals collected by Mr. Aver. Mention should be made et a small as ession from Angola, West Central Africa, which forms a valuable a lilition to the Woodside-Ovimbundu collection.

The most conspicuous addition to the herbarium during the year is that of the personal herbarium and library of Dr. J. T. Rothrock, who, as a member of several of the early surveys of the West, not only amasse I large an I-valuable collections himself, but through his asso-

ciation with Dr. Asa Gray, Dr. George Thurber, Dr. John Torrey and other early botanists, was able to secure many rare plants and sets of plants. His herbarium consists of nearly 25,000 sheets, largely from the west, north and southwest, Mexico and Florida. It contains long series of the plants of Bean, Berlandier, Bigelow, Bischoff, Bolander, Brendel, Burk, Canby, Chapman, Clinton, Curtiss, Garber, Ghiesbright, Hall and Harbour, Sutton Hayes, Kellogg, Kenney, Lemon, Leow, Mann, John Stuart Mill, Palmer, Parry and Palmer, Pope, Porter, Pringle, Regel, Reverchon, Thurber, Vasey, Ward, Wolf, and Wright. This herbarium comprises collections made principally from 1840 to 1880, thus directly supplementing that of Patterson, secured by the Museum some years ago, which dates from 1880 to 1900. The Rothrock herbarium is mostly mounted and 6,000 sheets have already been put through and placed in the organized herbarium of the Museum. The other notable herbaria now incorporated with that of the Museum are those of Dr. Arthur Schott, M. S. Bebb, H. N. Patterson, C. F. Millspaugh, A. A. Heller, John K. Small, L. J. Wahlstedt, A. S. Hitchcock, and the University of Chicago. Other series secured to the herbarium this year are: Clemens, Philippine, 1,150; Bloomer, Arizona, 900; von Tuerckheim, Guatemala, 406; Conzatti, Mexico, 185; Purpus, Mexico, 523; C. R. Barnes and Land, Mexico, 303; Stewardson Brown, Bermuda, 150; S. S. Visher, Dakota, 198; Botanic Gardens, Natal, 105; Fiebrig, Paraguay, 155; Tracy, Gulf States, 507; Britton and Harris, Jamaica, 770; J. T. Rothrock, Bahamas, 162; L. J. K. Brace, Bahamas, 231; Percy Wilson, Bahamas, 489; R. A. Dixon, Illinois, 400; Wright, Illinois, 139; J. H.Maiden, New South Wales, 100; W. E. Broadway, Trinidad and Tobago, 450; J. Macoun, Canada, 335, and H. H. Smith, Georgia, 479. Arranged geographically the specimens added to the organized herbarium during the year are as follows:

				University of Chicago Loan.	Addition to	Total now in Herb'm*
Alaska					195	537
Canada (in general)				38	3	1,950
Alberta					47	331
British Columbia					103	793
Newfoundland				244		464
Quebec				9		4.5
United States						
Alabama				20	39	793
Arizona				1,227	1,867	6,634

^{*}Totals are from these few geographic localities only. This does not tabulate the whole herbarium.

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Unite I State	University of Chicago Lean	M te All little et to Herbarture	Total new in Herbim
Acharas			1 77
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$C = \{1, 2, 3, 4, \dots\}$	206	1 /4	6754
		. , ,	24
North Dakota			4.7
South Dake to		: 5	2 % 2
Derry to a Columbia			1,514
I'm ta	: 11	: 7 4	11 957
Georgia		· . · ·	1 102
The state	212		14 - 47
Indiana		1 4	1 4 4 3
Leva			1 232
Kentusky	1 4		644
L. mana Maine		2	945
	225		1.094
Massachusetts.	2	:	2 0 5 3
Mexican Boundary		1 ,	1 100
Michigan		1.2	2.111
Minnesota	:		550
Missinsippi	5		1.560
M: court	1		681
Montana	2	=	2.079
Novada	\$	ā · ,	101
New Hampshire	:		977
New Jersey	7:	:	1 462
New Mexico	1.1.1	2.2	2.266
New York .	: : :	2.1	1 772
North Carolina	2.1.2	\$ 6	1 1 2 2
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Pacific Coast	1 1 4		470
Pennsylvania	:		6.491
Rocky Mountain.	1		725
South Carolina	1		547
Softhwestern States	7.4		74
Tennelsee	1	-	681
Texas	7 8 7	695	6.056
Utas.	4 1 7	11.3	1.122
Parks 1 21 .	1 % 1	2 5	1.102
Virginia	2 4 7	2	1.078
Washington	55:		4.291
West Vinginia		:6	1.254
Withouth		4	745
Www.ming		126	863
Yell evstone Park	· ·		267
Bahamas			
Antros Islant		1	1.264

Dahawas									University	Museum Addition to	
Bahamas									Chicago Loan.		
Cat Island		٠	٠				٠			18	446
Crooked Isl										20	331
		٠	٠			٠		•		7 I	664
Fortune Isla	and.		٠				•			2 I	344
Inagua .		٠		٠			٠			2 I	44 I
Long Island	l .	٠						٠		I	141
Mariguana										1	169
New Provid					٠			٠		440	2,386
Hog Island										I 2 I	190
Riding Roc	ks .									13	13
Salt Cay Ba	ınk										
Elbow Ca	v .									7	7
Water Ca	y .									26	26
Anguilla										134	134
Cat Sal										43	43
Watling's										9	458
Bermuda .										151	627
West Indies						•				-3-	027
Cuba .										167	5,093
Dominica		٠	•	•	•		•			2	78
Grenada				•	•		•	•			801
					•	•		•		24	
Jamaica.		•	•	•	•		•			780	6,056
Porto Rico				•				٠		I	3,969
St. Kitts		٠			•	•	٠			I	10
St. Thomas										11	438
Tobago .								٠		16	56
Trinidad								٠		310	394
Mexico									3,138	2,268	25,402
Coronados 1										2	10
Lower Calif									227	20	1,632
Central America	,										
Costa Rica									116		487
Guatemala									584	423	2,141
Honduras									75		484
Panama.										7	51
South America											
Argentine									I		824
Paraguay										155	1,392
Venezuela										17	959
Europe		·								- 1	737
Denmark										I	I
Germany			•	•				•		I	4,051
Italy .		•				•	•	•			-
Sardinia					•	•	•	•	3 I		917
Asia			٠	٠	٠	٠		•	1		2
India .									2		= 0 -
			٠	٠	•		•				727
Palestine				•	٠	•	٠			23	1,134

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Total merease of the organized herbarium during the year, in the specimens

In Geology the gift of the Tonopah meteorite, weighing nearly two tins, is a notable accession. This was presented through the generisity of Messrs, Stanley Field, R. T. Crane, Jr., Cyrus H. Mc-Cormick, and George F. Porter, of the Board of Trustees. The mass was obtained entire and is the largest meteorite specimen in the Museum collection as well as one of the largest known. The meteorite exhibits atmospheric shaping and pitting in a remarkable degree. A very interesting specimen of copper boulder weighing 22 pounds found near Lake Geneva, Wisconsin, and a specimen of asbestos from Canada, were presented by Mr. Edward E. Aver of the Board of Trustees. Mr. William J. Chalmers of the Board of Trustees kindly added to the Chalmers crystal collection a superb crystal of golden hervl showing negative crystals. From Thomas S. Chalmers were received three specimens of gold ore from Cripple Creek, Colorado, showing some of the richest ore found in the early days of the Independence Mine. A large collection, comprising over 300 specimens, of native or provincial values, hematite, datolite, and other minerals and fossils, chiefly from the Lake Superior region, was received from Mrs. Joseph Austrian of Chicago. The collection was made by her husband, the late Mr. Austrian, during the early days of copper mining in the Lake Superior region and hence contains many specimens no longer procurable. From F. Pereira Gamba were received in sperimens of gold ores and associated rocks of Colombia; from Nippon Tok: Gome: Kwaisha 12 specimens of clays and other minerals used in the manufacture of Japanese porcelains; from L. V. Kenkel a large photograph, a feet in length, of the Miles glacier, and other photographs of Alaska; from President John Goff 45 specimens of fessil echnoids from Mississippi; and from W. W. Newberry 24 specimens white and fossils from Oklahoma. By exchange, specimens of the Dokachi and Futtehour meteorites were obtained from

the Geological Survey of India, and from Grebel, Wendler & Co., a specimen of the Buschhof meteorite and ten specimens of minerals. Important material obtained by purchase included an unusually complete mastodon skull from Yorkville, Illinois, and a nearly complete skeleton of the rare fossil beaver-like animal Castoroides obioensis from Indiana. A large slab 31½ square feet in area showing over 200 calices of the fossil crinoid Uintacrinus from Kansas and a series of well-preserved crinoids from the Kinderhook group of Le Grand, Iowa, were also obtained by purchase. Accessions by collection include several hundred specimen fossils of Bermuda; about 200 specimens of ores and minerals of the Pacific Northwest and Alaska, obtained from exhibitors at the Seattle Exposition; 76 specimens of fossils, ores and minerals from Oklahoma and nearly 3,000 specimens of invertebrate fossils from Wilmington, Illinois, and adjoining localities.

The acquisitions during the year in the Department of Zoölogy were extensive and important, comprising 122 mammals, 1,170 bird skins, 300 eggs, 4,080 specimens of fishes, and 201 reptiles. An interesting and important collection of mammals and birds was obtained through the kind offices of Mr. Rodway of the Georgetown Museum, British Guiana. Mr. Rodway's interest in the Museum is gratifying and highly appreciated. Approximately 1,300 of the fishes were collected on the Florida Keys by Assistant Curator Meek; 30 specimens were collected in Venezuela by Mr. J. F. Ferry, and the remainder from near Chicago by Mr. Hildebrand. A large collection of mostly fresh-water fishes was purchased from Mr. Woolman. The collection contains many rare species from the Southern States and from Mexico. Of the reptiles, 71 important ones were collected on the islands near Venezuela by Mr. Ferry, and the next in importance were secured through exchange from Mr. Hunter of St. Louis. The acquisitions in the Division of Entomology consisted mainly of small lots of insects, mostly of local species, though by purchase 163 specimens were obtained from Charles Weber, who collected them on the island of Palawan, Philippine Islands.

EXPEDITION AND FIELD WORK.— One of the most important expeditions of the year has been that of Assistant Curator Simms in continuation of the survey of the Philippine Islands, the funds for which are provided by Mr. Robert F. Cummings. On his arrival at Manila Mr. Simms proceeded to the Cagayan valley with the object of assembling the material collected by Dr. Jones and arranging for its dispatch to Manila. Dr. Jones, having made an exhaustive study

of the Rongots of Dumabatu, Tamsi, Alicad, and Cagadyangan, and having assembled his collections at Dumabatu, was preparing to raft them to Echaque, when he was killed by natives. The following report from Assistant Curator Simms, dated November 26, 1909, from Tay a line Mt. Province, is of interest. "I have the pleasure to report that my stay in the Itugao territory (where I journeyed after completing my work in connection with the affairs of the late Dr. Jones was one of success, having collected more than a thousand specimens terring a typical and comprehensive collection from this interesting people, who, up to the time of making this collection were but poorly represented in the Museum. In this collection there is a full size typical house, also forges, models, objects in progress of manufacture. etc. My next scene of investigation and collecting was among the Igorot of the sub-province of Amburayan - principally at Bacun and immediate vicinity. From this little known area I made a collection of several hundred specimens which greatly increase the value of an already large and valuable collection of Igorot material. to the affect in of a productish existing gap. I sin crely hope to get my material shipped soon, that it may reach Chicago the first of the coming year." The collections of Dr. Jones and Assistant Curator Summs are now in transit from Manila. Dr. Berthold Laufer continued his ethnological survey of Tibet under the Blackstone fund Early in May, Assistant Curator Lewis left for New Guinea and the whatent islands, beginning the three years survey under the Joseph Note: 18 at le Pauto Islan is Fund. After a brief stat in Hawan he proceeded to the Figurslands, where he was able to secure a fairly comprehensive collection, comprising about 70 type specimens, baskets. mats, posts, fishing outfits, etc., in various stages of completion. From Fin Mr. Lewis journeyed to Sydney, Australia, and from thence to Herbertshohe, Bismark Archipelago. From here, without delay, he set sut upon a trip along the coast of German New Guinea, from Huon Gril: to Berlin Hafen, with the intention of returning to the former Leadity to begin work. Early in October Mr. Cole returned to the Philippines on his second R. F. Cummings' Expedition, to make investigations among the wild tribes of the southern islands. He will his' work among the Mangyans of Mindoro, a Malayan tribe having a written language quite different from that used by other Malayan people. After visiting certain sections of Palawan he will go to Negros for a somewhat lengthy sojourn. Upon completion of this work he will go to Mindanao for an extended stay among pagan tribes found toward the interior of that island.

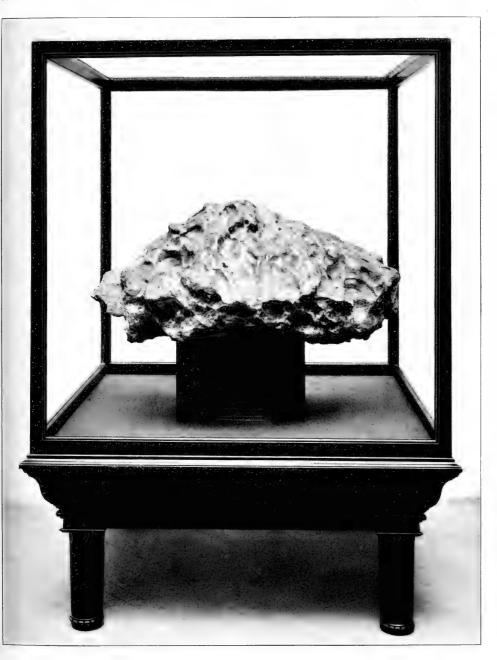
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Three field trips in the interest of the Department of Botany have been successfully made during the year. The herbarium staff spent a week among the sandstone outcrops of the Starved Rock region, not only to assure a representation of the plants of that interesting locality in the herbarium, but to secure valuable exchange material. This trip resulted in 183 specimens, and 11 sets of specimens for exchange with other herbaria. Mr. R. A. Dixon, one of the preparators of the department, made a like trip to Madison, Montgomery, and Walther counties, Texas, securing 189 specimens for the herbarium and 575 specimens for exchange. Mr. Huron Smith, Dendrologist, made his field base this year in the mountains of West Virginia and Northern Georgia where he collected 149 tree specimens, 110 negatives of trees, 250 herbarium specimens of trees, 592 specimens of various plants for the general herbarium, and 1,342 specimens for exchange. Mr. B. E. Dahlgren made a trip to Jamaica in February and March to secure studies and specimens of tropic fruits for reproduction. From this expedition he returned 117 specimens, molds, and mounts together with a long series of water-color studies of living plants and fruits in situ. In his work on the island he was generously accorded accommodations at the Hope Botanical Gardens at Kingston and material assistance by the Director, Mr. H. H. Cousins, Mr. William Harris, and other members of the staff.

In March a trip was made to the Bermuda Islands by the Curator of Geology and full series obtained illustrative of the coral and æolian limestones, cave products, soils and erosion forms of these islands. Of the latter forms, two large potholes nearly two feet in depth collected were especially important in illustrating these peculiar formations. Specimens of the fossil shells and corals of the islands were obtained in large number and about 60 photographs made, illustrating various geographic features but more especially the variations in elevation and subsidence of the islands. The Alaska-Yukon-Pacific Exposition at Seattle was visited near its close by the Curator and a considerable quantity of valuable material illustrative of the ores and minerals of Alaska and the Pacific Northwest obtained from exhibitors there. Among the material obtained was a number of pay gravels from placer mines of Alaska, low grade gold ores of Alaska, copper ores, including those of native copper, from the Copper River district, tin and tungsten ores from Teller, Alaska, showing associations like those of the Cornwall region, specimens illustrating the coals of Alaska, including anthracite and natural coke, sulphur and antimony ores from Alaska, representative ores from the mines of

the State of Washington, including ores from the New Republic mine, gold bearing lead ores from Metaline, nickel, mercury, and antimony ores from Cle Elum, a series of copper ores illustrating transition from carbonate to sulphale from the Glacier Peak district, iron and chromate concentrates from the black sands of Cape Flattery, tale, fire class and pottery clays and a series of silver-lead ores of the important mines of the Coeur d'Alene district, Idaho. Some choice mineral specimens were also obtained, including a fine group of smoky quartz crystals from Mt. Hood and a specimen of the new mineral hulsite. Some excellent Cretaceous fossils of unique form of preservation and including a new nautiloid species were also obtained. On the same trip the asphalt fossil beds near Los Angeles, California, and the Grand Canyon of Arizona were visited and valuable specimens collected and photographs made. A brief trip to Southern Oklahoma was made by the Assistant Curator from which ores, fossils, and other geological material of the territory were obtained. The ores secured were chiefly of iron and manganese and illustrative of the gradations among these ores and the replacement of limestone by iron. Good specimens of glass sand were also obtained. The fossils obtained were chiefly bryozoa and brachiopods. In addition, specimens of calcareous and siliceous oolites were collected and some field studies made regarding the origin of the latter. The Assistant Curator of Invertebrate Palcontology continued during the year the work of collecting invertebrate fossils in the Chicago area and at Wilmington, Illinois. In the Chicago area over 500 specimens of Niagara age were collected, chiefly crinoids, sponges, and corals. Several of the crinoids furmished additional illustrations of the new species recently described by the Assistant Curator and some new forms were obtained. Several hundred Pleistocene shells were also collected in the area. At Wilmington over 2,000 specimens of Richmond age were obtained, nearly all of which are new to the collections. These include representatives of about 20 species of Brachiopods, several species each of Pelecypods and Cephalopods, and 35 species of Bryozoans.

During January, February and March, Mr. John F. Ferry of the Department of Zoology, visited the islands of Bonaire, Aves, Los Roques, Orchilla, Tortuga, Blanquilla, Los Hermanos, Margarita, and Testigos, situated off the northern coast of South America. His collections number 824 birds, 27 birds' eggs, 19 mammals; and in addition small collections of fishes, reptiles, and invertebrates were made. As a result, 8 species and subspecies of birds new to science were discovered and a large number of species new to the collections



Tonopah (Nevada) Meteorite. Weight 3,275 lbs.

OF THE UNIVERSITY OF HILINOIS

[AN., 1910.

of the Museum were obtained. In addition much information of value in the study of migration, variation, and geographic distribution was secured. In May, June, and July Mr. Ferry again took the field and worked in the vicinity of Prince Albert and Quill Lake, Saskatchewan, where he secured 195 birds, 22 mammals, 36 sets of birds' eggs with nests, and a large amount of accessory material for the preparation of exhibition groups of the water birds which breed in this region. Later a second expedition to the same locality was undertaken by Mr. Ferry, accompanied by Mr. L. L. Pray, to procure a series of pelicans and additional accessory material, which proved successful. In the early part of December, Mr. C. A. Corwin, Artist, and Mr. L. L. Pray, Taxidermist, spent two weeks in northern Louisiana, securing sketches and accessories for bird groups in course of preparation. During March, April, and May, Assistant Curator Meek and Mr. Heim visited Key West and Dry Tortugas, Florida, for the purpose of collecting fishes and accessory material for fish groups, as well as making studies for the same. On this expedition 1,300 alcoholic specimens together with 400 fish skins were secured, representing 50 species. There was also collected a large quantity of sea ferns, sea feathers, sponges, corals, starfish, sea urchins and other material for accessory work. Of the 400 fish skins about 200 were preserved in brine, 175 are mounted but not finished, and 25 are mounted, ready for exhibition. Over 1,500 entomological specimens were collected by the Assistant Curator of the division on a trip made in the late summer to the southern part of Illinois. Among the insects obtained were a number of interesting species which are not found in the northern section of the State, where most of the field work has been done in the past. As a result of a trip made by Mr. Freisser to Northern Mexico, over 200 very desirable insects were obtained from that section.

Following is a list of the expeditions since the date of the last Report:

Collector.

Key West and Tortugas. .S. E. Meek,

Margarita Islands and various other islands off
north coast South America J. F. Ferry,

Saskatchewan J. F. Ferry,

Jamaica B. E. Dahlgren, Fiji — German New Guinea

(Huon Gulf) A. B. Lewis,

Material.

Fishes for groups and study material.

Birds and mammals.
Birds, birds' eggs, nests, etc.,
for groups.
Tropical fruits.

General Ethnological collections.

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1 a	Collector	Material
West Virginia of UN 105	esti	
Eggs right (H H Smith,	Timber:
Secreta & December	M Greenman	Herbarium specimens.
Herman, Director	O C Farrington	Geological specimens.
Taken B. Italia	S. C. Simms.	Collections among Igerot tribes of northern Luzon
Medical Police	P. C. Cole	Collections and investigations among Mangyans.
Chine Can I. Tiber	B Laufer.	General collection of Ethnology and investigations
Messer	G. A. Dorsey.	Reconnoissance of certain ruins in Chiapas.
A Palah ma	H. W. Nichols,	Ores
V.Y.P. Expedition	O C Farrington.	Ores and minerals of Pacitic Northwest and Alaska.
Saikat hewan	J. F. Ferry.	Birds, including adults and young, birds' eggs and nests for groups and study material.
Lemont and Wilmington	:	
Ittim vis	A. W. Slocom.	Invertebrate fossils.
Southern Illinois	.W. J. Gerhard.	Insects, etc.
Leren P. L	Wm Jones.	Investigations and collections among the Hongots, pro- vince Isabela.
Fex is	R. A. Dixon.	Herbarium specimens.

INSTALLATION, REARRANGEMENT, AND PERMANENT IMPROVEMENT .- The ethinoligical material secured by Mr. Cole in Northwestern Luzon during the second Robert F. Cummings' Philippine Expedition. shietly among the Tinguian, Apavao, and Kalinga tribes, has been installed in new cases entirely, filling Hall 41 and partially filling Hall 57, with the exception of two cases. Hall 41 is entirely occupied with material from the Tinguian tribe. This comprehensive exhibit onsists of basketry, matting, a case fully illustrating the manutacture of textiles, blanketry, women's costumes, men's dress and a cess ries, medicine and foods, toys and musical instruments, fishing paraphernalia. Two Tinguian groups are about completed for Hall 4: A life-size forge group of five figures, illustrates the manuta ture of head axes and spears. A miniature village group, built · sale by Dumagat, a native boy, consists of house models, rice granary, balana, spirit houses, rice seed-beds, and accompanying accessories. About thirty figures of the natives at their daily tasks will lend added interest to this case. Two cases of Kalinga-Tinguian-Iz not material from the Saltan River Valley and from the TinguianJAN., 1910.

Apayao-Kalinga people of the Tineg River Valley complete the quota of 21 cases filling this Hall. In Hall 57 are already installed two additional cases of Kalinga-Tinguian-Igorot ethnological specimens from the Saltan River Valley; two cases of Kalinga material, one case each of Batak and Tagbanua ethnological material from Palawan. Over 200 photographs, along with new maps, have been placed in these cases to further illustrate the use of objects shown. In this Hall there vet remain to be installed two cases of Batak material and three of Apayao, for which cases are still lacking. 17 New Guinea house posts have been placed in the coves of Hall 58. In Hall 53 two cases of ethnological specimens, comprising basketry, weapons, house posts, drums, carved figures, a wooden bed, shell money, etc., from New Ireland and close-by islands, have been temporarily installed. This material, except a small quantity from the Parkinson collection, was gathered by the Curator of the Department during his hurried trip around the world in 1908. From the hall ceiling were suspended boats. outrigger canoes, from the Solomon Islands, New Guinea and New Britain, and a surf raft from the Solomon Islands. Upon the east and west walls were fastened ceremonial house carvings from New Guinea, a portion of the Voogdt collection, presented by Mr. Joseph N. Field. Here also have been installed two dance masks, the larger over 16 feet in height, from Hansa Bay, German New Guinea. These masks are rare since they are usually destroyed after having served the temporary purpose for which they were made. In Hall 37 has been installed a case of material from Sumatra and one from Java, consisting of material collected by the Curator during his recent visit to these islands. case of Java ethnology stands in Hall 39 and two cases of the same material yet remain to be installed upon the arrival of the consignment of new cases. Here also is a case of Apache-Yuma and Havasupai ethnology. In the south cove of Hall 38 have been placed temporarily four Philippine spirit houses collected by Mr. Cole on the second R. F. Cummings' Expedition. On the wall of the cove are four large rice planters from the Island of Cuyo. In the center of the Hall stand temporarily three cases of Apache material, consisting of two cases of Medicine Dance paraphernalia, and one case of painted buckskins, implements of the chase, various household utensils, tools used in tanning, etc. Some confusion of installation exists in Halls 37, 38, and 39, leading to the east annex, owing to the temporary use of Hall 7 by Zoölogy. As soon as it is released to Anthropology this condition will be improved by the installation of the collections originally designed for this hall. In Hall. is were installed ax cases of Apache material, comprising objects of terronal abeniment, as essentes to dress, children's playthings. me from to els, games, awl cases, musical instruments, grinding min benear a transportation, basketry, and warfare. Three cases will The regime is a complete the installation of the Apache material. In the Larth end of the Hall have been installed the Navaho exhibits Larget other garner Mr. Aver, and consisting chiefly of blankets and a stibulities of old Navaho basketry. A case of old Tlingit arm of has been installed in Alcove riv. Owing to the crowded condition of the Egyptian Hall, the installation there of the sarcophagus and large false doorway, recently secured by Mr. Aver, made considerable rearrangement necessary. Case 41, Alcove 123, has been rearranged. In Hall 45 a rearrangement of five cases was rendered entropy of englished Hitton of certain material product by Mr Cole in Northern Luzon. The cases of the North Court have been telted anew and provided with suitable screws, rendering them more nearly dust proof than before.

The economic botanical collections have received the addition of 215 specimens of more than ordinary interest. The progress of installation in the Department of Botany has far exceeded that of any previous year. The entire west galleries have been completed through the installation of 40 cases, and 42 have been completely labeled. The large and valuable drendrologic series from Paraguay has been resawed, redressed, and installed with bark and wood in approximation, in 7 highly interesting cases; the 39 principal woods of the Island of Trinidad occupy a half case brilliant and attractive in older, these with 41 species of woods from British Guiana, complete the case, another case sets forth 70 species of Colombian woods. another, for species of the woods of Venezuela, the latter a very complete and carefully identified series. The dendrologic collections end with two cases of more than ordinary interest; one of these contains an enlarged model showing the structure of wood; the other a long series of specimens illustrating the manner and results of government timber tests. The unique and highly attractive display of woods in the Department now comprises 45 complete cases fully and descriptively labeled. To the systematic display in economic botany, 20 cases have been a ided during the year; one of these illustrates the than's of the Bible, the labels presenting relative quotations conterning each, another is devoted to tea in its various forms, types, and haracters, another contains q small families of plants, the snakeroots. the first of the state of the s

berries; and another the pines, cedars, and fir. A case illustrates the wood chip industry of Japan together with a long series of interesting and comparative coniferous fruits from the Orient, Australia, and the tropics. A case of Coontie starch plants with their interesting cone-like flowers and fruits; and the cattail flags and objects of their utilization. An additional case in the grass family shows the utilization of grass fibres in cordage and basketry, and the roots in dyeing. Two and a half further cases, illustrating the palms, bring the representation of this utilitarian family up to 14 cases. An additional case of the oaks, walnuts, and birches has been added, and another to the representation of the mulberry family, containing the interesting tapa cloth, letter-wood, fustic, and other products. A highly interesting case of the breadfruit family with its rubber gum, nuts, and meal. A case illustrating the magnolia, custard apple, witchhazel and sycamore families with their instructive fruits, woods, and other products. Four cases in the bean family have been added to the four previously on exhibition, the four new ones include the woods, fibres, fruits, seeds, gums, and dyeing and tanning barks produced by this valuable family. The mahogany family now occupies a case of high interest as do also the orange family, the spurge family, and the soapworts. The buckthorns and vines yield a highly instructive exhibit of products with the tea family occupying a part of the same case. The gutta-percha family with its rubbers, gums, and resins, and the passion flowers and lace-barks completes another installation. The cacti, pomegranates, and mangroves fill another case, and the interesting and curious monkey-pot family with that of the clove and allspice another. The family of the parsleys vielding many odorous fruits such as the cumin, anise, angelica, caraway, and the ill-smelling gums asafætida and angelica, is now well represented. The black gum, azalea, dogwood, and ebony families, producing many valuable products, and the sapodilla family, of chewing gum notoriety are fully exploited. The morning glory family, with the milkweeds, complete another interesting case; the mint family, and that of the sesames, another. The madder family with its coffee, dyes, and tans, and the potato family with many common food examples, complete the economic installation of the year. The plans of the Curator of Botany have been, from the first, to combine both taxonomic and economic characteristics in the cases devoted to systematic botanical installation. Up to the present year the absence of a capable reproductionist upon the staff of the department has necessitated installation of economic material only; now, how-

ever, a Modeler's section has been equipped and placed in charge et Dr. B. E. Dahlgren, a capable scientific artist, and the results of his work in reproduction are finding places in the plant tamiles. The case devoted to the breadfruit family, illustrated in this Report, clearly indicates the proposed plan of installation. In this case the material illustrates the family characters and products as follows: A life-size reproduction of the end of a lears flowering, and fruiting branch of the breadfruit (Artocarpus in its shows the leaf-form and characters; the disposition and haracteristics of the flowers, and the immature and mature trust in exact relation; with this are two enlargements from nature exemplifying the intimate structure and character of the dowers, both male and female, the more delicate features of which are reproduced in glass to insure stability and permanence in the reproductions; in close association is a natural sized ripe fruit, shown in section, to illustrate both the developed ovary and the pecuhanties of the fruit itself. These four reproductions together exemplify all the botanical characters that distinguish the family and unite its genera and species in intimate relationship. Another similar installation has been completed illustrating the chocolate family; in this a chocolate tree (Theobroma cacao) is represented in full fruit and ical, an enlarged model depicts the peculiar flower in botanic detail. and a third the ripe fruit with its seeds (chocolate beans) invested in their natural coating of mucilaginous tissue. Several other group models now well under way will soon add deep and renewed interest the absolute all installed with products only. No Museum has ever bet we attempted such comprehensive educational installation, and the result in interesting the public in plant life is already being felt. A rearrangement of the two easterly herbarium rooms became necessary in order to better arrange the departmental library to accommodate the increase of books obtained through the Rothrock accession. The herbarium cases in the northeast room were removed to the southeastern to replace the books therein. The entire walls of the former room are now in book shelves the content of which makes a related to the growing it a bestamual library. The subject, author, and species card indices have been kept up to date and the accessibility and utility of the library notably increased. The herbarium work has progressed satisfactorily during the year, though there is still a large part of the Wahlstedt, Rothrock, and University of Chicago berbaria awaiting the organization that will render the specimens an integral part of the Museum herbarium.

In Higinbotham Hall the series of gold nuggets and crystallized gold was moved to one of the floor cases and mounted and labeled in accordance with the method employed for the general gem collection. Unlabeled specimens of the gem collection were supplied with labels to the number of about sixty. In Hall 36 the large slab of Uintacrinus acquired during the year and shown in Plate LII was placed on exhibition. The preparation of this slab for exhibition involved considerable labor as the slab had been imperfectly mounted when received and was unsafe for exhibition without further treatment. In order to prepare it for exhibition and make a firm and durable mount, the surface designed for exhibition was covered with tissue and a thick covering of plaster poured over it. The slab was then reversed and the plaster previously forming the bed carefully removed from the rear side. A thick bed of plaster was provided for this side and a heavy and durable framework placed around it. The plaster was then removed from the front side and the whole framed in heavy plate glass. In Hall 50 a fine mastodon skull from Yorkville, Illinois. has been installed in place of the large cast of Elephas ganesa. Some needful repairs were made upon the mastodon skeleton in the same Hall. A wall case, corresponding in pattern to those already in the Hall, was provided for a series of Tertiary and Quaternary invertebrate fossils, including those collected by the Curator in Bermuda. and the specimens installed in it. Other specimens installed in the Hall include a slab mount of a nearly complete skeleton of the Miocene wolverine Aelurocyon, a skull and fore and hind legs of Moropus elatus, two skulls of Diceratherium, two skulls of Archæotherium mortoni, a skull of Oligobunis, and a fore leg of Hypohippus. In Hall 61 a nearly complete skeleton of Castoroides from Indiana was assembled and installed in a wall case. This is a rare form of beaver-like animal of which only one other skeleton and three incomplete skulls have been found, although the first remains were found in this country in 1838. Besides its rarity this skeleton is remarkable for its large size, the animal having been more than two feet in height and five feet in length and having incisors ten inches long. In Hall 62 a large floor case four feet square was provided for the Tonopah meteorite and the meteorite, weighing nearly two tons, installed in it. The case is of the same pattern as the other floor cases in the Hall. Some readjustment of the other floor cases was necessary in order to obtain space for this one, and the time during readjustment was improved to thoroughly paraffin the series of Toluca meteorites, in order to check incipient

Since small ineteorite specimens were also in-stalled in their respect places in the collection. In Hall 65 a large mal year are steet sprace by 8 feet high has been provided for an exhibit it selenite crystals from Utah. These are mounted in the form of the goods in which they originally occurred. The age to it with I with glass on one side and the interior is light ! with electricity. A large number of crystals are shown in flor exister many of them weighing between 50 and 100 pounds each, and the real ration of the conditions under which they were found to A case has also be n troubel in this Hall for the remarkable fulgurite, o feet in length. stamed from Indiana, and the specimen installed therein. The remaining collections in the Hall have been completely rearranged and labeled and some new material added, including the sportions of concretions and potholes brought by the Curator from Bernault. in addition to the exhibits named the Hall as now installed contains two ases of cave products, one of ripple marks, mud cracks, etc. a half case of glacial material and a half case illustrating rock we obering, two cases of concretions and one case of septaria. In order to complete the labeling of this Hall temporardy, about 200 work ten labels were prepared and installed. A similar marrangement and labeling has been made of the material in the wall cases in Hall 56. A half case is now devoted to rock textures, a half case to rock ternting, two cases to volcanic products, a half case to faults and tells, a half case to dendrites, a half case to polites, a half case to terns, and a half-case to products of metamorphism. A considerable mantity of rough building stone and marble material of "group" sere, which had been obtained from a number of sources was relined. to uniform size for installation with the regular building-stone and markle. Alestion in Hall 67. Twenty four-inch cubes of lime aone and the granites, and other building stones were added in this not it the builting stone collection and six large polished slabs of granite. In the and other cruptive rocks. In addition about 100 specimen of : Pole i marbles smaller than the standard size were grouped in I white relation in frames of the standard size of to x 15 inches and with it with marble collection. Twenty-five of these frames out turning in the next veight specimens each have been installed and thou a markerable number of important specimens which it had not been t sable to exhibit hitherto was added. About 70 temporary labell written in white ink on black cards were also prepared for this called to n and metalled. A series of specimens illustrating the manufanis Sizu stira



Combined Taxonomic and Economic Installation. The Botanical Characters Modeled.

OF THE
INVERSITY OF ILLINOIS

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ture of Japanese pottery received from Nippon Toki Gomei Kwaisha has been installed in Hall 68. This series exhibits both material and stages of manufacture. Hall 70, devoted to varieties of coal and hydrocarbons, has been completely reinstalled during the year. New cases have been provided throughout and the specimens, with some additions, reinstalled in them. The cases adopted are wall and floor cases of the type already in use in Hall 68, with the exception that the wall cases are deeper. Seven wall cases and six floor cases of these types have been placed in the Hall. Five of the wall cases are devoted to the collection illustrating varieties of coal from lignite to anthracite. Besides the coals of this country those of England, Germany, and Australia are especially well represented. The two additional wall cases are three feet deep and are devoted to large specimens of asphalts, cannels, and other coals, including a complete section, six feet in height, of an Australian coal seam. Of the floor cases, one is occupied by diamonds and diamond-bearing earths and rocks from most of the important diamondbearing regions of the world. Another is devoted to a very complete collection of graphites from various localities and countries. others contain asphalts, gilsonite, and other hydrocarbons of economic importance as obtained from various localities. A complete collection of rocks associated with the coals of Saarbrücken, Germany, and illustrating in a general way the rocks usually associated with coal occupies another floor case. The total number of specimens now exhibited in the Hall is as follows: 44 American lignites, 9 American cannels, 55 American bituminous coals, 29 English and miscellaneous European coals, 54 German coals, 17 specimens illustrating German coal washing, 12 specimens foreign bituminous coals, 17 specimens anthracite coals, 17 large specimens of French and California asphalts, American anthracites, cannels, etc., 31 specimens diamondiferous rocks and gravels, 50 specimens graphite, 50 specimens of peat and its products, and 63 specimens of asphalts and related hydrocarbons. Hall 72, devoted to ores of the precious metals and lead has also been completely reinstalled during the year. New cases have been provided and a complete reorganization of the collections made. The wall cases are of the type used in Hall 79 with some changes in the felting and hinging. Ten of these wall cases have been provided. On the floor of the Hall fifteen cases have been placed, five of which, placed in the center of the Hall, are devoted to larger specimens. These cases are similar to those used in Hall 79 except that the sides have been made in a single light of glass instead of two lights, and these lights are removable entire when it is desired to open the case. The other floor cases are of the type already in use in Hall 68. Before reinstallation of the specimens they were carefully cleaned and any essentially sluphcate material eliminated. The general plan of installation which had been previously adopted was retained, the ores being placed in geographic order in the wall cases. As before, the stes of a group of mining districts have been placed together and for all such groups an individual label has been prepared. It may be said that most of the important mining districts of the precious metals of the world are represented in this collection. The large specimens on the floor of the Hall are grouped geographically also as far as possible. Specimens too large for these cases were removed to the West Dome. All of the specimens in Hall 72 are now protected by glass, so that much better preservation of them is insured than has been possible hitherto. In addition to the large specimens the floor cases contain a number of special collections, such as those illustrate ing alloys of gold and silver, salvage of gold and silver waste, and platinum ores from various parts of the world. Three floor cases are also devoted to the metallurgy of the previous metals and lead. In one of these is exhibited an elaborate German method of treating silver and lead ores, the results of the different processes being connected by lines to show the course of treatment. A collection illustrating smelting of silver-lead ores in the ordinary manner occupies another case. In order to make the representation of the process somewhat more graphic, this collection has been provided with a model of a blast furnace. In this model, which was constructed in the Department, the various features of the blast furnace are shown in detail and a portion of the wall of the furnace is represented as removed from the rear so that the interior charge of the furnace may be seen. A model of a cyanide plant for the extraction of gold has also been constructed and placed in one of the floor cases. me lel shows five wooden tanks placed upon trestles and filled with representations of the solutions and ores used in the processes. tanks are connected by pipings shown in the model and a steam pump and rine box are shown. A summary of the collections at present exhibited in the Hall and their distribution is as follows: One case, synortic collection, placer gold ores. Canadian ores, and Appalafrom Morrow on a constant ase, lead res of the Mississippi Valley; two and one-half cases, Colorado ores; one case Nevada, Montana, Idaho, South Dakota, Washington, and Utah ores; one case, Califorma an i Arizona cres, one-half case, New Mexico ores, one case, MexJAN., 1910.

ican ores; one-half case, South American ores; one case, Colombian ores; one case, ores of Australia, Africa, and Europe; one case, gold ores of Alaska; one case alloys of precious metals; one case salvage of gold and silver wastes; one case ores of platinum; one case metallurgy of silver-lead ores; one case metallurgy of gold, silver, and lead, illustrated by models; one case large specimens South American ores; one case large specimens Mexican ores; one case large specimens New Mexico and Colorado ores; one case large specimens Colorado ores; and five cases large specimens of typical gold and silver ores from all parts of the world. The relief maps of Leadville, Mt. Blanc, Carmelo Bay, and Mt. Desert exhibited in Halls 76 and 77 were repainted and framed during the year. Some additions were made to the map of Auvergne and one of the large maps of the Henry Mountains was framed. About fifty labels were placed in Hall 78 in number sufficient to complete the labeling of the collections in this Hall and a few additional specimens were installed. In Hall 70 the large mass of manganese ore from Brazil weighing 3,300 pounds, obtained from the St. Louis Exposition, was installed upon a mahoganized base. There was also added to the exhibition series in this Hall the important series of copper ores from Alaska and. Washington secured by the Curator at the Seattle Exposition, and a number of mercury, tin, tungsten, antimony, cobalt, nickel, and iron ores from the same source. About 100 hand-written labels were made for the new specimens. The West Dome not proving sufficiently well lighted for the display of small specimens, the four cases of lead ores previously exhibited there were removed and a number of large specimens brought from Hall 72 to take their place. For these as well as for the large specimens already on exhibition in the dome, neat mahoganized bases were provided and the general appearance of this hall much improved thereby. A number of important specimens have during the year been prepared in the laboratory of vertebrate paleontology for exhibition. The largest of these was the mastodon skull with one tusk obtained from Yorkville, Illinois. Although this skull was nearly complete when received, some restoration was found necessary to insure its preservation. The restorations made were based on careful studies of skulls both of ancient and modern elephants. Considerable treatment of the tusk was also found necessary on account of its strong tendency to fall apart, and long experimentation was required before a satisfactory mode of preservation was discovered. By imbedding the tusk entire in paraffin, however, and then removing the excess of paraffin, a

satisfactory result was obtained. As only one tusk was present, another was modeled in plaster and the whole carefully assembled and belted together. It was then mounted upon a well-constructed The Armon ellent specimen of especial local interest has thus been secured. Another important preparation was that of a skeleton of the Miocene camel (Oxydactylus longipes) the material for which was collected by the Museum Paleontological Expedition of 1908 in Nebraska. By means of the restoration of a few bones a complete skeleton was obtained. This skeleton stands over six feet in height and exhibits to a striking degree the characters of the camel family. Only one other complete skeleton of the form is known. A nearly complete skeleton of the Miocene wolverine, Aclurocyon, was chiseled from its matrix and mounted in slab form. Two skulls of Archeetherium, one of which was collected in South Dakota in 1898 and the other in Nebraska in 1908, were also cleaned from matrix and mounted. These skulls were unusually well preserved and one may be a new species. A fore leg of Hypolippus obtained in Nebraska in 1908 and illustrating an interesting stage in the evolution of the horse was mounted. Two skulls of the two-horned rhinoceros or Discratherium from Nebraska, a skull of Oligobunis from the same locality and a skull and fore and hind legs of the remarkable form Moropus were also prepared and mounted. Two cases of storage trays were provided in addition to those already employed for storage of vertebrate fossils and were nearly filled with cleaned and identified ste mens. A similar case of travs has also been provided for the invertebrate fossils which will be used for specimens awaiting identification, before their removal to the exhibition or the study series. Considerable progress has been made in organizing the study collection of ores and other economic minerals, a large part of the specimens havin leen cleaned, wrapped, labeled, and distributed. To the Department photograph albums 179 prints have been added during the test making the total number 2,372. Books, pamphlets, and that it is the number of 492 have been added to the Department library, making the total number in the library 6,042, and some binding of largaining of books and rearrangement of shelf series in this connection has been performed.

The Department of Zoology installed during the year a striking pair of African elephants in the central rotunda of the Museum. Aside from this, no large groups have been completed though several important studies both of mammals and of birds are well under way



Group of African Elephant (Elephas africanus peeli. Lydekker).

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and will doubtless be installed during the year. A habitat group of antelopes (Antelocapra americana) has been begun and in November Mr. Julius Friesser visited northern Mexico securing the necessary accessory material. Owing to the generosity of Mr. Stanley Field, who provided the necessary funds, four large habitat groups of birds have been begun and bid fair to excel any work of the kind which has been undertaken. These groups will show the following North American species under natural conditions: 1, California condors (scene, mountains of Southern California); 2, wild turkeys (scene, forest of Northern Louisiana); 3, white pelecans, cormorants, gulls, etc. (scene, breeding grounds, Quill Lake, Saskatchewan region, Canada); 4, wild geese, ducks, terns, etc. (scene, breeding grounds, vicinity of Prince Albert, Saskatchewan, Canada). In this connection the services of Mr. C. A. Corwin have been secured to prepare the painted backgrounds. Ten large mammals have been added to the systematic series of mounted mammals during the year. These include 2 glacier bears, 1 Stone's caribou 1, mountain goat, 2 Alaska wolves, I wolverene, and 2 Alaska lynx. About 80 small and medium-sized birds have been finished and placed on exhibition. A collection of photographs of living animals intended especially for use of the taxidermists has been begun and proves most valuable. One fish case containing 4 groups of fresh-water fishes and 36 jars of fishes in formaldehyde have been installed. One python has been mounted, and a large alligator has been installed in the exhibition rooms. In progress of preparation is a case 6 x 12 feet to contain 6 groups of tropical fishes, each group with a glass front 3 x 6 feet; below these groups, occupying the entire floor of the case, is being installed a group consisting of a large tiger shark and her 44 young. Much attention has been given during the past year to the collection of local insects, with a view to installing an exhibition collection representing the insect fauna of the State. For several years it has not been possible to prepare the specimens as rapidly as they were received, with the result that a large amount of material has accumulated which has not been pinned. It was to the preparation of these insects that more time was devoted than to any other work, by the Assistant Curator. Owing to facilities for degreasing skulls and skeletons, which were secured through the courtesy of Mr. William Warwick, Superintendent of the Standard Oil Company plant at Whiting, Indiana, who placed a building at the disposal of the Museum for that purpose, 43 skeletons and skulls were degreased.

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In the Museum laboratory the following specimens were prepared

Skall a leaned for the Division of Mammalogy .	7.5.3
Skeleton, repaired and remounted	5
Sight mounted for Cramology	17
Skeletons mounted for Osteological collection	. S
T Ad	786

printed during the year. The office is now well equipped, its facilities enlarged, and the number of employees increased. The following figures show the number of impressions in the way of label printing and other impressions:

	120	Other Impressions
Department of Anthropology	1.721	5.250
Department of Botany	6.081	10,630
Department of Geology	271	255
Department of Zoology	191	29.925
Director's Office		75.005
Highly than Hall	1.2	

PHOTOGRAPHY AND RUBSTRATION. - Unusual activity marked the progress in this important division. 875 negatives, made in the field, were developed; over 1,200 lantern slides, and 84 Lumiere Autochrome photographs. The following is a statement of the work performed:

	Negatives.	Prints		Enlarge- ments	Auto- chrome.	tives for Field Ex- polition.
Director's Office	2.4	251				
Department of Anthropology	1.807	\$1000	772			6
Department of Botany.	28	871		2.5	-\$	282
Department of Geology	83	208	:66		65	114
Department of Zoology	200	233	210	2.8	15	473
General		97				
Crift		118	fig.			
~ 1° F		91	26			
$\Gamma^{-1} A^{-1}$	2.112	6.017	1.273	5.3	84	875

I of number of inventory entries to December 31, 1909	90.762
Entries tr in December 11, 1928, to December 11, 1909	11.144

ATTENDANCE.— The attendance for the year shows a slight decrease over the previous year. The following is the list of school classes (thirty pupils or more) that visited the Museum during the year:

Schools and Location.	Teachers.	Pupils.
University High Fifty-ninth Street and Monroe Avenue .	2	31
Hyde Park High — Fifty-seventh Street and Kimbark Avenue	I	45
Hyde Park High — Fifty-seventh Street and Kimbark Avenue	I	35
Hyde Park High — Fifty-seventh Street and Kimbark Avenue	I	55
University Elementary - Fifty-ninth Street and Monroe Ave-		
nue	3	75
Forest Park — Forest Park, Illinois	2	47
Parkside — Seventieth Street and East End Avenue	I	36
University Elementary - Fifty-ninth Street and Monroe Ave-		
nue	2	30
Oglesby — Seventy-ninth Street and Emerald Avenue	2	32
Hyde Park High - Fifty-seventh Street and Kimbark Avenue	I	43
Hyde Park High — Fifty-seventh Street and Kimbark Avenue	I	45
Hyde Park High — Fifty-seventh Street and Kimbark Avenue	2	52
Parkside — Seventieth Street and East End Avenue	. 2	34
Parkside — Seventieth Street and East End Avenue	I	36
Hyde Park High — Fifty-seventh Street and Kimbark Avenue	I	42
Joliet Township — Joliet, Illinois	2	92
Blue Island — Blue Island, Illinois	2	5.5
Burke — Fifty-second Street and Prairie Avenue	3	38
South Harlem — Harlem, Illinois	2	3.5
James Shields - South Rockwell, corner West Forty-third	I	31
Englewood High — West Sixty-second Street and Stewart		
Avenue	1	169
Prescott — Wrightwood Avenue and North Ashland Avenue .	I	30
Harrison — Twenty-third Place and Wentworth Avenue	3	31
University Elementary — Fifty-ninth Street and Monroe Ave-		
nue	I	4.5
University of Chicago — Chicago, Illinois		30
James Shields — South Rockwell, corner West Forty-third.	I	44
Harvey — Harvey, Illinois	1	30
Frances E. Willard — Forty-ninth Street and St. Lawrence		
Avenue	I	31
Gladstone — Robey Street, corner Washburne Avenue	I	37
Blue Island — Blue Island, Illinois	4	149
Hyde Park High - Fifty-seventh Street and Kimbark Avenue	I	100
Kershaw — Union Avenue and Sixty-fourth Street	I	4.5
Frances E. Willard - Forty-ninth Street and St. Lawrence		
Avenue	2	30
Earle — Sixty-first Street and Hermitage Avenue	2	44
Raymond — Thirty-sixth Place and Wabash Avenue	3	60
Blue Island — Blue Island, Illinois	2	64
Kenwood — Lake Avenue and Fiftieth Street	2	43
Blue Island — Blue Island, Illinois	6	3

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· · · · · and Location	Ica hers	Parris.
Pres att - Wrightwood Avenue and North Ashland Avenue	2	6.2
James Shields South R. kwell, corner West Forty-third	2	50
Mark Sheride. Twenty seventh Street and Wallace Street	1	65
James Shield South Rockwell, corner West Forty-third	:	47
James Shield - South Rockwell, corner West Forty-third	1	10
St. Vic. et al., Webster Avenue, corner Shetheld Avenue	2	30
Sewer I. I. sty sixth Street and Hermitage Avenue	2	: 5
I decomplete of the Avenue Leavitt Street and Belle Plaine Avenue	2	3.3
William Penn - Sixteenth Street and Avers Avenue	2	148
Rower, High - Eighty-ninth Street and Manistee Avenue	2	307
University of Chicago of Chicago, Illinois, Section 1985	4	104
Pullman is One Hundred and Thirteenth Street and Morre Ave-		
to be	:	149
Barnarl - One Hundrel and Fourth Street, corner Charle		
Avenue		30
Mitgett - Seventy-first and Loomis Streets	1	42
McCornick Vacation - West Twenty-seventh Street, corner		
Sawver Avenue	: 5	262
University of Chicago's a Chicago, Illinois		36
University of Chicago Chicago, Illinois.		5 2
University of Chicago - Chicago, Illinois		10
University of Chicago — Chicago, Illinois.		45
St. Ignature - Fre West Twelfth Street		32
Raymon I — Thirty-sixth Place and Wabash Avenue	2	86
- Lames Washworth — Sixty-fourth Street and Greenwood Avenue — nue —		95
Fore t Park Forest Park, Illinois	-	67
Lame. Wallaworth - Sixty-fourth Street and Greenwood Ave-		
nge		46
Wen lell Phillips High - Thirty-minth Street and Prairie Ave-		10.10
nue	*	37
Brumarck - Central Park, corner Armitage Avenue		81
James Wadaworth - Sixty-fourth Street and Greenwood Ave-		
time		37
James, Wallsworth - Sixty-fourth Street and Greenwood Ave-		
none -		4 4
Thorn's a Township High - Harvey, Illinois	2	7.2
Jewish Training 554 West Twelfth Place	2	35
Walter S. C Sectiv-fourth Street and Washington Avenue.	â	4.3
Oakland - Fortieth Street, between Langley and Cottage		
Griste Avenues		43
Larmic - Evanston, Illinois	1	3.8
Jewish Training ccs West Twelfth Place	. 4	[4 2
O.G. Park High - Oak Park, Illimois		35

Herewith are also submitted financial statements, list of accessions, names of members, etc. Frederick J. V. Skipp,

Director.

FINANCIAL STATEMENT.

GENERAL ACCOUNT.

RECEIPTS AND DISBURSEMENTS

From January 1, 1909, to December 31, 1909.

RECEIPTS

Cash in Treasurer's hands, December 31, 1908	\$47,348.32
Petty Cash on hand, December 31, 1908	739.95
Dues of Annual Members.	
	1,590.00
Admissions and Check Rooms	5.719.50
Sales of Guides	359.25
South Park Commissioners	15,000.00
Interest on Investments	45.289.28
Field Endowment Income	172,156.89
Interest on Daily Balances	1,069.47
Sundry Receipts and Refunds	2,385.09
Sundry Sales	239.16
R. F. Cummings' Philippine Fund	4,273.07
Joseph N. Field South Pacific Islands Fund	10,000.00
Stanley Field Ornithology Fund.	1,000.00
Huntington W. Jackson Fund	40.00
Special Donations —	4
Richard T. Crane, Jr	
George F. Porter	
Cyrus H. McCormick 693.75	
Stanley Field	
Sundry	3,525.00
Marshall Field Endowment Sinking Fund	1,000.00
New Building Moving and Furnishing Fund In-	1,000.00
come	1,200.00

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Don't we are		
		\$52. 11.74
Guard Service		12.706 32
familier Service		5.557 82
Fire Protection		2 915 18
Heat and Light		
Wage	\$ 1,000.00	
$\mathbf{F}_{\mathrm{eff}}(t)$	7 4/2 5	
Supplies, gas, etc.	1,104 41	12,112 91
Regardant Alterations		
	\$11,542.46	
plaster, etc	1.340.16	12.555.62
Furniture and Fixture: The Labrary		1 - 11 11 11
Books and Periodicals	\$1.551.15	
Rinding	77:12	
Syndraes	71.50	2 : 11/1 54
Services of Printing and Photography		2,171,18
Collections, etc., Parchased		24.641.21
Departmental Expense		1.112 00
Expelition:		7.214 77
Publications		7.553 55
General Expense Account		
Freight. Expressing and Teaning	\$4.023 32	
Stationery, Postage, Telephone, etc.	1770 02	
Northern Trust Company, Custodian fee	20102	
Sandries	1,105 51	7 7 1 4.4
Mr. Tenothy B. Black cone Fund		11111100
R. F. Commings' Philippine Fund		5 , 5/5 173
Style: Field Ornithology Fund		,47 60
		6
In Trea irer's hand. December 41, 1979	805.011.11	\$210,636.03
Petty Cash on han I	730 05	
New Building Moving and Furnishing Fund In-		
verthent	25,621.51	
Marsh Cl. Field Endowment Sinking Fund Invest		
west.	: = ; -/	.: 2-505
		\$312 933 98

ATTENDANCE AND RECEIPTS FROM JANUARY 1, 1909 TO DECEMBER 31, 1909.

Attendance.	
Paid Attendance	
Adults	•
Children	21,370
Free Admission on Pay Days	
School Children 5,318	
Students	
Teachers	
Members: Corporate	
Annual	
Life	
Officers' Families	
Special	
Press	9,771
Admission on Free Days	7.77
Saturdays	
Sundays	178,029
Sundays	1,0,029
Total Attendance	209,170
Highest Attendance on any one day (July 25, 1909).	6,941
Highest Paid Attendance on any day (September 6, 1909)	549
Average Daily Attendance (365 days)	573
Average Paid Admissions (259 days)	82
(2)9 (3) (7)	
RECEIPTS.	
Guides sold — 1,437 at 25 cents each	\$359.25
Articles Checked — 11,176 at 5 cents each.	558.80
Admissions	5,100.70
	\$6,078.75

ACCESSIONS.

DEPARTMENT OF ANTHROPOLOGY.

COLOSIONS ARE BY GIFT UNLESS OTHERWISE DESIGNATED)

ANER E E. Chicago

they mold from Catheve - Egypt

relatived western image. - New Ireland. (Collected by G. A. D. relev

Facabole of the Papyrus of Ani, in the British Museum.

CUMMINGS, R. F., Philippine Expedition.

Skulls of Igorot, Tinguian, Ilocanos — Luzon Island. (Collected by F. C. Cole)

: Bagobo skull purchased from Miss Laura E. W. Benedict).

**: cethnological specimens, 48 objects from burial cave of Pokanin - Mindoro, Philippine Islands (purchased from Dr. Fletcher Gardner).

DORSEY, GEO. A., Chicago,

r Itugao skull.

DUPEE, WALTER HAMLIN, Chicago,

Rectangular woven garment, probably kilt, ornamented with tuft of human hair -- Lower California

FERRY, J. F., Chicago,

Flat carrying basket - Margarita Island

FIELD, JOSEPH N., Manchester, England. South Pacific Islands' Fund

i.r - ethnological specimens from Central Coast, carved posts, etc. general ethnological collection, canoes, etc.— New Guinea purchased from Captain H. Voogdt).

c : ctimological specimens from Huon Gulf, (purchased from Captain H. Voogdt).

FUELD MUSEUM OF NATURAL HISTORY.

tolle to liby Edward E. Ayer and Geo. A. Dorsey:

Mastaba tomb from Necropolis of Sakkara - Egypt.

Granite sarcophagus - Egypt.

C. He tell by A. B. Lewis:

A other logical specimens - Berlin Hafen, New Guinea.

Paralyanes

Ethnological specimens from Angola, West Central Africa, mostly from the interior from the district of Bihe, and used by the trille known as the Ovimbundu.

Ethn logical specimens — Cevlon.

22 pieces of Kabyle jewelry - Algiers, Africa.

rr Roman seals - Algiers, Africa.

2 Skokomish baskets — Washington.

38 models of Igorot figures, to be used in group work of Northern Luzon, Philippine Islands.

McCORMICK, STANLEY, Chicago.

6 oil paintings of participants in the famous Hopi Snake Dance — Arizona. (Painted by E. A. Burbank).

2 oil paintings of children in ceremonial costumes — Arizona. (Painted by E. A. Burbank).

RYERSON, MARTIN A., Chicago.

Mastaba tomb from Necropolis of Sakkara — Egypt.

VOOGDT, CAPTAIN H., Freidrich-Wilhelms Hafen, New Guinea. 1 stone image - Huon Gulf, New Guinea.

DEPARTMENT OF BOTANY.

(ACCESSIONS ARE BY GIFT UNLESS OTHERWISE DESIGNATED.)

AIKEN, W. H., Cincinnati, Ohio.

ı herbarium specimen — Oklahoma.

AKERMAN, ALFRED, Athens, Georgia.

ı herbarium specimen — Georgia.

BERNICE PAUAHI BISHOP MUSEUM, Honolulu, H. I.

4 economic specimens — Hawaii.

BIRUM, ELI W., Saratoga, Indiana.

5 economic specimens as follows:

I five pound can sorghum molasses, 3 complete sorghum plants, sorghum canes, extracted canes, 4 fruiting heads — Indiana.

BOTANIC GARDENS, Sydney, Australia.

109 herbarium specimens — Australia (exchange).

1 herbarium specimen — Tasmania (exchange).

103 herbarium specimens — Australia (exchange). 101 herbarium specimens — New South Wales, Australia (exchange).

BRANDEGEE, T. S., Berkeley, California.

5 herbarium specimens - Mexico.

CALKINS, W. W., Berwyn, Illinois.

ı herbarium specimen — Illinois.

CHAMBERLAIN, C. J., Chicago.

4 herbarium specimens — Mexico.

2 fruits in alcohol - Mexico.

CLARK, H. W., Chicago.

r Toxylon pomiferum fruit — Illinois.

CONZATTI CASSIANO, Oaxaca de Juarez, Mexico.

185 herbarium specimens — Mexico.

COULTER, J. M., Chicago.

ı herbarium specimen — Michigan.

CUSICK, WM. C., Union, Oregon.

9 herbarium specimens - Oregon.

DEAM, C. C., Indianapolis, Indiana.

1 herbarium specimen — Indiana (exchange).

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archerbarum germens - Guatemala.

ty her areins specimen. Florida (exchange

DESERT I ABORATORY, Tueson, Arizona

or continuous speciment fruits and gum -- Arizona

DINON, R. A. Chicago.

r herbareim specimen - Grass Lake, Illinois

2) herbarenn gerimens - Vermont.

cherbarium specimens - Montana.

so herbarium specimens -- Illinois

21 herbarium specimens --- Utah

FIELD MUSEUM OF NATURAL HISTORY

Collate Pay J. M. Greenman

i i blate.

z photographo

2 ; lant descriptions.

a photograph of type specimen.

Collate I by C. F. Millspaugh:

118 herbarium specimens - Bahamas, Cuba, and Jamaica.

righ stograph of type specimen.

reconomic specimens — Kentucky, British India, West Indies and Peru.

; economic specimens -- Jamaica.

r tracing.

; herbarium specimens.

: a economic specimens

3 economic specimens - California.

: straw specimen.

2 economic specimens - California and Illinois.

2 economic specimens - Spain and Ceylon

C. Te tell by B. E. Dahlgren:

118 economic specimens - - Jamaica.

C. Bertell by R. A. Dixon:

265 herbarium specimens - Texas.

C. Meltell by J. M. Greenman, O. E. Lansing, Jr., and R. A. Dixont 1,433 herbarium spesimen. — Illinois.

of He to I by C. F. Millspanish.

a fruit specimens

"c 's I by H. H. Smith:

to herbarren sperimens -- West Virginia.

is built geomens - West Virginia.

20 Jan agermens - West Virginia.

princel specimens - West Virginia.

; et montes specimens - West Virginia.

z fer fruit specimens - West Virginia.

tisce omen fruits in formalin -- West Virginia

: berlassum sperimen - Illin as.

170 herbarum apecimens - Georgia.

training out steamens - Georgia.

6 specimens law fruits - Georgia.

- 4 specimens fruits in formalin Georgia.
- 13 herbarium specimens West Virginia.
- 7 dry fruits West Virginia.
- 28 economic specimens West Virginia.
- 40 winter twigs West Virginia.
- 101 slab specimens -- West Virginia.
- 82 board specimens West Virginia.
- 20 specimens wheel sections West Virginia.

Purchases:

- 374 herbarium specimens various localities.
- 54 herbarium specimens Tobago, West Indies.
- 155 herbarium specimens Paraguay.
- 338 herbarium specimens West Indies.
- The private herbarium and library of Dr. J. T. Rothrock, West Chester, Pennsylvania.
- 61 herbarium specimens various localities.
- 303 herbarium specimens Arizona.
- 198 herbarium specimens Black Hills, South Dakota.
- 4 herbarium specimens Tobago, West Indies.
- 522 herbarium specimens Mexico.
- 507 herbarium specimens various localities.
- 406 herbarium specimens Guatemala.
- 597 herbarium specimens Arizona.
- 32 specimens crude drugs.
- 414 herbarium specimens West Indies.
- 1,150 herbarium specimens Philippine Islands.
- 28 herbarium specimens Palestine.
- 15 economic specimens Palestine.

Modeled by B. E. Dahlgren:

- 11 models of plants Jamaica.
- 3 models of plants Indiana.

FULLER, GEORGE D., Chicago.

- 40 herbarium specimens Alberta, British Columbia.
- 7 herbarium specimens various localites.

GARRETT, A. O., Salt Lake City, Utah.

- 14 herbarium specimens Utah.
- GATES, FRANK C., Chicago.
 - 43 herbarium specimens various localities (exchange).
 - 27 herbarium specimens Illinois.
- GLOYE, MAX C., Michigan City, Indiana.
 - 1 specimen Brazilian cedar Brazil.
 - r specimen laurel British Guiana.
 - 1 board specimen Mexico.
- GREEN, CHARLES D., Allegheny, Pennsylvania.
 - 1 fruit specimen Norway.

GREENMAN, J. M., Chicago.

- r herbarium specimen Massachusetts.
- 5 herbarium specimens Indiana.
- 2 herbarium specimens Utah.

HILL P. L. Chicago

77 herbareim specimens - various localities

HOPE BOTANICAL GARDEN, Kingston, Jamaica, r truck of tree fern — Jamaica.

ISELV, F. B., Tonkawa, Oklahoma,

124 herbarum specimens - Oklahoma

KIRKWOOD J. E., Tucson, Arizona.

o therbarium specimens - - Mexico.

r berbarium specimen - - Arizona

LANSING, O. E., Jr., Chicago,

r tangus specimen -- Illinois

I UNELL, J. Leeds, North Dakota

; herbarium specimens North Dakota

MAC DOUGAL, D. T. Tucson, Arizona

2 photographs of Juliana - Mexico.

o economic specimens - - Arizona

2 cactus candy specimens - - Tucson, Arizona.

MILLSPAUGH, C. F., Chicago.

17 economic specimens.

2 economic specimens - Japan.

r economic specimen - Jamaica.

2 economic specimens - Mexico.

: economic specimen - Curação.

: economic specimen Florida.

r fruit specimen.

; herbarium specimens — Pennsylvania.

MISSOURI BOTANICAL GARDEN, St. Louis, Missouri,

r description of Callicarpa cinerea

MITCHELL, J. C., Chicago.

1 specimen strawberry fruits - Chicago.

MYERS, G. W., Chicago.

: herbarium specimens - Colorado.

NATAL BOTANIC GARDENS, Berea, Durban Natal

15t herbarium specimens - various localities (exchange).

N. W. LOPK, BOTANICAL GARDEN, Brota Park, New York

1 economic specimens — Bahamas, Jamaica, and Mexico (exchange).

211 herbarium specimens — Cuba and Bahamas (exchange).

t conomic specimens - Java (exchange).

771 herbarium specimens - Jamaica (exchange).

6 herbarum specimens - Florida (exchange).

ter herbarum specimens — Bermuda (exchange).

ttt herbarum specimens - Bahamas (exchange)

i herbarum geeimens - Barbadoes (exchange).

RUECHER, S. E., Sparta, Illinois

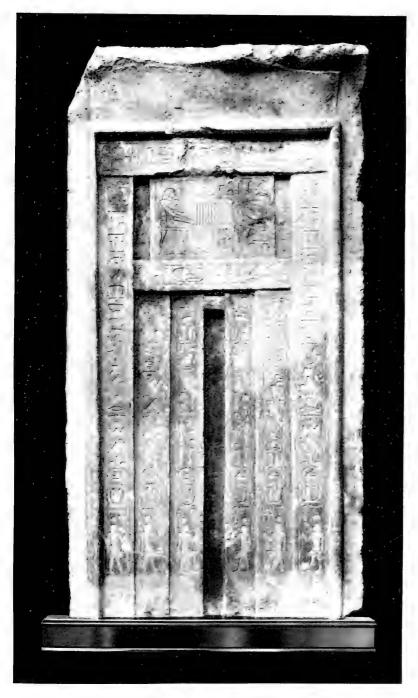
27 herbarium specimens - Illinois.

A herbarrum specimens - Missouri.

REYNOLDS, MISS CARRIE A., Mayfair, Illinois,

: herbarum specimens - Illinois.

t herbarrim specimens - Illinois.



False Door of Large Mastaba Tomb.

OF THE UNIVERSITY OF HEINDIS

ROTHROCK, J. T., West Chester, Pennsylvania.

r steel engraving of Dr. Asa Gray.

1 photograph of John Bartram House.

1 photograph of C. S. Bradford.

1 photograph of Quercus Muhlenbergii.

r photograph of M. Woronin.

r photograph of Andre Michaux.

r photograph of A. de Bary.

ı photograph of E. Stahl.

394 herbarium specimens — West Indies.

ROWLEE, W. W., Ithaca, New York.

I fruit specimen.

ROYAL GARDENS, Kew, London, England.

1 specimen seeds — Niger River (exchange).

RUSBY, H. H., New York City.

1 economic specimen — Holland.

SMITH, H. H., Chicago.

4 economic specimens - Indiana.

2 herbarium specimens — Illinois.

2 economic specimens — Indiana.

THE CHINA TEA ASSOCIATION, London, England.

18 samples of English breakfast teas — Hankow, China.

THE JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J.

12 specimens illustrating steps in the manufacture of lead pencils.

TRELEASE, WM., St. Louis, Missouri.

1 herbarium specimen — Mexico.

UNITED STATES BUREAU OF PLANT INDUSTRY, Washington, D. C.

r specimen macaroni wheat — South Dakota.

UNIVERSITY OF CALIFORNIA, Berkeley, California.

173 herbarium specimens — Arizona (exchange).

UNIVERSITY OF CHICAGO, Chicago.

303 herbarium specimens — Mexico.

WERTER, P. J., Miami, Florida.

r economic specimen — Florida.

WRIGHT, WILBUR H., Chicago.

200 herbarium specimens — Illinois, Indiana, and Wisconsin.

DEPARTMENT OF GEOLOGY.

(ACCESSIONS ARE BY GIFT UNLESS OTHERWISE DESIGNATED.)

AUSTRIAN, MRS. JOSEPH, Chicago.

322 specimens of minerals, fossils, etc.

AYER, E. E., Chicago.

1 specimen asbestos — Ontario.

1 glaciated copper boulder, weight 22 lbs.— Lake Geneva, Wisconsin.

BEEBE, J. O., Burlington, Iowa.

10 plaster casts of fossil crinoids.

CATLIN, H. W., Oaxaca, Mexico.

5 specimens silver ore — Oaxaca, Mexico.

Mr. Fined Messes wood Natural History Reports, Vol. III

OHA: MIRSSINGS STREET

processors gold from Croppin Crock, Colorado.

CHAIMERS WM E the co-

The second of the Seest Polan I. Marne

LONG BUILDING LONG

governors. Les concretion : Fort Dolge, Iowa

INVESTIGATION ROOF I Dimen-

Play to the state of deer is Brittol, Illinois

FARRIMATON OF Charge

rogers on discoond, in matrix of Brazil doan's

core microscrystallized topaz - New Hampshire doans

FIFTO, STANLEY, CRANE, R. T. Jr., McCORMICK, CYRUS H.: PORTER GEO F

I'm a di mete dite

FIRED MUSEUM OF NATURAL HISTORY

C Sected to O C Farrington

it; specimens ores and minerals of Washington, Idaho, and Ala 3

: de emen volcanne dust - Alaska.

; de mens tribbites - British Columbia.

gles mensore accous fossils - Washington

: Recemens for all wolf - Los Angeles, California

15 decimen rocks -- Arizona and Oregon

r glaciated ; ebble - Homewood, Illinois

: specimen pyrargyrite - - Oaxaca, Mexico

; se imens alver ore - Oaxaca, Mexico

; germen copper ore - Oaxaca, Mexico

r specimen chert Oaxaca, Mexico

r tree mens rocks Bermuda

; .; e. enen . pothole . - Bermuda

: decimens concretions - Bermuda

pages mensionly and sands - - Bermuda

: perimen building stone - Bermuda

in specimen for als Bermuda

fire the different formal and the state of t

to deciment found shells . Yorkville, Illinois

Cle telby | F Ferry

rope imen magne ate ... Margarita Islands, Venezuela ...

I To to I by H W Nichols

15 geometry for als, ores, and minerals - Bromide, Coal Co., Oklahoma

Me to I by I W Showing

r race onen invertebrate fossils. - Petoskey and Bay View, Michi-

ring are ment investebrate fossils - Wilmington, Illinois.

17 are mens uncertebrate fossils - Cook County, Illinois.

ture moneius Cook County, Illinois.

in acceptance of Cook County, Illinois

restreament gerdes - Romeo, Illinois.

: specimens invested gate fossils - Cook County, Illinois.

- 2 specimens sandstone Lemont, Illinois.
- 46 specimens invertebrate fossils Cook County, Illinois.
- r specimen bitumen Thornton, Illinois.
- 350 specimens Pleistocene shells Willow Springs, Illinois.

Purchases:

- 3 specimen slabs of crinoids Le Grand, Iowa.
- 23 specimens crinoids (10 species) Le Grand, Iowa.
- ı slab Uintacrinus socialis Beaver Creek, Logan Co., Kansas.
- z skeleton of fossil beaver (Castoroides ohioensis)— Fairmount, Indiana.
- r skull of mastodon with one tusk Yorkville, Illinois.

GAMBA, F. PEREIRA, Pasto, U. S. of Colombia.

11 specimens gold ores and associated rocks — Porvenir mine, Piedrancha.

GEOLOGICAL SURVEY OF INDIA, Calcutta, India.

- I specimen Dokachi meteorite (exchange).
- 1 specimen Futtehpoor meteorite (exchange).

GOFF, JOHN, Pontotoc, Mississippi.

45 specimens (2 species) fossil echinoids — Pontotoc, Mississippi.

GOODALE, FRED, Bristol, Illinois.

1 specimen eroded limestone.

GREBEL, WENDLER & COMPANY, Geneva, Switzerland.

r specimen Buschhof meteorite (exchange).

10 specimens minerals (exchange).

HOWLAND, LOUIS M., Paris, France.

7 specimens fossil sharks' teeth — Cavaillon, France.

KENKEL, LOUIS V., Harper, Washington.

34 views of mines, caves, and rock formations — Montana and Washington.

16 photographs of Alaska glaciers.

LIEBINGER, FELIX, Vienna, Austria.

2 maps of Dolomitic Alps.

MILLAR, A. Q., Minneapolis, Minn.

3 specimens diamond-bearing peridotite — Pike Co., Arkansas.

2 specimens fuller's earth — Pike Co., Arkansas.

NEWBERRY, W. W., Chicago.

5 specimens silicious oölite — Bromide, Oklahoma.

I concretion — Bromide, Oklahoma.

2 pseudomorphs — Bromide, Oklahoma.

1 piece stalactite — Bromide, Oklahoma.

15 specimens fossils — Bromide, Oklahoma.

NIPPON TOKI GOMEI KWAISHA, Noritake, Japan.

12 specimens clays and other minerals used in the manufacture of Japanese porcelain.

SLOCOM, A. W., Chicago.

1 specimen jasper in hematite — Ishpeming, Michigan.

TALBERT, JOS. T., Chicago.

6 specimens gilsonite - Utah.

1 specimen anthracite - Colorado.

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WELLEY DOWN ALCHOOS

The resemblished prefer Lake Superior

DEPARTMENT OF ZOOLOGY.

A THE SECOND OFF BY GIFT UNIESS OTHERWISE DESIGNATED.

While to Prochaming

: the Chicago

BAKER HENRY D., Hobart, Tasmania

r in sunted platypus - Tasmania

BUISS RAYMOND E. Jr. Chicago.

r tishes mounted - Manitouish Waters, Wisconsin

COALE HENRY K. Highland Park, Illinois

mank Deerheld, Lake County, Illinois

: deer mouse Highland Park, Illinois

DEUBLER, L. Chiago

a the . He sville, Indiana.

: beetle. Hessville, Indiana.

DEWEY, C. L. Chicago.

: turtle Dowagiac, Michigan.

DOHMAN, U. A. Chicago.

bee - Chicago

: beetle-larva - Chicago.

: bumblebee - Chicago.

DORSEY, GEO A. Chicago.

r paradice bird - Solomon Islands

: Einglisher - Solomon Islands.

: ta ana Solomon Islands

FERRY, I. F. Chicago.

a moth - Porlamar, Margarita

FIELD MUSEUM OF NATURAL HISTORY

Control to Charles

i millipe le ... Voi, British East Africa

thing. Tana River, British East Africa.

t Veetle. - Tana River, British East Africa

the tell by E. B. Chaper:

its fragentles, grasshoppers, bugs, beetles, flies, moths and bees,

marga, etc. - Illinois and Wisconsin.

satisficies. Itagendies, grasshoppers, bugs, butterflies, moths, leadies, dies and bees, wasps, etc.—Northern Illinois.

C. To to ! In the A. Digson:

radius, this - Interior of Bougainville, Solomon Islands.

t 'c to t' . I I' I'

to New Alexandra, South America,

in least is Venezuela, South America,

this Venezuela, South America.

```
1 turtle — Venezuela, South America.
```

31 fishes — Venezuela, South America.

1 frog - Quill Lake, Saskatchewan.

17 mammals — Saskatchewan.

1 moth — Margarita Islands.

835 bird skins — Margarita Islands.

15 mammal skins, 1 butterfly, 1 centipede — Margarita Islands.

195 bird skins — Saskatchewan.

36 sets of eggs (with nests) 192 eggs - Saskatchewan.

27 nests (without eggs)— Saskatchewan.

Collected by Julius Friesser:

208 grasshoppers, bugs, beetles and bees, wasps, etc.— Mexico.

Collected by W. J. Gerhard:

735 spiders, nerve-wings, grasshoppers, dragonflies, bugs, beetles, butterflies, moths, flies and bees, wasps, and parasites—Northern Illinois and Northern Indiana.

I lizard — Olive Branch, Illinois.

Collected by S. F. Hildebrand:

168 fishes — Stendal and Pikeville, Indiana.

71 reptiles - Stendal and Pikeville, Indiana.

1 millipede — Pikeville, Indiana.

Collected by O. E. Lansing:

r beetle - Starved Rock, Illinois.

Collected by S. E. Meek and W. Heim:

360 fishes - Dry Tortugas, Florida.

942 fishes - Key West, Florida.

5 lizards - Key West, Florida.

Collected by L. L. Pray:

3 fox squirrel skins — Tallulah, Louisiana.

4 gray squirrel skins - Tallulah, Louisiana.

5 black fur squirrels — Tallulah, Louisiana.

5 mice - Tallulah, Louisiana.

12 squirrels — Tallulah, Louisiana.

5 mice — Tallulah, Louisiana.

2 bird skins - Tallulah, Louisiana.

I turkey buzzard — Tallulah, Louisiana.

r pileated woodpecker — Tallulah, Louisiana.

Collected by V. Shelford and S. F. Hildebrand:

254 fishes - Illinois.

4 turtles.

3 snakes.

3 frogs.

Collected by A. B. Wolcott:

533 dragonflies, grasshoppers, bugs, moths, beetles, flies and bees, wasps, etc.— Illinois and Indiana.

Purchases:

5 mounted reptiles as follows: I snake, I frog, I toad and 2 lizards — Europe.

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r small restent Darjeeling, India

i beetles - Darjeeling, India

to moths Darjeeling, India-

210 butterthes Darieeling, India

monkeys British Guiana

: por spine - British Guiana

: para British Guiana

r agonti - British Guiana

: Bracket - British Guiana

r dog - British Guiana

r jaguar - British Guiana

rocclot - British Guiana

12 squirrels, muskrats, mice, minks, weasels, moles, and shrews, 2 flying lizards - Palawan, Philippine Islands

215 shells - Palawan, Philippine Islands

112 butterflies - Palawan, Philippine Islands

t moths -- Palawan, Philippine Islands

t mantis - - Palawan, Philippine Islands

4 katydids - Palawan, Philippine Islands

; bees, parasites, etc. - Palawan, Philippine Islands.

14 beetles - Palawan, Philippine Islands.

2 sowbugs -- Palawan, Philippine Islands

2 spiders - Palawan, Philippine Islands

r mountain goat skin

I perperse

r spoon bill cat fish - Scotts, Arkansas

1.211 fishes various localities

i golden eagle - Bozeman, Montana

: t bird skins - Darjeeling, India.

r wild turkey -- Missouri

18 bird skins - Jamaica, West Indies

142 ducks, ibises, toucans, tinamous, parrots, hawks, woodpeckers humming-birds, and others mostly small passerine birds — British Guiana.

r American rough leg hawk - Geneva, Illinois,

FREEBURG, GUS, Liverpool, Indiana

2 snakes - Liverpool, Indiana

FRIESSER, JULIUS, Chicago.

(a) beetles, flies, and specimens of scale insects — Illinois and Michigan

; turtles - McHenry, Illinois

GERHARD, WM. L. Chicago.

16 grasshoppers, crickets, etc.— Eastern Pennsylvania, Southern New Jersey, and Maryland

GLYNN, PETER, Chicago

1 salamander -- Downer's Grove Illinois

GREGOR, DARLING K. Fulton, Missouri

23 lizards Oklahoma

; to go Oklahoma

GUERET, E. N., Chicago.

1 short eared owl — Grass Lake, Illinois.

4 red wing black birds — Grass Lake, Illinois.

ı rusty black bird — Grass Lake, Illinois.

r snake — Wauconda, Lake County, Illinois.

HARDEE, F. E., Chicago.

1 snake — India.

r skeleton of snake.

HELLER, ISIDORE, Chicago.

I owl (mounted).

1 cormorant (mounted).

HILDEBRAND, S. F., Chicago.

r beetle - Chicago.

2 scorpions — Globe, Arizona.

5 lizards — Globe, Arizona.

HOWE, MURRAY, Chicago.

2 skulls of bear — Alaska.

HURTER, JULIUS, St. Louis, Missouri.

19 reptiles (exchange).

JACKSON, H. H. T., Madison, Wisconsin.

3 owls, 2 shorebirds, 1 bobwhite, 2 woodpeckers, 8 passerine birds — Wisconsin (exchange).

KWIAT, ALEX., Chicago.

1 fly - Palos Park, Illinois.

McCOY, G. W., San Francisco, California.

5 rats — San Francisco, California.

1 mole — San Francisco, California.

1 weasel — San Francisco, California.

15 fleas — San Francisco, California.

McINTYRE, G., Walworth, Wisconsin.

6 moths — Walworth, Wisconsin.

MOULTON, MRS. G. M., Chicago.

ı spine of catfish — Caribbean Sea.

MUNZNER, H., Chicago.

1 bumblebee — Chicago.

OSGOOD, W. H., Chicago.

ı skunk skull.

raccoon skull.

PARK FISHERMEN, Jackson Park, Chicago.

1 turtle — Jackson Park, Chicago.

RADDATZ, R. C., Chicago.

2 woodchuck skulls — Dry Bay, Alaska.

RAVEN, HENRY F., Simon, Costa Rica.

r squirrel skin — Simon, Costa Rica.

ı oriole — Cumana, Venezuela.

r parrot — Cumana, Venezuela.

47 bird skins — Costa Rica and Venezuela.

SETON, ERNEST T., Cos Cob, Connecticut.

16 mice and shrews.

ALTANER HENRY, Philadelphia, Pennsylvania

: batterflie. - Ft. Wingate, New Mexico.

SMITH, C. P. Chicago

Swarper - San Carlos, Vera Cruz, Mexico.

: lees - Chicago.

: Laty hale Pales Park, Illinois.

, tees - Chicago, Illinois.

SMITH AUSTIN PAUL, Brownsville, Texas.

r rock wren - Brown ville, Texas.

r cardinal -- Brownsville, Texas.

: titmouse - Brownsville, Texas.

r sparrow - Brownsville, Texas.

: warbler - Brownsville, Texas.

: water thrush - Brownsville, Texas.

STEVENS, MRS. A., Chicago.

: beetle - Chicago.

THAYER MUSEUM, Lancaster, Massachusetts.

41 sets of bird's eggs including 73 eggs - Lower California

THOMPSON, S. L., Chicago,

r ichneumon fly - Chicago.

TUTTLE, MRS. M.

10 bryozoans - Santa Cruz, California.

UNITED STATES DEPARTMENT OF COMMERCE AND LABOR

Washington, D. C.

so fresh-water shells — various localities.

UNITED STATES EXPRESS COMPANY, Chicago.

r monkey

UNITED STATES NATIONAL MUSEUM, Washington, D. C.

: squirrels - Venezuela (exchange).

WEBER, C. M., Palawan, Philippine Islands.

shells — Tara Islands, Palawan.

r shell - - Bacuit, Palawan.

shells -- Coron Islands, Palawan.

: thell - Binga, Mt. Capoas, Palawan.

: shell - - Palawan.

WILLARD, F. C. Tombstone, Arizona.

ranke. - Tombstone, Arizona.

WOLCOTT, A. B. Chicago.

; ... ch Chicago

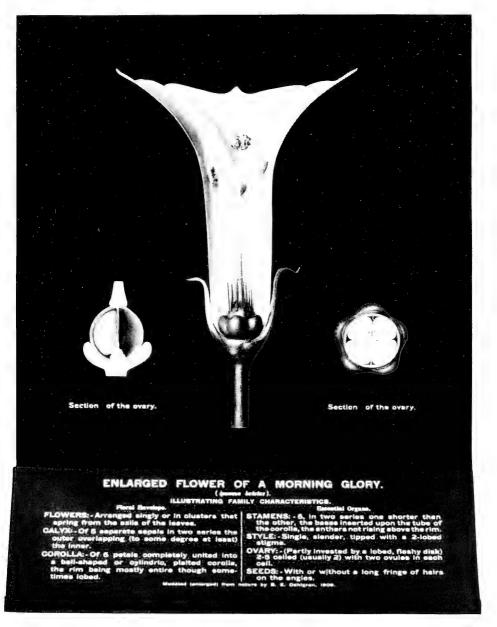
eresth - North Evanston, Illinois.

: Leetle New Harmony, Indiana.

: You New Harmony, Indiana.

: turtle - West Pullman, Illinois.

: t al West Pullman, Illinois.



Enlarged Model of a Convolvulaceous Flower.

OF THE

SECTION OF PHOTOGRAPHY.

(ACCESSIONS ARE BY GIFT UNLESS OTHERWISE DESIGNATED.)

DAYKIN BROTHERS, Cleveland, Ohio.

16 views of Bermuda scenery (exchange).

FIELD MUSEUM OF NATURAL HISTORY.

Made by C. H. Carpenter:

2,142 negatives, 6,917 prints, 1,273 lantern slides, 53 enlargements, 84 Lumiere Autochrome photographs, 875 negatives developed.

Made by F. C. Cole:

6 portraits of natives, etc. — Philippine Islands.

Made by O. C. Farrington:

54 negatives of general views — Bermuda Islands.

24 negatives of general views - Mexico.

18 negatives of general views — California and Arizona.

Made by J. F. Ferry:

300 negatives of general views — Saskatchewan.

Made by S. E. Meek:

84 negatives of fishes, views, etc.— Florida.

Made by W. H. Osgood:

4 negatives of landscapes - South Chicago.

Made by H. H. Smith:

12 portraits of trees — Chicago.

146 portraits of trees, landscapes, etc.— West Virginia.

36 portraits of trees, landscapes, etc.

Purchases:

721 portraits, views, landscapes, etc.

465 portraits of mammals.

80 views of India and types of natives.

6 colored lantern slides — Bermuda.

10 lantern slides - Bermuda.

 $_{\rm 32}$ lantern slides — Bermuda and the Colorado River. $_{\rm 34}$ lantern slides — Alaska.

SKIFF, FREDERICK J. V., Chicago.

o portraits of living mammals.

UNITED STATES NATIONAL MUSEUM, Washington, D. C.

I portrait of adult walrus.

THE LIBRARY.

BOOKS, PAMPHLETS, AND SERIALS.

(ACCESSIONS ARE BY EXCHANGE UNLESS OTHERWISE DESIGNATED.)

ABERDEEN UNIVERSITY, Aberdeen, Scotland.

1 reprint.

ADAMS, F. D. T., Montreal, Canada.

I pamphlet.

ALABAMA AGRICULTURAL EXPERIMENT STATION, Auburn, Ala-

Bulletin, current numbers (gift).

ALLEY TO VON YOR UNIV.

i tegeticis

VWVNI BIOLOGISCH LANDWIRTSSCHAFT-INSTITUT, Deutsch Ostatiska

Der ; flanzer, v. g. no. r. 8.

AMURICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetti.

Proceedings, current numbers.

AMERICAN ANTIQUARIAN SOCIETY, Boston, Massachusetts, Proceedings, current numbers.

AMERICAN ASSOCIATION OF MUSEUMS, Pittsburgh, Pennsylvania, Proceedings, v. 2, 1908

AMERICAN CHEMICAL JOURNAL PUBLISHING COMPANY, Baltimore, Maryland.

Journal, current numbers.

AMERICAN FOLK-LORE SOCIETY, Cambridge, Massachusetts. Journal, current numbers.

AMERICAN GEOGRAPHICAL SOCIETY, New York City, Bulletin, current numbers.

AMERICAN INSTITUTE OF MINING ENGINEERS, New York City. Transactions, v. 39, 1908. Yearbook, 1909.

AMERICAN MINING CONGRESS, Denver, Colorado, Report of proceedings, 11th annual session, 1908 (gift).

AMERICAN MUSEUM OF NATURAL HISTORY, New York City.

AMERICAN ORIENTAL SOCIETY, New Haven, Connecticut. Journal, v. 20

AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. Proceedings, current numbers.

AMES ROTANICAL LABORATORY, Easton, Pennsylvania.

Contributions, no. 9

AMSTERDAM DUTCH ROYAL GEOGRAPHICAL SOCIETY, Amsterdam. Netherlands

I'm live & Niew-Guinea Expedite, 1904-5.

AMSTERDAM K. AKADEMIE VAN WETENSCHAPPEN, Amsterdam, Netherland.

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CAGERS SOUTÉTÉ D'ÉTUDES SCIENTIFIQUES, Angers, France, Balletin, v. 17

VIGERS SO IÉTÉ NATIONALE D'AGRICULTURE, SCIENCES ET ARTS, Angers, France.

Maria mela wasto.

COATES DES MINES, Paris, France.

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VYTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRE-LAND, London, England.

i centi correct combact

ARCHAEOLOGICAL INSTITUTE OF AMERICA, New York City.

American journal of archaeology, current numbers.

Index, vol. 1-10.

ARCHIV FÜR RELIGIONWISSENSCHAFT, Leipzig, Germany.

Current numbers.

ARCTOWSKI, HENRY K., Melle, Belgium.

1 pamphlet (gift).

ARDENNES. SOCIÉTÉ D'HISTOIRE NATURELLE, Ardennes, France.

Bulletin, current numbers.

ARIZONA AGRICULTURAL EXPERIMENT STATION, Tucson, Arizona.

Annual report, no. 19, 1908.

Bulletin, current numbers.

ARKANSAS AGRICULTURAL EXPERIMENT STATION, Fayetteville,

Arkansas.

Bulletin, current numbers.

ARMOUR INSTITUTE OF TECHNOLOGY, Chicago.

2 publications.

ASIATIC SOCIETY OF BENGAL, Calcutta, India.

Proceedings, current numbers.

ASSOCIATION OF ENGINEERING SOCIETIES, Philadelphia.

Journal, current numbers.

ATKINSON, GEORGE F., Ithaca, New York.

3 reprints.

AUGSBURG NATURHISTORISCHER VEREIN, Augsburg, Germany.

Bericht, 1008.

AUSTRALASIAN ASSOCIATION FOR ADVANCEMENT OF SCIENCE,

Adelaide, Australia.

Report, no. 11, 1907.

AUSTRALIAN MUSEUM, Sydney, New South Wales.

Report, 1908.

4 publications.

AYER, EDWARD E., Chicago.

4 volumes (gift).

AZAMBUJA DE, GRACIANO A., Porto Alegre, Brazil.

r publication.

BAKER, HENRY D., Hobart, Tasmania.

3 pamphlets (gift).

BALCH, E. S., Philadelphia.

I pamphlet.

BARBER, EDWIN ATLEE, Philadelphia.

r publication.

BATAVIAASCHE GENOOTSCHAP VAN KUNSTEN EN WETEN-

SCHAPPEN, Batavia, Java.

Tijdschrift, v. 51, no. 3-4.

Verhandelingen, v. 57.

BATH NATURAL HISTORY AND ANTIQUARIAN FIELD CLUB.

Bath, England.

Proceedings, v. 11, no. 3.

ISSUED TO MUSEUM OF NATURAL HISTORY REPORTS, VOL. 111.

SUVER NOORNEEHOLOGISCHE GESELLSCHAFT, Munich, Germann Mitteilingen – irrent numbers

TATURA CONTRACT HISTORY AND PHILOSOPHICAL SOCIETY Hebric Conference

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THEFASE NATURALISTS' FIELD CLUB, Belfast, Ireland.

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BURGENS MUSEUM, Bergen, Norway,

BEELD, DEUTSCHE GEOLOGISCHE GESELLSCHAFT, Berlin, Germann

Monatorchrift, current numbers.

Zeit a hritt, current numbers.

BURLIN DEUTSCHE GESELLSCHAFT FUR ANTHROP., ETHNOL UND URGS, Berlin, Germany.

Zeit shrift für ethnologie, current numbers

BURLIN DEUTSCHE GESELLSCHAFT FÜR ERDKUNDE, Berlin, Germany

Bibli theca geographica, v. 14. Zeits brift, current numbers.

BERTIN DEUTSCHE GESELLSCHAFT FÜR VOLKSTUMLICHE, Berlin, Germany

Natural chenichnit, current numbers,

PHRLIN DEUTSCHE UNIVERSITÄT, Berlin, Germany, Labre, verzen brits, v. 21

BURLIN K. BIBLIOTHEK, Berlin, Germany Labre Jericht, 1978, 9.

BURLLY K. BOTANISCHER GARTEN UND MUSEUM, Berlin, Germany Notificiati, no. 44, 45.

BUFUDA K PREUSSICHE AKADEMIE DER WISSENSCHAFTEN.
Berlin, Germany.

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DEFILES VEREIN FUR VOLKSKUNDE, Berlin, Germany

JUSTIN JOOR OGISCHES MUSEUM, Berlin, Germany.

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BOMBAY ANTHROPOLOGICAL SOCIETY, Bombay, India. Journal, current numbers.

BONN. NATURHISTORISCHER VEREIN, Bonn, Germany. Sitzungsberichte, 1908.
Verhandlungen, v. 65, pt. 1.

BORDEAUX. SOCIÉTÉ LINNÉENE, Bordeaux, France. Procès-verbaux, v. 62.

BOSTON MUSEUM OF FINE ARTS, Boston, Massachusetts. 5 publications.

BOSTON PUBLIC LIBRARY, Boston, Massachusetts. Annual report, no. 57, 1908-9.

BOSTON SOCIETY OF NATURAL HISTORY, Boston, Massachusetts. 3 publications.

BOSTON TRANSIT COMMISSION, Boston, Massachusetts.
Annual report, no. 14, 1908.

BOSTON UNIVERSITY, Boston, Massachusetts, President's report, 1907–8. Yearbook, v. 36.

BOWDOIN COLLEGE, Brunswick, Maine. Catalogue, 1908–1909.

Librarian's report, 1908–9.

BRAND, CHARLES J., Washington, D. C. Guide to modern Peru (gift).
BRANDEGEE, T. S., Berkeley, California.

r separate.

BRANDENBURG BOTANISCHER VEREIN, Brandenburg, Germany. Verhandlungen, v. 50.

BRAUNSCHWEIG VEREIN FÜR NATURWISSENSCHAFT, Braunschweig, Germany.

Jahresbericht, no. 14.

BREMEN. NATURWISSENSCHAFTLICHER VEREIN, Bremen, Germany.

JAN., 1910.

many.
r publication.

BRIGHTON AND HOVE NATURAL HISTORY AND PHILOSOPHI-

CAL SOCIETY, Brighton, England. Abstracts of papers and annual report, 1908.

BRISTOL MUSEUM AND ART GALLERY, Bristol, England.
Report, 1908.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.
London, England.

Report, Dublin meeting, 1908.

BRITISH COLUMBIA LEGISLATIVE ASSEMBLY, Victoria, British Columbia.

Sessional papers, 1908, 1909.

BRITISH COLUMBIA MINISTER OF MINES, Victoria, British Columbia.
Annual report, 1908.

BRITISH COLUMBIA PROVINCIAL MUSEUM, Victoria, British Columbia.

Visitors' guide.

- STORY H. MUSHUM, STATURAL HISTORY), London, England
- ADVING AN INSTITUTE OF ARTS AND SCIENCES, Brooklyn, New York
- *PTAN LANDWIRES HAFT LANDES VERSUCHSSTATION FÜR PELANGENKULTOR, Brunn, Austra
- NATIONAL CAREORSCHENDER VEREIN, Brunn, Austria Verlage Bungen, v. 46
- ugt skri's AcADÉMIE ROYALE DES SCIENCES, DES LETTRES
 EL DES BEAUX ARTS, Brussels, Belgium
 Accuses de la

Bulletin surrent numbers

- HE SSEES LARDEN ROTANIQUE DE L'ETAT, Brussels, Belgium : 1 a égetation en Belgique
- ED' SSELS MUSÉE ROYALE D'HISTOIRE NATURELLE, Brussels, Belgion
- HET SSELS SOCIÉTÉ D'ARCHÉOLOGIE, Brussels, Belgium, Annales, current numbers Annaure, v. 27
- BRYN MAWR COLLEGE, Bryn Mawr, Pennsylvania Calen Iar, 1989
- Monograph's, reprint series, v. 7.
 BUDAPEST SOCIÉTÉ ROYALE HONGROISE DES SCIENCES
 NATURELLES, Budapest, Hungary

Accords a greent number.

- RUENOS AIRES FACULTAD DE FILOSOFIA Y LETRAS. Buenos Aires, Argentina
- Publications, no. 4-3 BUENOS AIRES MUSEO DE FARMACOLOGIA, Buenos Aires, Argen-

r table atten-

- BUENOS AIRES MUSEO NACIONAL, Buenos Aires, Argentina Anales ser as tore
- ET FFALO, PUBLIC LIBRARY, Buffalo, New York
- UMERALO SOCIETY OF NATURAL SCIENCES, Buffalo, New York Buffelo current numbers
- BUILTENSIORO DEPARTMENT OF AGRICULTURE, Builtenzorg, Java.
 Builten a current numbers
- BUILTENFORG STANDS PLANTENTUIN, Builtenzorg, Java.
- BUSMA ARCHAEOLOGICAL SURVEY, Burma, India.

 Ect. of 1995-9

CALCUTTA. ROYAL BOTANIC GARDENS, Calcutta, India.

Annals, v. 11.

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, California.

Proceedings, current numbers.

CALIFORNIA AGRICULTURAL EXPERIMENT STATION, Berkeley,

California.

Bulletin, current numbers.

Circulars, current numbers.

CALIFORNIA STATE LIBRARY, Sacramento, California.

Biennial report, 1906-1908.

Occasional papers, current numbers.

CALIFORNIA STATE MINING BUREAU, San Francisco, California.

Bulletin, 46, 50-53.

Map.

Report, Board of Trustees, 1908.

CALIFORNIA UNIVERSITY, Berkeley, California.

32 publications.

CALL, R. ELLSWORTH, New York City.

6 publications.

CAMBRIDGE ANTIQUARIAN SOCIETY, Cambridge, England.

List of members, etc., 1909.

Proceedings, current numbers.

CAMBRIDGE MUSEUM AND LECTURE ROOMS SYNDICATE, Cambridge, England.

Annual report, no. 43, 1908.

CAMBRIDGE PHILOSOPHICAL SOCIETY, Cambridge, England.

Proceedings and transactions, current numbers.

CAMBRIDGE PUBLIC LIBRARY, Cambridge, Massachusetts.

Annual report, 1908-9.

Bulletin, current numbers.

CAMBRIDGE UNIVERSITY LIBRARY, Cambridge, England.

Report, 1908.

CAMERANO, LORENZO, Milano, Italy.

4 pamphlets.

CAMPINAS CENTRO DE CIENCIAS, Sao Paulo, Brazil.

Revista, current numbers.

CANADA. BOTANICAL SOCIETY, Halifax, Nova Scotia.

Report, 1906-7, 1907-8.

3 pamphlets.

CANADA. GOVERNMENT OF, Ottawa, Canada.

8 reports.

17 topographical sheets.

4 maps.

CANADA. ROYAL SOCIETY, Ottawa, Canada.

Proceedings and transactions, 3d. ser., v. 2.

CANADIAN INSTITUTE, Toronto, Canada.

Transactions, v. 8, no. 3.

193 FILLD MUSEUM OF NATURAL HISTORY REPORTS, VOL. III.

CAPE OF GOOD HOPE DEPARTMENT OF AGRICULTURE, Cape
Town South Atrica

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CAPE TOWN GOVERNMENT ENTOMOLOGIST, Cape Town, South

Report to 5

CARDILL NATURALISTS' SOCIETY, Cardiff, Wales

Transactions, v. 41

CARDIET PUBLIC LIBRARIES, Cardiff, Wales

Annual report, no. 46, 1907-8

**ARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACH-ING, New York City

Annual report 1908 (gift)

 ARNEGIE INSTITUTE, Pittsburgh, Pennsylvania 4 publications

CARNEGIE LIBRARY OF PITTSBURG, Pittsburgh, Pennsylvania.
Annual report, no. 14, 1929

Balletin, current numbers

CARNEGIE MUSEUM, Pittsburgh, Pennsylvania

CARPENTER, G. H., Dublin, Ireland

Irish naturalist, current numbers CARTHAGE INSTITUTE, Tunis, Africa

Revue tunisienne, current numbers

CASSON, HERBERT N., Chicago, r-publication gift).

CATANIA ACCADEMIA GIOENIA DI SCIENZE NATURALI Catania, Italy

Bollettino, current numbers

CETTE UNIVERSITÉ DE MONTPELLIER, INSTITUT DE ZOOLO-GIE, Cette, France

Memoire, no 17

CEYLON AGRICULTURAL SOCIETY, Colombo, India

o publications

CEYLON ROYAL BOTANIC GARDENS, Perademya, Ceylon o publications

* HARLESTON MUSEUM, Charleston, South Carolina 7 publications

CHICAGO ACADEMY OF SCIENCES, Chicago a publications

CHICAGO ART INSTITUTE, Chicago

CHICAGO COMMERCIAL CLUB, Chicago.

Plan of Chicago (gift)

CHICAGO HISTORICAL SOCIETY, Chicago, Annual report, 1988

CHICAGO PUBLIC LIBRARY, Chicago 6 publications

CHICAGO. SOUTH PARK COMMISSIONERS, Chicago.

Report, 1906-1908.

CHICAGO UNIVERSITY, Chicago.

70 publications.

CHILE. BIBLIOTECA NACIONAL, Santiago de Chile.

27 publications.

CHRISTIANIA MINERALOGICAL INSTITUTE, Christiania, Norway.

3 publications.

CINCINNATI MUSEUM ASSOCIATION, Cincinnati, Ohio.

Annual report, 1908.

CINCINNATI PUBLIC LIBRARY, Cincinnati, Ohio.

8 publications.

CINCINNATI UNIVERSITY, Cincinnati, Ohio.

15 publications.

CLARK UNIVERSITY, Worcester, Massachusetts.

5 publications.

CLARKE, JOHN M., Albany, New York.

ı bulletin.

CLEVELAND PUBLIC LIBRARY, Cleveland, Ohio.

5 publications.

COGNIAUX, A.

4 separates.

COIMBRA UNIVERSITY LIBRARY, Coimbra, Portugal.

Boletin, current numbers.

COLBY COLLEGE, Waterville, Maine.

Catalogue, 1908-9.

COLE, FAY COOPER, Chicago.

1 pamphlet.

COLLEGIO DE S. FIEL, S. Fiel, Portugal.

Broteria, current numbers.

COLLIERY ENGINEER COMPANY, Scranton, Pennsylvania.

Mines and minerals, current numbers.

COLLINGE, WALTER E., Berkhamsted, England.

5 reprints.

COLMAR. SOCIÉTÉ D'HISTOIRE NATURELLE, Colmar, Germany.

Mitteilungen, B. 9, 1907-8.

COLN. RAUTENSTRAUCH-JOEST-MUSEUM FÜR VOLKERKUNDE,

Cologne, Germany.

Ethnologica, v. r.

COLOMBO MUSEUM, Colombo, India.

Administrative report, 1908.

Spolia zeylanica, current numbers.

COLORADO BUREAU OF MINES, Denver, Colorado.

Report, 1907-8.

COLORADO COLLEGE, Colorado Springs, Colorado.

Studies, science ser., current numbers.

COLORADO STATE AGRICULTURAL COLLEGE, Fort Collins, Colorado. 16 publications.

192 FILLD MUSIUM OF NATURAL HISTORY -- REPORTS, VOL. 111.

COLORADO STATE HISTORICAL AND NATURAL HISTORY SO-CLETY, Denver, Colorado.

Beennal report, 1926 .

COLUMBIA UNIVERSITY, New York City.

to publication

CONCARNEAU. Lab ratoire de zoologie et de physiologie maritimes.

Concarneau. France.

Fravaux scientifiques, t. I, fasc, 2-5.

CONCILIATION INTERNATIONALE, Paris, France.

2 pamphlets

CONNECTICUT ACADEMY OF SCIENCE, New Haven, Connecticut Transactions, v. 15.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION, New Haven, Connecticut.

Bulletin, current numbers.

Report, no 31-32, 1007-8.

COOK, MELVILLE T. Newark, Delaware, preprints

COOPER ORNITHOLOGICAL CLUB, Hollywood, California.
10 publications.

COOPER UNION FOR THE ADVANCEMENT OF SCIENCE, New York City.

Annual report, no. 50.

COPENHAGEN BOTANIC GARDEN, Copenhagen, Denmark.
9 publications.

COPENHAGEN. K. BIBLIOTHEK, Copenhagen, Denmark, Aarsberetning, 1906-1909.

COPENHAGEN NATURHISTORISK FORENING, Copenhagen, Denmark, Videnskabelige meddelelser, 1908.

CORNELL UNIVERSITY, Ithaca, New York. Librarian's report, 1907-8.

r pamphlet.

COSTA RICA MUSEO NACIONAL, San José, Costa Rica.
6 publications.

CROSS, WHITMAN, Washington, D. C. 6 separates.

CROYDON NATURAL HISTORY AND SCIENTIFIC SOCIETY, Croydon, England.

Proceedings and transactions, 1907-8.

CTEA - A TON CENTRAL AGRONOMICA. Santiago de las Vegas.

re publications

CULLOM S. W., Washington, D. C.
Otheral register, U. S., v. 1-2.

CZERNOWITZ K K FRANZ JOSEPH UNIVERSITĂT, Czernowitz.

E TOTOTE

DARMSTADT VEREIN FÜR ERDKUNDE, Darmstadt, Germany. Notirblatt, 1958



Slab of fossil crinoids (*Vintacrinus socialis*), showing more than 200 individuals. Size, $7/3 \times 4/2$ feet

OF THE
UNIVERSITY OF HILLHOIS

DELAWARE COLLEGE AGRICULTURAL EXPERIMENT STATION. Newark, Delaware.

Bulletin, current numbers.

DELAWARE COUNTY INSTITUTE OF SCIENCE, Media, Pennsylvania. Proceedings, current numbers.

DENISON UNIVERSITY, Granville, Ohio.

Bulletin, current numbers.

DETROIT MUSEUM OF ART, Detroit, Michigan.

Annual report, 1908.

Bulletin, current numbers.

DETROIT PUBLIC LIBRARY, Detroit, Michigan.

Annual report, no. 44, 1908.

Bulletin, no. 20.

DEUTSCHE DENDROLOGISCHE GESELLSCHAFT, Bonn, Poppelsdorf. Mitteilungen, 1908, 1909.

DEUTSCHER NATUR. MEDISIN. VEREIN FÜR BÖHMEN "LOTUS," Prag, Austria.

35 publications.

DIAL PUBLISHING COMPANY, Chicago.

Dial, current numbers.

DIBBLEE, MRS. HENRY M., Lake Forest, Illinois. Parrots in captivity. 2 vols., Greene, W. T.

DIXON, ROLAND B., Cambridge, Massachusetts. 3 reprints.

DORSEY, GEORGE A., Chicago.

32 miscellaneous publications.

DRESDEN. GENERAL-DIRECTION DER K. SAMMLUNGEN FÜR KUNST UND WISSENSCHAFT, Dresden, Germany.

Bericht, 1906-7.

DRESDEN. GESELLSCHAFT FÜR NATUR-UND HEILKUNDE, Dresden, Germany.

Jahresberichte, 1907-8.

DRESDEN, K. ZOOLOGISCHES UND ANTHROPOLOGISCH-ETH-NOGRAPHISCHES MUSEUM, Dresden, Germany.

Abhandlungen und bericht, current numbers.

DRESDEN. NATURWISSENSCHAFTLICHE GESELLSCHAFT "ISIS." Dresden, Germany.

Sitzungsberichte und abhandlungen, current numbers.

DUBLIN NATIONAL MUSEUM OF SCIENCE AND ART, Dublin, Ireland.

List of Irish birds.

Proceedings, current numbers.

DUBLIN. ROYAL IRISH SOCIETY, Dublin, Ireland.

Proceedings, current numbers.

DUBLIN. ROYAL ZOOLOGICAL SOCIETY OF IRELAND, Dublin, Ireland.

Annual report, 1908.

194 - Phen Musical of Natural History - Reports, Vol. III

DUMERTESSHIRE AND GALLOWAY NATURAL HISTORY AND AN-1103 ARIAN SOCIETY, Dumfrie shire, Scotland.

learn term and pournal of proceedings, v. 19, 20

FAULTS SCIENTIFIC AND MICROSCOPICAL SOCIETY, London.

Reserve of Francischen a 1908 of

FAST KENT SCHENTIFIC AND NATURAL HISTORY SOCIETY, East Kent England

Report and transactions, v. S.

FDF9 ROBERT Mosking Austria-Hungary in particulation gift.

FIDENIC RGH GEOLOGICAL SOCIETY, Edinburgh, Scotland Free school vog. no. 304

F DUARURGH ROYAL BOTANIC GARDENS, Edinburgh, Scotland Notice to 8

FDENBURGH ROYAL SCOTTISH MUSEUM, Edinburgh, S. et.a. I. Garder collection of rocks Report 17, 8

FDP-BURGH ROYAL SOCIETY, Edinburgh, Scotland Proceeding, and transactions, current numbers

FIGVEL SURVEY DEPARTMENT, Giza, Egypt. a conditions.

J. JOHNMANN CARL H., Bloomington, Indiana

III BERFIFLD NATURWISSENSCHAFT VEREIN, Elberfield, Germany Labre Serichte, no. 12

ELECTROCHEMICAL AND METALLURGICAL INDUSTRY PUBLISH-ING COMPANY, New York

or pamphlet

ELLISHA MITCHELL SCIENTIFIC SOCIETY, Chapel Hill, North Carolina

Larnal current numbers

FLUIS HAVELOCK Paris, France

EMERSON ALFRED, Chicago

LAGINGERS SOCIETY OF WESTERN PENNSYLVANIA, Predough, Pennsylvania

Proceedings current number.

PAGE H. PRATT FREE LIBRARY, Baltimore, Maryland Armed report no. 24, 1928 Pattern vo. 14

FREERALIEO MME Brussels, Belgium

FASEX DASTITUTE Salem, Massachusetts,

FWANT ALFRED I McCourne, Australia - 1 anni No.

FARRINGTON, O. C., Chicago.

45 pamphlets.

3 maps.

FESTA, E.

2 pamphlets.

FIELD MUSEUM OF NATURAL HISTORY, Chicago.

585 books.

431 pamphlets (purchase).

FLEMING, JAMES H.

2 reprints.

FLORIDA AGRICULTURAL EXPERIMENT STATION, Tallahassee, Florida.

Annual report, 1908.

FLORIDA STATE GEOLOGICAL SURVEY, Tallahassee, Florida.

Bulletin, no. 1.

First report, 1907-8 (gift).

FOOTE MINERAL COMPANY, Philadelphia, Pennsylvania.

Complete mineral catalogue (gift).

FOREST AND STREAM PUBLISHING COMPANY, Chicago.

Forest and stream, current numbers.

FRANKLIN INSTITUTE, Philadelphia, Pennsylvania.

Journal, current numbers.

 $\label{eq:FREIBURG.} \textbf{FREIBURG.} \ \textbf{K.} \ \textbf{SACHS.} \ \textbf{BERGAKADEMIE}, \ \textbf{Freiburg}, \ \textbf{Germany}.$

Program, 1909-10.

FREIBURG. NATURFORSCHENDE GESELLSCHAFT, Freiburg, Germany.

Bericht.

FRENCH, GEORGE H., Carbondale, Illinois.

r pamphlet.

FRIEDLANDER, R. UND SOHN, Berlin, Germany.

Naturæ novitates, current numbers.

FUR TRADE REVIEW, New York City.

Fur trade directory, 1909-10.

FURBRINGER, M., Heidelberg, Germany.

1 publication.

GENÈVE. CONSERVATOIRE ET JARDIN BOTANIQUES, Geneva,

Switzerland.

Annuaire, v. 11, 12.

GENNEP, ARNOLD VAN, Paris, France.

2 publications.

GENOA. MUSEO CIVICO STORIA NATURALE, Genoa, Italy.

Annali, current numbers.

GEORGIA AGRICULTURAL EXPERIMENT STATION, Experiment, Georgia.

deorgia.

Bulletin, current numbers.

GEORGIA GEOLOGICAL SURVEY, Atlanta, Georgia.

Bulletin, nos. 18, 19.

GERHARD, WILLIAM J., Chicago.

3 publications.

196 - Lifth Musicm of Natural History - Reports, Vol. III.

GHISSEN UNIVERSITAT BIBLIOTHEK, Giessen, Germany, 4 Indertaining

GILSON, GUSTAV Brunels, Belgium

GLASGOW NATURAL HISTORY SOCIETY, Glasgow, Scotland, Francia from a current numbers

GUEERUP C. W. K., Lund, Sweden, Botaniska Notiser, current numbers

GORLATZ NATURFORSCHENDE GESELLSCHAFT, Gorlitz, Germany.

Abhandlungen, B. 24, 25, 26

GÖTERORG K VETENSKAPS- OCH VETTERHETS-SAMHALLE, Göteborg, Germany.

Handlingar, v. 10, 11.

GÖTTINGEN K GEORG-AUGUST-UNIVERSITÄT, Göttingen, Germany, Chronik, 1988 Verslag, 1989.

GRAZ NATURWISSENSCHAFTLICHER VEREIN FÜR STEIRMARK.
Graz, Germany.

Mitteilungen, 1908

GRAVES, F. P., Doe Run, Missouri, r. pamphlet (gift)

GREAT BRITAIN GEOLOGICAL SURVEY, London, England. Summary of progress, 1908.

GURNEY, J. H.

HARANA BIBLIOTECA NACIONAL, Havana, Cuba. Revista, t. I. nos. 1-2.

HABANA INSTITUTO DE SEGUNDA ENSENANZA, Havana, Cuba, Memeria anual, 1987-8.

HAMBURG BOTANISCHE STAATSINSTITUTEN, Hamburg, Germany, Labre d'erachte, 1926-7.

HAMBURG MUSEUM FUR VOLKERKUNDE, Hamburg, Germany, Labricoch v. 23, with Beiheft, 1-7.

HAMILTON COLLEGE, Clinton, New York Annual register, 1928-9

HANNOVER STADT BIBLIOTHEK, Hannover, Germany, Kataloge, 1918

HARRINGTON M. R.

HARTFORD PUBLIC LIBRARY, Hartford, Connecticut

HARTIAND E. SYDNEY, Gloucester, England

HARVARD COLLEGE, Cambridge, Massachusetts
Massum of Comparative Zeology:

Distriction of the second

HARVARD UNIVERSITY, Cambridge, Massachusetts.

Catalogue, 1908-9.

Official register, 1907-8.

HASSE, C., Berlin, Germany.

I pamphlet.

HATCH AGRICULTURAL EXPERIMENT STATION, Amherst, Massachusetts.

Bulletin, current numbers (gift).

HAWAII AGRICULTURAL EXPERIMENT STATION, Honolulu, Hawaiian Islands.

Annual report, 1908.

Bulletin, current numbers.

HAWAIIAN SUGAR PLANTERS ASSOCIATION, Honolulu, Hawaiian Islands.

5 publications.

HEIDELBERG. UNIVERSITÄTS-BIBLIOTHEK, Heidelberg, Germany. 31 inaugural dissertations.

HELLER, A. A., Las Vegas, New Mexico. Muhlenbergia, current numbers.

HERRICK, G. W., Austin, Texas.

1 pamphlet.

HONGKONG BOTANICAL AND FORESTRY DEPARTMENT, Hong-kong, China.

Report, 1908.

HONOLULU. BOARD OF AGRICULTURE, HORTICULTURE AND FORESTRY, Honolulu, Hawaiian Islands.

Hawaiian forester, current numbers.

HORNIMAN MUSEUM AND LIBRARY, London, England.
2 publications.

HOUGH, WALTER, Washington, D. C.

1 pamphlet.

HOVEY, EDMUND OTIS, New York City.

2 reprints.

HULL MUNICIPAL MUSEUM, Hull, England.

6 publications.

IDAHO AGRICULTURAL EXPERIMENT STATION, Moscow, Idaho.
Annual report, 1908.

Bulletin, current numbers.

ILES, GEORGE, New York City.

2 pamphlets,

ILLINOIS EDUCATIONAL COMMISSION, Springfield, Illinois. Final report, 1909 (gift).

ILLINOIS GEOLOGICAL SURVEY, Urbana, Illinois.

3 publications.

ILLINOIS MUSEUM OF NATURAL HISTORY, Springfield, Illinois. Report, 1908.

ILLINOIS NATURAL HISTORY SURVEY, Urbana, Illinois. Fishes of Illinois and atlas.

308 FIELD MUSEUM OF NATURAL HISTORY REPORTS, Vol. 111.

ILLINOIS STATE ACADEMY OF SCIENCE, Springfield, Illinois Transactions, vol. 15, 8

ILLINOIS STATE HISTORICAL LIBRARY, Springfield, Illinois Collection (1994)

ILLINOIS UNIVERSITY Urbana, Illinois 42 publications

INDIA ARCHAEOLOGICAL SURVEY, Calcutta, India , paydications

INDIA ROTANICAL SURVEY, Calcutta, India-

INDIA GEOLOGICAL SURVEY, Calcutta India Memory current numbers Mineral resources of India

INDIA GOVERNMENT OF, Calcutta, India Agricultural ledger, current numbers copublications

INDIAN FORESTER, Allahabad, India Current numbers

INDIAN MUSEUM Calcutta, India 8 publications

INDIANA ACADEMY OF SCIENCE, Indianapolis, Indiana Proceedings, 1908

INDIANA BOARD OF STATE CHARITIES, Indianapolis, Indiana Annual report, no. 19, 1908 Bulletin, June, 1909

INDIANA DEPARTMENT OF GEOLOGY AND NATURAL RE-SOURCES, Indianapolis, Indiana

Report, no 33, 1908

INLAND PRINTER PUBLISHING COMPANY Chicago Inland printer, v. 42, 43

INTERSTATE COMMERCE COMMISSION, Washington, D. C. Annual report, no. 22, 1908.

IOWA ACADEMY OF SCIENCE, Des Moines, Iowa-Proceedings, v. 15.

IOWA GEOLOGICAL SURVEY, Des Moines, Iowa-Report, v. 18, 1907

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS, Ames. Iowa

Bulletin, current numbers. Catalogue, 1909-10

IOWA STATE HISTORICAL DEPARTMENT, Des Moines, Iowa, Annals, current numbers Biennial report, no. 9

IOWA STATE HORTICULTURAL SOCIETY, Des Moines, Iowa, Transactions, v. 43

IOWA STATE UNIVERSITY, Iowa City, Iowa. Calendar, 1929-12 IRELAND. DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION, Dublin, Ireland.

21 publications.

JACKSON, HARTLEY H. T., Milton, Wisconsin.

2 separates (gift).

JAMAICA BOTANIC GARDENS, Kingston, Jamaica.

Department of Agriculture;

Bulletin, current numbers.

JANCHEN, ERWIN.

r pamphlet (gift).

JAPAN ASIATIC SOCIETY, Tokyo, Japan.

Constitution and by-laws, etc.

JASSY UNIVERSITÉ, Jassy, Roumania.

Annales scientifiques, v. 6, no. 1.

JOHN CRERAR LIBRARY, Chicago.

Annual report, no. 14.

List of books — reading room.

JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland.

Register, 1908-9.

JOURNAL OF GEOGRAPHY, New York City.

Journal, current numbers.

KANSAS ACADEMY OF SCIENCES, Topeka, Kansas.

Transactions, v. 22.

KANSAS STATE AGRICULTURAL COLLEGE, Topeka, Kansas.

Annual report, no. 21, 1907-8.

Bulletin, current numbers.

KANSAS STATE BOARD OF AGRICULTURE, Topeka, Kansas.

Biennial report, 1907-8.

KARLSRUHE. GROSSHERZOGL. BAD. GARTENDIRECTION, Karlsruhe, Germany.

ı pamphlet.

KARLSRUHE. NATURWISSENSCHAFTLICHER VEREIN, Karlsruhe, Germany.

Verhandlungen, b. 21, 1907–8.

KAUKASISCHE MUSEUM, Tiflis, Russia.

Mitteilungen, v. 4, nos. 1-2.

KENTUCKY AGRICULTURAL EXPERIMENT STATION, Lexington, Kentucky.

Annual report, nos. 14, 18-20.

Bulletin, current numbers.

KEW. ROYAL BOTANIC GARDENS, Kew, England.

21 publications.

KIEL. K. UNIVERSITÄTS-BIBLIOTHEK, Kiel, Germany.

Bericht, 1908.

K. NATUURKUNDIGE VEREENIGING NEDERLANDISCHE INDIE, Weltevreden.

Natuurkundig tijdschrift, v. 68.

KROEBER, A. L., Berkeley, California.

ı pamphlet.

FILE MESTER OF NATURAL HISTORY - REPORTS, Vol. III.

El agricultor current numbers.

LAPIATA MUSEO DE, La Plata, Argentina.

LAFONE QUEVEDO SAMUEL A. Buenos Aires, Argentina

LAKE FOREST COLLEGE, Lake Forest, Illinois (catalog to 8 o

LAKE MOHONK CONFERENCE ON INTERNATIONAL ARBITRA-TION, Lake Mohonk, New York.

LANCASHIRE SEA-FISHERIES LABORATORY, Liverpool, England, Report 1928

LAWRENCE FREE PUBLIC LIBRARY, Lawrence, Massachusetts.
Annual report, 1927

LEICESTER MUSEUM AND ART GALLERY, Borough of Leicester, England

Report, no. 17, 1905-8

LEIDEN RIJKS ETHNOGRAPHISCH, MUSEUM, Leiden, Netherlands, Verslag, 1997. S

LEIDEN RIJKS MUSEUM VAN NATUURLIJKE HISTOIRE, Leiden, Netherlands

Leyden notes, current numbers.

LEHPZIG K SACHISCHE GESELLSCHAFT DER WISSENSCHAFTEN, Leipzig, Germany.

Berelit, current numbers.

LEIPZIG MUSEUM FUR VOLKERKUNDE, Leipzig, Germany, perblication.

LEVALLOIS PERRET L'ASSOCIATION DES NATURALISTES, Levallois-Perret, France

a reble atoms.

LEWIS, V. B. Chicago

LEWIS INSTITUTE, Chicago Director's report, 1978 Register, 19, 8-9

LIEBECK C. F. Chicago

LIMA SO IEDAD GEOGRAFICA, Lima, Peru Belleten tega

LUNVILLE HENRY R., Jamaica, New York,

Proceedings and transactions, v. 22.

LIVERPOOL GEOLOGICAL SOCIETY, Liverpool, England, Pr. ochogs correct numbers.

LIVERPOOT, MARINE BIOLOGICAL COMMITTEE, Liverpool, England, Report Port Erin Station, no. 22

LLOYD LIBRARY, Cincinnati, Ohio.

Bulletin, reproduction series, no. 7.

LONDON FOLK-LORE SOCIETY, London, England.

Publications, no. 60, 63.

LONDON. GEOLOGICAL SURVEY AND MUSEUM, London, England. Guide.

LONDON. LINNEAN SOCIETY, London, England.

8 publications.

LONDON. ROYAL GEOGRAPHICAL SOCIETY, London, England. Proceedings, current numbers.

LONDON. ROYAL HORTICULTURAL SOCIETY, London, England. Journal, current numbers.

LONDON. SOCIETY OF ARTS, London, England.

Journal, current numbers.

LONDON ZOÖLOGICAL SOCIETY, London, England.

Proceedings, current numbers.

Transactions, current numbers.

LOUBAT, DUC DE, Paris, France.

4 publications.

LOUISIANA AGRICULTURAL EXPERIMENT STATION, Baton Rouge, Louisiana.

5 publications.

LOUISIANA GEOLOGICAL SURVEY, Baton Rouge, Louisiana. Bulletin, nos. 6–8.

McGILL UNIVERSITY, Montreal, Canada.

Publications, current numbers.

MACRITCHIE, DAVID, Edinburgh, Scotland.

2 pamphlets.

MADRAS. AGRI-HORTICULTURAL SOCIETY, Madras, India.

Annual meeting, 1909.

Proceedings, current numbers.

MADRAS. DEPARTMENT OF AGRICULTURE, Madras, India. 5 publications.

MADRID. R. ACADÉMIA DE CIENCIAS, Madrid, Spain.

Memorias, t. 26.

Revista, current numbers.

MADRID. SOCIEDAD ESPANOLA DE HISTORIA NATURAL, Madrid, Spain.

Bulletin, current numbers.

Memorias, current numbers.

MAGYAR NEMZETI MUZEUM, Budapest, Hungary.

Annales, current numbers.

MAIDEN, J. H., Sydney, New South Wales.

ı pamphlet.

MAINE AGRICULTURAL EXPERIMENT STATION, Orono, Maine. Bulletin, current numbers.

MAINE STATE LIBRARY, Augusta, Maine.

5 state publications.

1 2 There Mesermon Natural History Reports, Vol. 111.

MAINE AND PRINTS IN CO. S.S. Maine

MANN HISTORIA DESTITUTE OF ARTS AND SCIENCES, Manchester, No. 4 Hourshire

William December 2.

MAND HE STER TIMERARY AND PHILOSOPHICAL SOCIETY, Man-

the as been content number.

MANN HESTER MUSEUM OWENS COLLEGE, Manchester, England,

MARRITRG GESEILLSCHAFT ZUR BEFÖRDERUNG DER GESAMTEN NATURWISSENSCHAFTEN, Marburg, Germany

Strang benching to S

MARRURG UNIVERSITAT, Marburg, Germany

thronk to s

as he estations

MARIETIA COLLEGE, Marietta, Ohio-

Catalogue, 19 5 9

MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM Presenth, England

International fisheries investigations, 1904-5

sernal current numbers

MARSEILLE FACULTÉ DES SCIENCES, Marseille, France.

MARSEILLE MUSÉE COLONIAL, Marseille, France

Annales, ed sers, v. 6 WARSEILLE MUSÉE D'HISTOIRE NATURELLE, Marseille, France.

Annales to re
MARYLAND AGRICULTURAL EXPERIMENT STATION, College Park,

Maryland Aringal report, v. 22, 1908-9

Lattering correct massey been

MARYLAND INSTITUTE, Baltimore, Maryland,

MARYLAND STATE HORTICULTURAL SOCIETY, College Park, Mary-

Report, no. 11, 1988.

WASSACHU SELIS INSTITUTE OF TECHNOLOGY, Boston, Massa-

Mater correct number.

to the gardina to

WAY FIFTH FOREST AND GARDEN DEPARTMENT, Mauritius, Accordings

MET BOURNE I MIVERSITY, McPourne, Australia

MUNIO BUBLIOTECA NACIONAL, Mexico, Mexico,

WEXT O DESTRUCTO GEOLOGICO, Mexico, Mexico,

MEXICO. MUSEO NACIONAL, Mexico, Mexico.

Anales, current numbers.

MEXICO. SOCIEDAD GEOLOGICA, Mexico, Mexico.

Boletin, t. 3-4.

MICHIGAN AGRICULTURAL EXPERIMENT STATION, Lansing, Michigan.

Annual report, v. 18-21.

Bulletin, current numbers.

MICHIGAN COLLEGE OF MINES, Houghton, Michigan.

Yearbook, 1908-9.

MICHIGAN GEOLOGICAL SURVEY, Lansing, Michigan.

Annual report, 1905, 1906, 1907, 1908.

MICHIGAN UNIVERSITY, Ann Arbor, Michigan.

11 publications.

MILANO. SOCIETA ITALIANA DI SCIENZE NATURALI, Milano, Italy. Atti, current numbers.

MILLS, WILLIAM C., Columbus, Ohio.

1 pamphlet.

MILLSPAUGH, CHARLES FREDERICK, Chicago.

60 botanical publications.

MINING WORLD PUBLISHING COMPANY, Chicago.

Journal, current numbers (gift).

MINNEAPOLIS PUBLIC LIBRARY, Minneapolis, Minnesota.

Annual report, 1908.

MINNESOTA AGRICULTURAL EXPERIMENT STATION, Minneapolis,

Minnesota.

Annual report, 1908.

Bulletin, current numbers.

MINNESOTA GEOLOGICAL AND NATURAL HISTORY SURVEY,

Minneapolis, Minnesota.

Botanical studies, v. 4, no. 1.

MINNESOTA HISTORICAL SOCIETY, St. Paul, Minnesota.

Collections, v. 12-13.

MISSISSIPPI AGRICULTURAL EXPERIMENT STATION, Agricultural College, Mississippi.

Bulletin (gift).

MISSISSIPPI GEOLOGICAL SURVEY, Jackson, Mississippi.

Bulletin, nos. 1-4 (gift).

MISSOURI AGRICULTURAL EXPERIMENT STATION, Columbia,

Missouri

Bulletin, current numbers.

MISSOURI BUREAU OF GEOLOGY AND MINES, Jefferson City,

Missouri.

5 publications.

MISSOURI UNIVERSITY, Columbia, Missouri.

r publication.

MONTANA AGRICULTURAL EXPERIMENT STATION, Bozeman, Montana.

Bulletin, current numbers.

424 FIELD MUSEUM OF NATURAL HISTORY - REPORTS, Vol. III.

MONTANA STATE UNIVERSITY, Missoula, Montana.

MONTEVIDEO MUSEO NACIONAL, Montevideo, Uruguay.

Value V t. pt 1

MetoDIF ROY L. Lawrence, Kansas.

reprint gift

MOORE CLARENCE B. Philadelphia, Pennsylvania.

WUNGHEN DEUTSCHES MUSEUM, Munich, Germany, publications.

MUNCHEN K. K. AKADEMIE DER WISSENSCHAFTEN, Munich, Germany

Bericht, current numbers.

MUNN AND COMPANY, New York City. Scientific American, current numbers.

MUSEE DU CONGO, Brussels, Belgium.

MUSÉE GUIMET, Paris, France.
2 publications.

MUSEO ZOOLOGICO DELLA R. UNIVERSITA DI NAPOLI, Naples, Italy.

Annuario, n. s., v. 2, nos. 1-6, 8-16.

MUSEU PAULISTA, Sao Paulo, Brazil. Revista, v. 7.

NAPOLI R. ACCADEMIA DELLE SCIENZE, Naples, Italy.
Atti, current numbers.

Rendiconti, current numbers.

NAPOLI SOCIETA DI NATURALISTI, Naples, Italy. Bollettino, ser. 1, v. 20; ser. 2, v. 21.

NATAL BOTANIC GARDENS, Durban, Natal. Natal plants, v. 6, pt. 1.

NATAL GOVERNMENT MUSEUM, Pietermaritzburg, Africa. Annals, v. 2, no. 1.

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C. Magazine, current numbers.

NATURALISTE CANADIEN, Chicoutimi, Canada.

Lurnal, current numbers.

VATURFORSCHENDE GESELLSCHAFT, Basel, Switzerland.
Verhandlungen, current numbers.

NEBRASKA ACADEMY OF SCIENCES, Lincoln, Nebraska, Proceedings, v. 28, no. 3.

NUBRASIA AGRICULTURAL EXPERIMENT STATION, Lincoln, Nebraska

Vanual report, no. 22.

Bulletin, current numbers

NEBRASKA GEOLOGICAL SURVEY, Lincoln, Nebraska, r publications



Group of Atlantic Fishes from Coast of Florida.

OF THE UNIVERSITY OF HITHBUS

NEBRASKA STATE LIBRARY, Lincoln, Nebraska.

Studies, current numbers.

NEBRASKA UNIVERSITY, Lincoln, Nebraska.

Calendar, 1909-10.

NEDERLANDSCH-INDIE. DEPARTEMENT VAN LANDBOUW, Buitenzorg, Java.

2 publications.

NEDERLANDSCH-INDIE. K. INSTITUT DE TAAL-, LAND- EN VOLKENKUNDE, Batavia, Java.

2 publications.

NEDERLANDSCH-INDIE. K. NATUURKUNDIGE VEREENIGING, Batavia, Java.

Register, 1875-1908.

Tijdschrift, v. 68.

NEW BEDFORD FREE PUBLIC LIBRARY, New Bedford, Massa-

Annual report, v. 56, 57, 1907-1908.

Bulletin, current numbers.

NEW HAMPSHIRE COLLEGE OF AGRICULTURE, Durham, New Hampshire.

Bulletin, current numbers.

Catalogue, 1908-9.

Report, nos. 19-20.

NEW JERSEY AGRICULTURAL COLLEGE EXPERIMENT STATION, Trenton, New Jersey.

9 publications.

NEW JERSEY GEOLOGICAL SURVEY, Trenton, New Jersey. Annual report, 1908.

NEW JERSEY HORTICULTURAL SOCIETY, Trenton, New Jersey. Proceedings, 34th annual session, 1909.

NEW JERSEY STATE MUSEUM, Trenton, New Jersey. Annual report, 1908.

NEW MEXICO AGRICULTURAL EXPERIMENT STATION, Mesilla Park. New Mexico.

Bulletin, current numbers.

NEW MEXICO HISTORICAL SOCIETY, Santa Fe, New Mexico. 8 publications.

NEW SOUTH WALES. BOTANIC GARDENS AND GOVERNMENT DOMAINS, Sydney, New South Wales.

Annual report, 1907, 1908.

NEW SOUTH WALES. DEPARTMENT OF FISHERIES, Sydney, New South Wales.

Report, 1908.

NEW SOUTH WALES. DEPARTMENT OF MINES AND AGRICUL-TURE, Sydney, New South Wales.

NEW SOUTH WALES LINNEAN SOCIETY, Sydney, New South Wales. Proceedings, current numbers.

1 . Field Maseau of Natural History Reports, Vol. III.

- NI W. VORE, ACADEMY OF SCIENCES, New York City, Academic Sciences
- NEW YORK AGRICULTURAL EXPERIMENT STATION, Geneval 1990 (1994)
- J. W. AORK, BOTANICAL, GARDEN, New York City, E. Weter correct number.
- NEW YORK MERCANTILE LIBRARY, New York City Report for SS, 1978
- NEW YORK METROPOLITAN MUSEUM OF ART, New York City, Annual report, no. 19, 1978. Bulletin current numbers
- NEW YORK PUBLIC LIBRARY, New York City.
 Bulletin, current numbers
- NEW YORK STATE FOREST, FISH AND GAME COMMISSION, Albany, New York
- MEW YORK STATE LIBRARY, Albany, New York, Education Department: Annual report, 1989, 2 vs.
- NEW YORK STATE MUSEUM, Albany, New York
- NEW YORK ZOÖLOGICAL SOCIETY, New York City, Associal report, no. 14, 1928. Bulletin, current numbers
- NEW ZUALAND DEPARTMENT OF AGRICULTURE, Wellington, New Zealand
- NEW ZEALAND DEPARTMENT OF MINES, Wellington, New Zealand Geological survey Bulletin, no. 16-7
- NEW ZEALAND INSTITUTE, Wellington, New Zealand, Proceeding a vortex. Transactional vortex.
- NEWBERRY LIBRARY, Chicago.
- NICARAGOAN GOVERNMENT, Guatemala, Nicaragua
- NOWTH CAROLINA AGRICULTURAL EXPERIMENT STATION, Ruleigh North Carolina B Notice Surrent numbers (gift).
- NOPTH VIOLINA STATE GEOLOGICAL AND ECONOMIC SURVEY.

 Classed Hell North Carolina.
- NORTH DISCORD AGRICULTURAL EXPERIMENT STATION, Fargo. Now to the α

It it was a comment according

NUMISMATIC AND ANTIQUARIAN SOCIETY, Montreal, Canada. Canadian antiquarian, current numbers.

NÜRNBERG, NATURHISTORISCHE GESELLSCHAFT, Nuremberg, Germany.

Abhandlungen, v. 17.

Mitteilungen, 1907, no. 1-6; 1908, no. 1.

OBERLIN COLLEGE, Oberlin, Ohio.

Annual report of librarian, 1908.

Laboratory bulletin, nos, 14, 15.

OHIO AGRICULTURAL EXPERIMENT STATION, Wooster, Ohio. Bulletin, current numbers.

OHIO GEOLOGICAL SURVEY, Columbus, Ohio.

ı map.

OHIO STATE ARCHÆOLOGICAL AND HISTORICAL SOCIETY, Columbus, Ohio.

Journal, quarterly.

OHIO STATE BOARD OF AGRICULTURE, Columbus, Ohio. 8 publications.

OHIO STATE UNIVERSITY, Columbus, Ohio.

5 publications.

OKLAHOMA AGRICULTURAL EXPERIMENT STATION, Stillwater, Oklahoma.

Bulletin, current numbers.

OMAHA PUBLIC LIBRARY, Omaha, Nebraska.

Bulletin, current numbers.

ONEIDA HISTORICAL SOCIETY, Utica, New York.
Yearbook, no. 10.

ONTARIO. DEPARTMENT OF AGRICULTURE, Ontario, Canada. 15 reports.

OPEN COURT PUBLISHING COMPANY, Chicago.

Monist, current numbers.

ı pamphlet.

OREGON AGRICULTURAL EXPERIMENT STATION, Corvallis, Oregon. Bulletin, current numbers (gift).

OREGON STATE BIOLOGIST, Eugene, Oregon.

Biennial report, 1907-8.

ORNITHOLOGISCHE GESELLSCHAFT, Munich, Germany. Verhandlungen, v. 8.

OTAGO UNIVERSITY MUSEUM, Dunedin, New Zealand.

Curator's report, 1908–9 (gift). OTTAWA FIELD NATURALISTS' CLUB, Ottawa, Canada.

Ottawa naturalist, current numbers.

OUTES, FELIX F., Buenos Aires, Argentina. 10 reprints.

OUTING PUBLISHING COMPANY, New York City.
Outing magazine, current numbers.

OXFORD UNIVERSITY MUSEUM, Oxford, England. Annual report, no. 21, 1908.

ES - FIELD MUSICM OF NATURAL HISTORY - REPORTS, Vol. III.

PALACHE CHARLES Cambridge, Massachusetts

PALERMO R ORTO ROTANICO E GIARDINO COLONIALE, Palermo, 1985.

Symmetric annual roy 5.

a cerebigia in to biology, v. 1, no. 2.

PAN, AMERICAN SCIENTIFIC CONGRESS, Washington, D. C. Reight, 1979.

PARIS ACADEMIE DES SCIENCES, Paris, France, Compte, rendus current numbers.

PARIS Recola: D'ANTHROPOLOGIE, Paris, France Revue surrent numbers

PARIS MUSEUM D'HISTOIRE NATURELLE, Paris, France Bulletin current numbers

PARIS SOCIETÉ DES AMERICANISTES, Paris, France Leimal, current numbers

PARIS SOCIETÉ NATIONALE D'AGRICULTURE, Paris, France, Bulletin, current numbers

PARKE DAVIS & COMPANY, Detroit, Michigan, Bulletin of pharmacy, current numbers (gift)

PEARODY INSTITUTE, Peabody, Massachusetts.
Annual report, no. 57, 1908.

PEARODY MUSEUM OF AMERICAN ARCHÆOLOGY AND ETH-NOLOGY, Cambridge, Massachusetts

Memorra, v. 4, no. 2

Report, no. 42, 1027-8
PENASYLVANIA AGRICULTURAL EXPERIMENT STATION, Harrisburg, Pennaylyania

Bulletin current numbers

PENNSYLVANIA DEPARTMENT OF FORESTRY, Harrisburg, Pennsylvania

Report, 1921 1927

PENNSYLVANIA MUSEUM AND SCHOOL OF INDUSTRIAL ARTS.
Philadelphia, Pennsylvania.

PENASYLVANIA UNIVERSITY, Philadelphia, Pennsylvania excibilisation.

PENROSE R. A. F., JR., Philadelphia, Pennsylvania

PERRINS INSTITUTE AND MASSACHUSETTS SCHOOL FOR THE BLIND, Boston, Massachusetts

Versial report no 77, 1908.

PHRIHSHIRE NATURAL HISTORY MUSEUM, Perth. Scotland.
History handle-ok
Report, 1

PERTHSHIRE SOCIETY OF NATURAL SCIENCE, Perth. Scotland. 12 publications

PERU : UERPO DE INGENIEROS DE MINAS, Lima, Peru.

B detin, current numbers

PERU INSTITUTO HISTORICO, Lima, Peru.

Revista, current numbers.

PHILADELPHIA ACADEMY OF NATURAL SCIENCES, Philadelphia, Pennsylvania.

Proceedings, 1908.

PHILADELPHIA COLLEGE OF PHARMACY, Philadelphia, Pennsylvania.

American journal of pharmacy, current numbers.

PHILADELPHIA COLLEGE OF PHYSICIANS, Philadelphia, Pennsylvania.

Transactions, v. 30.

PHILADELPHIA FREE LIBRARY, Philadelphia, Pennsylvania.
Annual report, no. 13, 1909.

PHILADELPHIA GEOGRAPHICAL SOCIETY, Philadelphia, Pennsylvania.

Bulletin, current numbers.

PHILADELPHIA LIBRARY COMPANY, Philadelphia, Pennsylvania. Bulletin, no. 62, 63.

PHILIPPINE ISLANDS. BUREAU OF SCIENCE, Manila, Philippine Islands.

22 publications.

PHILLIPS ACADEMY, Andover, Massachusetts.

Bulletin, current numbers.

Catalogue, 1909.

 $\begin{array}{c} \textbf{PIETERMARITZBURG. BOTANIC SOCIETY, Pietermaritzburg, South} \\ \textbf{Africa.} \end{array}$

Annual report, 1908.

PIOLTI, GIUSEPPE, Torino, Italy.

3 pamphlets.

PISA. SOCIETA TOSCANA DI SCIENZE NATURALI, Pisa, Italy. Atti, current numbers.

Memorie, v. 24.

PORTICI R. SCUOLA SUPERIORE D'AGRICULTURA, Portici, Italy. Bollettino, v. 3.

PORTLAND PUBLIC LIBRARY, Portland, Maine.

Annual report, 1908.

PORTLAND SOCIETY OF NATURAL HISTORY, Portland, Maine. Proceedings, v. 2, pt. 8.

PORTO RICO AGRICULTURAL EXPERIMENT STATION, Mayaguez, Porto Rico. $\ \ \,$

Annual report, 1908.

POSEN. DEUTSCHE GESELLSCHAFT FÜR KUNST UND WISSENSCHAFT, Posen, Germany.

Zeitschrift der Naturw. Abtheilung, current numbers.

PRAG. ACADÉMIE DES SCIENCES DE L'EMPEREUR FRANÇOIS JOSEPH I., Prag. Austria.

24 publications.

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PRAGEA, BOHM GESTILSCHAFT DER WISSENSCHAFTEN, Prage

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PRAIL Destrict Free LIBRARY, Brocklyn, New York, to Note to current number.

PROCESS HER BOTANISCHE VEREIN, Königsberg, Germany Udire Cerebit, 19-7

PRUSS FION UNIVERSITY, Princeton, New Jersey Cotal guessia 8, 29

PROVIDENCE ATHEN.EUM, Providence, Rhode Island -Annual report, no. 74, 1918

PROVIDENCE PUBLIC LIBRARY, Providence, Rhode Island Annual report, no. 44, 1958

PURDUE UNIVERSITY, Lafayette, Indiana

QUEENSLAND GEOLOGICAL SURVEY, Brisbane, Queensland $\varphi \in \operatorname{publications}$

QUEENSLAND MUSEUM, Brisbane, Queensland,

QUEENSLAND ROYAL GEOGRAPHICAL SOCIETY, Brisbane, Queen + land

menal, v 21

QUEENSLAND ROYAL SOCIETY, Brisbane, Queensland, Proceedings, v. 24

RANDALL & COMPANY, Chicago Clayworker, current numbers (gift)

REID, HARRY F. Baltimore, Maryland

RUNNES UNIVERSITY, Rennes, France.

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PUR HUNRDH DELV New York

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ROGER WILLIAMS PARK MUSEUM, Providence, Rhode Island. Annual report, 1908.

Bulletin, v. 1-4.

ROME. R. ACCADEMIA DEI LINCEI, Rome, Italy.
Atti, current numbers.
Rendiconti, current numbers.

ROME. SOCIETA GEOGRAFICA ITALIANA, Rome, Italy. Bollettino, current numbers.

ROME. SOCIETA ROMANA DI ANTROPOLOGIA, Rome, Italy. Atti, current numbers.

ROSE POLYTECHNIC INSTITUTE, Terre Haute, Indiana. Catalogue, 1908-09.

ROTH, WALTER, E., Sydney, New South Wales. 2 pamphlets.

ROTHMANN, C. G., St. Louis, Missouri. r pamphlet.

ROTTERDAM MUSEUM VOOR LAND-EN-VOLKENKUNDE, Rotterdam, Holland.

Verslag, 1909.

ROYAL ARCHÆOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND, London, England.

Journal, current numbers.

ROYAL ASIATIC SOCIETY, CEYLON BRANCH, Colombo, India. Journal, no. 59-61.

ROYAL DUBLIN SOCIETY, Dublin, Ireland. 5 publications.

RUTOT, A., Brussels, Belgium.

4 separates.

ST. GALL. OSTSCH, GEOGRAPH, COMMERC, GESELLSCHAFT, St. Gall Switzerland.

Mitteilungen, v. 2, 1908.

Report, 1907.

ST. LAURENT COLLEGE, Montreal, Canada.

Catalog, 1908-09.

ST. LOUIS ACADEMY OF SCIENCES, St. Louis, Missouri.

Transactions, current numbers.

ST. LOUIS MERCANTILE LIBRARY ASSOCIATION, St. Louis, Missouri.

Annual report, no. 63, 1908.

ST. LOUIS MUSEUM OF FINE ARTS, St. Louis, Missouri.
3 publications.

ST. LOUIS PUBLIC LIBRARY, St. Louis, Missouri.

Bulletin, current numbers.

Report, 1907-8, 1908-9.

ST. LOUIS UNIVERSITY, St. Louis, Missouri.

Bulletin, current numbers.

Catalogue, 1909.

113 FILED MESIUM OF NATURAL HISTORY REPORTS, Vol. III.

ST PETERSBURG ACADÉMIE IMPÉRIALE DES SCIENCES, St. Peter Seitg. Russia

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SATEM PUBLIC LIBRARY, Salem, Massachusetts

SAN FRANCISCO MECHANICS INSTITUTE, San Francisco, California.

Annual report, no. 52, 53

SAN SALVADOR MUSEO NACIONAL, San Salvador,

Ander current numbers.

SAO PAULO INSTITUTO AGRONOMICO, Sao Paulo, Brazil. Beletin, current numbers.

SAO PAULO MUSEU PAULISTA, Sao Paulo, Brazil.

Catalogo, da fauna brazileira, v. 2. SAO PAULO SOCIEDAD CIENTIFICA, São Paulo, Brazil.

Revista, v. 2 no. 9-12.

r tamphlet

SAÔNE ET LOIRE SOCIÉTÉ DES SCIENCES NATURELLES, Châlonsur-Saône, France.

Bulletin, current numbers.

SARDOVO STATL, LANDW, VERSUCHSSTATION, Sardovo, Bulgaria.

SATURDAY REVIEW, London, England.

Current numbers.

SAUVAGEAU, C., Bordeaux, France.

a pamphict

SCHARIZER, RUDOLF, Graz, Germany.

r reprint

SCHENCK, C. A. Biltmore, North Carolina.

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SCHLESISCHE GESELLSCHAFT FÜR VATERLÄNDISCHE CULTUR.
Bredan, Germany.

problemation.

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Vertice to a 10 2:1929

SCOTEAND FISHERIES BOARD, Glasgow, Scotland.

Annual report, pt r. no. 27, 1908.

SENG KENBERGISCHE NATURFORSCHENDE GESELLSCHAFT.
Frankfortsam-Main, Germany.

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SKIFF, F. J. V., Chicago.

10 publications (gift).

SLOCOM, A. W., Chicago.

ı pamphlet.

SLONAKER, JAMES R., Palo Alto, California.

r reprint.

SMITH, JOHN B., New Brunswick, New Jersey.
2 pamphlets.

SMITH, JOHN D., Baltimore, Maryland. 4 publications.

SMITHSONIAN INSTITUTION, Washington, D. C. 29 publications.

SOCIEDAD CIENTIFICA "ANTONIO ALZATE," Mexico, Mexico. Memorias, current numbers.

SOCIETA AFRICANA D'ITALIA, Naples, Italy. Bollettino, v. 28, no. 1–4.

SOCIETA TOSCANA DI SCIENZE NATURALI, Pisa, Italy. Memorie, v. 24.

SOCIETAS PRO FAUNA ET FLORA FENNICA, Helsingfors, Finland. Meddelanden, v. 33-35.

SOCIÉTÉ BELGE DE GÉOLOGIE, DE PALÉONTOLOGIE ET D'HY-DROLOGIE, Brussels, Belgium.

Bulletin, v. 21-22, 23, no. 1-6.

SOCIÉTÉ BOTANIQUE DE FRANCE, Paris, France. Bulletin, current numbers.

SOCIÉTÉ DE GÉOGRAPHIE, Toulouse, France. Bulletin, current numbers.

SOCIÉTÉ DE PHYSIQUE ET D'HISTOIRE NATURELLE, Geneva, Switzerland.

Comptes rendus des séances, v. 25, 1908.

Mémoires, current numbers.

SOCIÉTÉ DES NATURALISTES DE KIEV, Kiev, Russia.

Mémoires, v. 1, no. 1.

SOCIÉTÉ DES SCIENCES, Nancy, France.

Bulletin, current numbers.

SOCIÉTÉ ENTOMOLOGIQUE SUISSE, Bern, Switzerland.

Mitteilungen, v. 11, no. 9. SOCIÉTÉ FRIBOURGEOISE DES SCIENCES NATURELLES, Fribourg, Switzerland.

Compte rendu, 1907-8.

Mémoires, v. 6.

SOCIÉTÉ GÉOLOGIQUE DU NORD, Lille, France.

Annales, v. 36, 1907.

SOCIÉTÉ IMPÉRIALE DES AMIS DE SCIENCES NATURELLES, D'ANTHROPOLOGIE ET ETHNOGRAPHIE, Moscow, Russia.

Bulletin, 1908.

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- See H TE ZOOLOGIQUE DE FRANCE, Paris, France Refleting volume Monogrephical
- SOIL THE AFRICA GEOLOGICAL SURVEY, Johannesburg, South Africa Francactions, current numbers
- SOUTH AFRICA ROYAL SOCIETY, Cape Town, South Africa Francactions, v. r. no. r
- SOUTH AFRICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Grahamstown, South Africa Report 1978
- SOUTH AFRICAN CENTRAL LOCUST BUREAU, Pretoria, South Africa, Annual report no 2, 3, 1908, 1909 (gift)
- SOUTH AFRICAN MUSEUM, Cape Town, South Africa. Report to 8
- SOUTH AFRICAN PHILOSOPHICAL SOCIETY, Cape Town, South

Iran action current numbers

SOUTH AUSTRALIA DEPARTMENT OF AGRICULTURE AND IN-TELLIGENCE, Adelaide, South Australia

Relletin arrent number.

A service server number.

December 1

- STILL AT STRAILEA PUBLIC LIBRARY, MUSEUM AND ART GAL-LUNY A Islands, South Australia
- S. C. TH. AVESTIVACIA ROYAL, SOCIETY, Adelaide, South Australia, Proceedings, vol. 12
- SOUTH CAROLDAY AGRICULTURAL EXPERIMENT STATION, Clem-

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SOUTH DAROTA AGRICULTURAL EXPERIMENT STATION, Brooking South Dak to

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SOUTH LONDON ENTOMOLOGICAL, AND NATURAL HISTORY SOCIETY, London, England.

Proceedings, 1908-09.

SOUTHERN CALIFORNIA ACADEMY OF SCIENCES, Los Angeles, California.

Bulletin, current numbers.

SOUTHERN PACIFIC RAILROAD, San Francisco, California. Sunset magazine (gift).

SPRINGFIELD CITY LIBRARY ASSOCIATION, Springfield, Massachusetts.

Bulletin, current numbers.

Report, 1909.

STÄDTISCHES VÖLKERMUSEUM, Frankfurt-am-Main, Germany. Veroffentlichungen, current numbers.

STARR, FREDERICK, Chicago.

4 separates.

STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES, New York City.

Bulletin, current numbers.

STETTIN. GESELLSCHAFT FÜR VÖLKER-UND ERKDUNDE, Stettin, Germany.

Bericht, 1906-07, 1907-08.

STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, New Jersey. Annual catalogue, 1909–10.

STOCKHOLM. K. SVEN. VETENSKAPS AKADEMIEN, Stockholm, Sweden.

Publications.

STOCKHOLM. K. VITT. HIST. OCH ANTIQ. AKADEMIEN, Stockholm, Sweden.

3 publications.

STOCKHOLM SVEN. SALLSK. FÖR ANTROPOLOGI OCH GEOGRAFI, Stockholm, Sweden.

Ymer, current numbers.

STORRS AGRICULTURAL EXPERIMENT STATION, Storrs, Connecticut. Bulletin, current numbers.

STRASSBURG. KAISER-WILHELMS-UNIVERSITÄT, Strassburg, Germany.

17 dissertations.

TASMANIA. DEPARTMENT OF AGRICULTURE, Hobart, Tasmania.
Handbook of Tasmania.
2 pamphlets.

TEXAS AĞRICULTURAL EXPERIMENT STATION, College Station, Texas.

Bulletin, current numbers.

TEXAS UNIVERSITY, Austin, Texas.

Bulletin, current numbers.

Catalogue, 1908-1909.

11 FIRED MUSEUM OF NATURAL HISTORY - - REPORTS, VOL. III.

IHALBIETER WILLIAM Birkerod, Denmark

and a facilities

THOMSON I ARTHUR Aberdeen, Scotland.

appropriets and

THROOP INSTITUTE, Paladena, California.

San feetentary catalogue number, 1929.

THURINGISCHER BOTANISCHE VEREIN, Weimar, Germany.

TOKYO BOTANICAL SOCIETY, Tokyo, Japan.

Magazine surrent numbers

FORYO IMPERIAL MUSEUM OF NATURAL HISTORY, Tokyo, Japan. Catalogue of Japane e mollusca, pt. I.

FORYO IMPERIAL UNIVERSITY, Tokyo, Japan.

C Hege d Agriculture

Bulletin, current numbers.

College of Science:

Tearnal, current numbers

FOLEDO PUBLIC LIBRARY, Toledo, Obio.

Report, 1975

FORING MUSEO DI ZOOLOGIA ED ANATOMIA COMPARATA, Turin.
Italy

B. Mettino, V. 23, 1908.

TORINO R ACCAD, DELLE SCIENZE, Turm, Italy,

Vita current numbers.

Memorie, t. 68-69.

. . . VAAL DEPARTMENT OF AGRICULTURE Prot ma. Transvaal Annual report, 1907-08.

Tournal current numbers.

TRANSVAAL, MINES DEPARTMENT, Pretoria, Transvaal.

Report of the Geological Survey, 1907, 1908.

TRANSVAAL MUSEUM, Pretoria, Transvaal.

Annual report, 1007-08.

TRING ZOÖLOGICAL MUSEUM, Tring, England.

Novitates reslogice, current numbers.

TRINITY COLLEGE, Dublin, Ireland.

Hermathena, no gr

TROMSO MUSEUM, Tromso, Norway.

Var Jeretning, 1906, 1907.

Vir Letter n - 28, 1902.

TROMOSO Y PASO DEL FRANCISCO, Mexico, Mexico.

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TROVESSART E. L. Paris, France

TUFTS COLLEGE Teft. Massachusetts.

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UNION COLLEGE, Schnectady, New York.

Catalogue, 1909-10.

U. S. GOVERNMENT, Washington, D. C.

400 publications.

U. S. INDIAN SCHOOL, Carlisle, Pennsylvania.

Indian craftsman, v. 1, nos. 1-5.

U. S. LIBRARY OF CONGRESS, Washington, D. C.

7 publications.

U. S. NAVAL ACADEMY, Annapolis, Maryland.

Annual register, 1908-1909.

UPSALA. K. VETENSKAPS SOCIETETEN, Upsala, Sweden.

Nova acta, current numbers.

UPSALA UNIVERSITY, Upsala, Sweden.

2 publications.

UTAH AGRICULTURAL EXPERIMENT STATION, Logan, Utah.

Bulletin, current numbers (gift).

VAN HISE, CHARLES R., Madison, Wisconsin.

2 reprints.

VAN OVERBERGH, C., Brussels, Belgium.

Collection de monographies ethnographiques, v. 1-3.

VASSAR BROTHERS INSTITUTE, Poughkeepsie, New York.

Bulletin, v. 1-2.

r reprint.

VENEZUELA. ESTADISTICA DE LOS ESTADOS UNIDOS, Caracas,

Venezuela.

2 publications.

VERMONT AGRICULTURAL EXPERIMENT STATION, Burlington.

Vermont.

Bulletin, current numbers.

VERMONT BIRD CLUB, Essex Junction, Vermont.

Bulletin, nos, 1-3, 1906-08.

VERMONT UNIVERSITY, Burlington, Vermont.

Catalogue, 1908-09.

VICTORIA. DEPARTMENT OF AGRICULTURE, Melbourne, Victoria.

Journal, current numbers.

VICTORIA FIELD NATURALISTS' CLUB, Melbourne, Victoria.

Victorian naturalist, current numbers.

VICTORIA UNIVERSITY, Toronto, Canada.

Calendar, 1908-9, 1909-10.

Victoria College:

Bulletin, 1908-9.

VICTORIA ZOÖLOGICAL AND ACCLIMATIZATION SOCIETY, Melbourne, Victoria.

Annual report, 1908.

VIRCHOW, H., Berlin, Germany.

3 pamphlets.

VIRGINIA AGRICULTURAL EXPERIMENT STATION, Blacksburg,

Virginia.

Bulletin, current numbers.

418 FIELD MUSEUM OF NATURAL HISTORY REPORTS, VOL. III.

VIRGINIA JAMESTOWN EXPOSITION COMMISSION, Charlotte ville, Virginia

Mineral researces of Virginia sgift.

VIRGINIA STATE LIBRARY, Richmond, Virginia Bulletin, current numbers

VIRGINIA UNIVERSITY, Charlottesville, Virginia Catalogue, 19, 8, 9

WALCOTT A B Chicago republication

WARD HENRY B., Lincoln, Nebraska e-publications

WASHINGTON ACADEMY OF SCIENCES, Washington, D. C. Proceedings, current numbers

WASHINGTON BIOLOGICAL SOCIETY, Washington, D. C. Proceedings, current numbers

WASHINGTON PHILOSOPHICAL SOCIETY, Washington, D. C. Proceedings, current numbers

WASHINGTON STATE LIBRARY, Olympia, Washington i publication.

WAUGAUNI PUBLIC MUSEUM, Waugauni, New Zealand, Annual report no. 14, 1908-09.

WELLCOME CHEMICAL RESEARCH LABORATORIES, London, England

Publications, nos 86-92

WELLER, STUART, Chicago a reprints

WELLINGTON ACCLIMATIZATION SOCIETY, Wellington, New Zealand, Annual report, τ_{998-9}

WELLINGTON FIELD NATURALISTS' CLUB, Guelph, Canada ; publications

WESLEYAN UNIVERSITY, Middletown, Connecticut Catalogue, 1908-1909

WEST INDIES IMPERIAL DEPARTMENT OF AGRICULTURE, Barbados, West Indies

Publications, current numbers.

WEST VIRGINIA AGRICULTURAL EXPERIMENT STATION, Morgantown, West Virginia

Bulletin, current numbers

WEST VIRGINIA STATE BOARD OF AGRICULTURE, Charleston,
West Virginia

WESTERN AUSTRALIA DEPARTMENT OF AGRICULTURE, Perth.
Western Australia
Journal current numbers

WESTERN AUSTRALIA GEOLOGICAL SURVEY, Perth. Western Australia

Annual report 1895, 1958 Bulletin current numbers WESTERN PENNSYLVANIA ENGINEERS' SOCIETY, Pittsburgh.
Pennsylvania.

Charter, by-laws and list of members, 1909.

WIEN K. K. NATURHISTORISCHES HOFMUSEUM, Vienna, Austria.
Annalen, current numbers.
Jahresbericht, 1907.

WIEN K. K. UNIVERSITÄT, Vienna, Austria. Handkatalog. 6 reports.

WIEN K. K. ZOOLOGISCH-BOTANISCHE GESELLSCHAFT, Vienna, Austria.

Verhandlungen, v. 58.

WIESBADEN. NASSAUISCHER VEREIN FÜR NATURKUNDE, Wiesbaden, Germany.

Jahrbuch, v. 61.

WILLE, N., Christiania, Norway.

Naturwidenskaberne magazin, current numbers.

2 separates.

WILLIAMS COLLEGE, Williamstown, Massachusetts. 2 catalogues.

WILLISTON, S. W., Chicago.

4 reprints.

WILSON ORNITHOLOGICAL CLUB, Oberlin, Ohio. Bulletin, current numbers.

WINDSOR KENFIELD PUBLISHING COMPANY, Chicago. Brick, current numbers (gift).

WISCONSIN ACADEMY OF SCIENCES, Madison, Wisconsin. Transactions, v. 16, nos. 1-3, 5-6.

WISCONSIN ARCHAEOLOGICAL SOCIETY, Milwaukee, Wisconsin. Archeologist, current numbers.

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SOCIETY.
Madison, Wisconsin.
Bulletin, current numbers.

WISCONSIN STATE BOARD OF AGRICULTURE, Madison, Wisconsin. Annual report, 1909.

WISCONSIN STATE HISTORICAL SOCIETY, Madison, Wisconsin. 5 publications.

WISCONSIN UNIVERSITY, Madison, Wisconsin. 31 publications.

WISTAR INSTITUTE OF ANATOMY AND BIÒLOGY, Philadelphia, Pennsylvania.

Bulletin, nos. 3-4.

WITTROCK, BRECHER, Albano, Sweden.
Acta Horti Bergiani, v. 3, pts. 1-2.

WOOD, NORMAN A., Ann Arbor, Michigan.
r pamphlet (gift).

WORCESTER FREE PUBLIC LIBRARY, Worcester, Massachusetts.
Annual report, 1907-8.
Bulletin, current numbers.

42 FILLD MUSEUM OF NATURAL HISTORY -- REPORTS, VOL. III.

WRFN CHRISTOPHER, Athens, Pennsylvania, i. jamphlet (gitt)

WURLEMBERG VEREIN FUR NATURKUNDE, Wurtemberg, Germany, Labreshelte, no. 64, with a beilage.

WYOMING AGRICULTURAL EXPERIMENT STATION, Laranue.

Bulletin, current numbers

WYOMING HISTORICAL AND GEOLOGICAL SOCIETY, Wilkes Barre, Pennsylvania

Proceedings and collections, v. 10.

YALE UNIVERSITY, New Haven, Connecticut, publications.

ZIMANYI, KARL, Budapest, Hungary, ; separates.

ZIMMERMAN, JEREMIAH, Syracuse, New York, pamphlet (gift).

ZURICH BOTANISCHES MUSEUM DER UNIVERSITÄT. Zurich, Switzerland.

Mitteilungen, nos. 40-43, 45, 54, 4 dissertations.

ZURICH, GEOGRAPHISCH-ETHNOGRAPHISCHE GESELLSCHAFT. Zurich, Switzerland.

Jahresberichte, 1908-09.

ZURICH, NATURFORSCHENDE GESELLSCHAFT, Zürich, Switzerland, Vierteljahrsschrift, current numbers.

Egyptian Sarcophagus, of Granite.

OF THE LINES

ARTICLES OF INCORPORATION.

STATE OF ILLINOIS.

DEPARTMENT OF STATE.

WILLIAM H. HINRICHSEN, Secretary of State.

To All to Whom These Presents Shall Come, Greeting:

Whereas, a Certificate duly signed and acknowledged having been filed in the office of the Secretary of State, on the 16th day of September, A. D. 1893, for the organization of the COLUMBIAN MUSEUM OF CHICAGO, under and in accordance with the provisions of "An Act Concerning Corporations," approved April 18, 1872, and in force July 1, 1872, and all acts amendatory thereof, a copy of which certificate is hereto attached.

Now, therefore, I, William H. Hinrichsen, Secretary of State of the State of Illinois, by virtue of the powers and duties vested in me by law, do hereby certify that the said COLUMBIAN MUSEUM OF CHICAGO is a legally organ-

ized Corporation under the laws of this State.

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of State. Done at the City of Springfield, this 16th day of September, in the year of our Lord one thousand eight hundred and ninety-three, and of the Independence of the United States the one hundred and eighteenth.

W. H. HINRICHSEN,

[SEAL.]

Secretary of State.

TO HON. WILLIAM H. HINRICHSEN,

SECRETARY OF STATE:

SIR:

We, the undersigned, citizens of the United States, propose to form a corporation under an act of the General Assembly of the State of Illinois, entitled "An Act Concerning Corporations," approved April 18, 1872, and all acts amendatory thereof; and that for the purposes of such organization we hereby state as follows, to wit:

I. The name of such corporation is the "COLUMBIAN MUSEUM OF

CHICAGO."

2. The object for which it is formed is for the accumulation and dissemination of knowledge, and the preservation and exhibition of objects illustrating Art, Archæology, Science, and History.

3. The management of the aforesaid Museum shall be vested in a Board of Fifteen (15) Trustees, five of whom are to be elected every year.

411 Free Meanwell National History Reports, Vol. III.

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[10] J. S. Joseff, Mr. commun. in the City of Chicago, County of Co. k.

Land Committee of the C

Signed .

Charles L. W. Marke, A. Brew Peterson, L. J. Gage, Charles L. Hutchinson, Elements J. Velley, Ar Brew Peterson, L. J. Gage, Charles L. Hutchinson, Elements J. Velley, Ar Brew McNally, Edward E. Aver, John M. Clark, Herman H. L. L. Golden, Golden McNally, Edward E. Aver, John M. Clark, Herman H. L. L. Golden, Scheeler Henry H. Getty, William R. Harper, Frank J. H. L. C. Golden, J. J. Lewer, A. C. Bartlett, A. A. Sprague, A. C. Met Lurg, Lies W. S. M. George F. Broell, John R. Walsh, Chay Fitzsimons, John A. R. L. E. R. McCarg, Owen F. Aldes, Ferdinand W. Peck, James H. D. L. L. Lewer, J. M. Chawford, Wim Sooy Smith, P. S. Peterson, John C. Black, J. L. McCarlett, A. Chawford, Wim Sooy Smith, P. S. Peterson, John C. Black, J. L. McCarlett, C. F. Genther, George R. Davis, Stephen A. Forbes, R. Sert W. P. McCarlett, William E. Hale, Wim T. Baker, Martin A. Riverson, Lewes, W. Ellewerth, William E. Hale, Wim T. Baker, Martin A. Riverson, J. McCarlett W. Black and N. B. Ream, Norman Williams, Melville E. St. me 4000 (1993) and M. Baker, W. Blatchford, Philip D. Armour

Steril & Introduction

I G. R. Miriamir a Norvey Pennie in and for said County, do here's estimated the facegoing petitioners personally appeared before me and the state hererally that they agreed the foregoing petition as their free and thing the other themses and purposes therein set forth

G. 19 to be read hard notarial scal this rath day of September, 1893

G R. MITCHELL.

Notary Public, Cook County, Inc.

CHANGE OF NAME

For each to the district asset at a meeting of the Corporate member signal and the control MBIAN MUSEUM was a signal to FIELD COLUMBIAN MUSEUM. A certificate to this effect was to block as a signal and the other of the Secretary of State for Illinois.

CHANGE OF NAME

Proposed to the letter passed at a meeting of the Corporate members belt the St. Live to remier these the name of the FIELD COLUMBIAN with the second of the SELM OF NATURAL HISTORY. A meeting of the second of the Second of State of Thems.

AMENDED BY-LAWS.

(APRIL 12, 1909.)

ARTICLE I.

MEMBERS.

Section 1. Members shall be of five classes, Annual Members, Corporate Members, Life Members, Patrons, and Honorary Members.

SEC. 2. Annual Members shall consist of such persons as are selected from time to time by the Board of Trustees at any of its meetings, and who shall pay an annual fee of ten dollars (\$10.00), payable within thirty days after notice of election, and within thirty days after each recurring annual date. The failure of any person to make such initiatory payment and such annual payments within said time shall, at the option of the Board of Trustees, be sufficient grounds for the forfeiture of an annual membership.

This said annual membership shall entitle the member to:

First. — Free admittance for the member and family to the Museum on any day.

Second. — Ten tickets every year, admitting the bearer to the Museum on pay days.

Third. — A copy of all publications of the Museum when requested.

Fourth. — Invitations to all special exhibits, receptions, lectures, or other functions which may be given at the Museum.

SEC. 3. The Corporate Members shall consist of the persons named in the articles of incorporation, and of such other persons as shall be chosen from time to time by the Board of Trustees at any of its meetings, upon the recommendation of the Executive Committee; provided, that such persons named in the articles of incorporation shall, within ninety days from the adoption of these By-Laws, and persons hereafter chosen as Corporate Members shall, within ninety days of their election, pay into the treasury the sum of twenty dollars (\$20.00) or more. The failure of any person to make such payment within said time, shall, at the option of the Board of Trustees, be ground for forfeiture of his corporate membership. Corporate Members becoming Life Members, Patrons, or Honorary Members shall be exempt from dues. Annual meetings of said Corporate Members shall be held at the same place and on the same day that the annual meeting of the Board of Trustees is held.

Sec. 4. Any person paying into the treasury the sum of five hundred dollars (\$500.00), at any one time, shall, upon the unanimous vote of the Board, become a Life Member. Life Members shall be exempt from all dues.

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Process of Classics on by the Board upon recommendation of the Last transfer of the front accomplished who have rendered eminent services the Massaccomplished Disease who have rendered eminent services the Massaccomplished Disease with the Component Members.

However, Meether, shall be chosen by the Board from arring periods on the eventorial entire to whence, and only upon unabserver to the Executive Committee. They shall be exempt from a state of the Executive Committee.

VRTICLE II.

DIARD OF TRUSTEES

The Board of Trustees shall consist of fifteen members. The state of the Board now in office, and those who shall hereafter where the Court of the Board now in office, and those who shall hereafter where the Court of the Board of the Board, upon the nomination of the Breeze who experience is less than preceding regular meeting, by a majority vote of the court of the Board present.

Regular meetings of the Board shall be held on the second Mea Laviotic. The arthough meetings may be called at any time by the President, and a Thirdeeville I by the Secretary upon the written request of three Trinteeville I between shall constitute a quorum, except for the election of others of the all times of the Annual Budget, when seven Trusteeville between the Annual Budget, when seven Trusteeville between the Annual Budget, and less number from day to day, or to a factorial previous to the next regular meeting.

State Reasonable written notice, designating the time and place of hill-gracetings, shall be given by the Secretary.

ARTICLE III.

OFFICERS.

So the Vice-President, a Secretary, and Assistant Secretary, and a Treasurer There wall be chosen by ballot by the Board of Trustees, a majority of those present and voting being necessary to elect. The President, the First Vice-President, and the Second Vice-President shall be chosen from among the members of the Board of Trustees. The meeting for the election of others shall be held on the second Monday of January of each year, and shall be called the Armual Meeting.

The officer, shall hold office for one year, or until their successors are cle to be be all the land officer may be removed at any regular meeting that the form of all the members of the Board. We are in any office may be filled by the Board at any meeting.

The officers shall perform such duties as ordinarily appertain to the gravitation of the Board of Trustees.

ARTICLE IV

THE TREASURER

State Note: The Treasurer shall be custedian of the funds of the Corporation. He shall make informents only upon warrants drawn by the Director and countersigned by the President. In the absence or inability of the Director warrants may be signed by the Chairman of the Finance Committee, and in the absence or inability of the President, may be countersigned by one of the Vice-Presidents. But no warrants shall be issued, except in conformity with a regularly prepared voucher, giving the name of the payee and stating the

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scribed. It shall be no part of the duties of the Treasurer to see that the warrants have been issued in conformity with such vouchers.

Sec. 2. The securities and muniments of title belonging to the Corporation shall be placed in the custody of some Trust Company of Chicago to be designated by the Board of Trustees, which Trust Company shall collect the income and principal of said securities as the same become due, and pay same to the Treasurer. Said Trust Company shall allow access to and deliver any or all securities or muniments of title to the joint order of the following officers, namely: The President or one of the Vice-Presidents, jointly with the Chairman, or one of the Vice-Chairmen, of the Finance Committee of the Museum.

occasion for the expenditure, and verified and approved as hereinafter pre-

SEC. 3. The Treasurer shall give bond in such amount, and with such

sureties, as shall be approved by the Board of Trustees.

Sec. 4. All vouchers executed for the payment of liabilities incurred in the administration of the Museum, shall be verified by the Auditor, and approved for payment by the Director, and the Chairman of the Administration Committee. All vouchers executed for expenditures for the construction or reconstruction of the Museum building, or buildings, shall be verified by the Auditor and approved for payment by the Chairman of the Building Committee. All vouchers executed in connection with the investments of the Corporation, or, in any way having to do with the endowment funds of the Corporation, shall be verified by the Auditor and approved for payment by the Chairman of the Finance Committee.

ARTICLE V.

THE DIRECTOR.

Section r. The Board of Trustees shall elect a Director of the Museum, who shall remain in office until his successor shall be elected. He shall have immediate charge and supervision of the Museum, and shall control the operations of the institution, subject to the authority of the Board of Trustees and its Committees. The Director shall be the official medium of communication between the Board, or its Committees, and the scientific staff and maintenance force.

SEC. 2. There shall be four scientific departments of the Museum — Anthropology, Botany, Geology, and Zoölogy, each under the charge of a Curator, subject to the authority of the Director. The Curators shall be appointed by the Board upon the recommendation of the Director, and shall serve during the pleasure of the Board. Subordinate staff officers in the scientific departments shall be appointed and removed by the Director upon the recommendation of the Curators of the respective Departments. The Director shall have authority to employ and remove all other employees of the Museum.

Sec. 3. The Director shall make report to the Board at each regular meeting, recounting the operations of the Museum for the previous month.

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At the Armial Meeting the Director shall make an Annual Report, reviewing the Armial Report shall be published on a consideration for the information of the Trustees and Members, and the free-distribution in such number as the Board may direct

ARTICLE VI

AT DETECT

Story with The Board shall appoint an Auditor, who shall hold his other interests of the Board He of the Corporation, and transactions of the Corporation, and the Marken, and report thereon at each regular meeting, and at such other time of may be required by the Board. He shall certify to the correctness of Classification for the expenditure of the money of the corporation.

ARTICLE VII

So troy r. There shall be five Committees as follows: Finance, Building, Viliting, Administration and Executive.

Sign 2. The Finance, Building and Auditing Committees shall each complete. All members of these four Committees shall be elected by bullot by the Board at the Annual Meeting, and shall hold office for one year, and until their accessors are elected and qualified. In electing the members of the e-Committees the Board shall designate the Chairman and Vi e-Chairman by the order in which the members are named in the respective Committee; the first member named shall be Chairman, the second named the Vice-Chairman and the third named Second Vice-Chairman, succession to the Chairman.

Sec. 3. The Executive Committee shall consist of the President of the R and the Chairman of the Finance Committee, the Chairman of the Building control of the control of the Auditing Committee, and two other members of the Board to be elected by Vallet at the Annual Meeting.

See a Four members shall constitute a quorum of the Executive Committee three members shall constitute a quorum of the Administration Committee three members shall constitute a quorum of the Administration Committee three transfers of the first transfer to the first transfer to the members a product of the event that, owing to the absence or mability of members a product of the first transfer transfer transfer transfer to the first transfer transfer to the absence of the absence of

See 3. The Finance Committee shall have supervision of investing the configuration of an end of such real estate a smay become its property. It shall have authority to invest, sell, and removest, finds, subject to the approval of the Board.

so the building committee shall have operation of the construction, reconstruction, and extension of any and all buildings used for Museum purposes.

Sec. 7. The Executive Committee shall be called together from time to

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by three members of the Committee, to act upon such matters affecting the administration of the Museum as cannot await consideration at the Regular Monthly Meetings of the Board of Trustees. It shall, before the beginning of each fiscal year, prepare and submit to the Board an itemized Budget, setting forth the probable receipts from all sources for the ensuing year, and make recommendations as to the expenditures which should be made for routine maintenance and fixed charges. Upon the adoption of the Budget by the Board, the respective Committees shall be considered as authorized to make the expenditures detailed therein. No increase in the expenditures under any items of the Budget shall be made, except by authority of the Board of Trustees, but the Executive Committee shall have authority, in cases of emergency, to expend a further total sum not exceeding two thousand dollars in any one month.

Sec. 8. The Administration Committee shall have general supervision of the affairs of the Museum. The Committee shall hold one meeting each month with the Director at the Museum within a week preceding each Monthly Meeting of the Board of Trustees.

Sec. 9. The Auditing Committee shall have supervision over all accounting and bookkeeping, and full control of the financial records. It shall cause the same, once each year, or oftener, to be examined by an expert individual or firm, and shall transmit the report of such expert individual or firm to the Board at the next ensuing regular meeting after such examination shall have taken place.

Sec. 10. The Chairman of each Committee shall report the acts and proceedings thereof at the next ensuing regular meeting of the Board.

SEC. 11. The President shall be ex-officio a member of all Committees and Chairman of the Executive Committee. Vacancies occurring in any Committee may be filled by ballot at any regular meeting of the Board.

ARTICLE VIII.

NOMINATING COMMITTEE.

Section 1. At the November meeting of the Board each year a Nominating Committee of three shall be chosen by lot. Said Committee shall make nominations for membership of the Finance Committee, the Building Committee, the Administration Committee, and the Auditing Committee, and for two members of the Executive Committee, from among the Trustees, to be submitted at the ensuing December meeting and voted upon at the following Annual Meeting in January.

ARTICLE IX.

Section 1. Whenever the word "Museum" is employed in the By-Laws of the Corporation, it shall be taken to mean the building in which the Museum as an Institution is located and operated, the material exhibited, the material in study collections, or in storage, furniture, fixtures, cases, tools, records, books, and all appurtenances of the Institution, and the workings, researches, installations, expenditures, field work, laboratories, library, publications, lecture courses, and all scientific and maintenance activities.

Sec. 2. These By-Laws may be amended at any regular meeting of the Board of Trustees by a two-thirds vote of all the members present, provided the amendment shall have been proposed at a preceding regular meeting.

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ERNEST R GRAHAM
VERNON SHAW KENNEDY
GEORGE MANIERRE

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JOHN BARTON PAYNE
FREDERICK W. PUTNAM
FREDERICK J. V. SKIFF
WILLARD A. SMITH

EDWIN WALKER

DECEASED.

WILLIAM I. BUCHANAN

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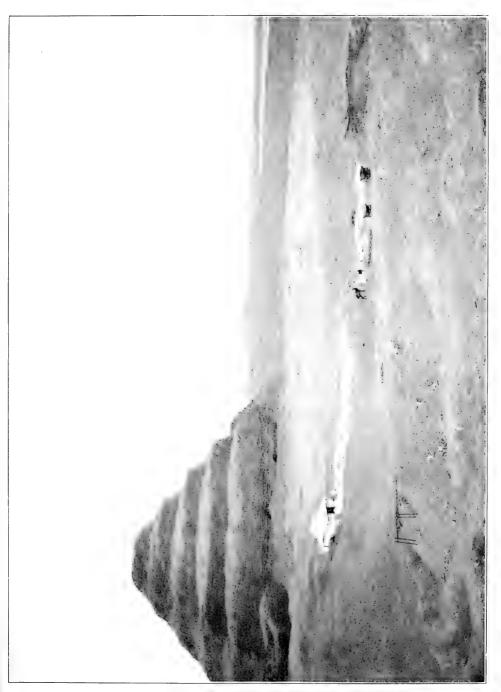
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WEBSTER, GEORGE H.
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WILSON, M. H.
WOODCOCK, LINDSAY T.

DECEASED.

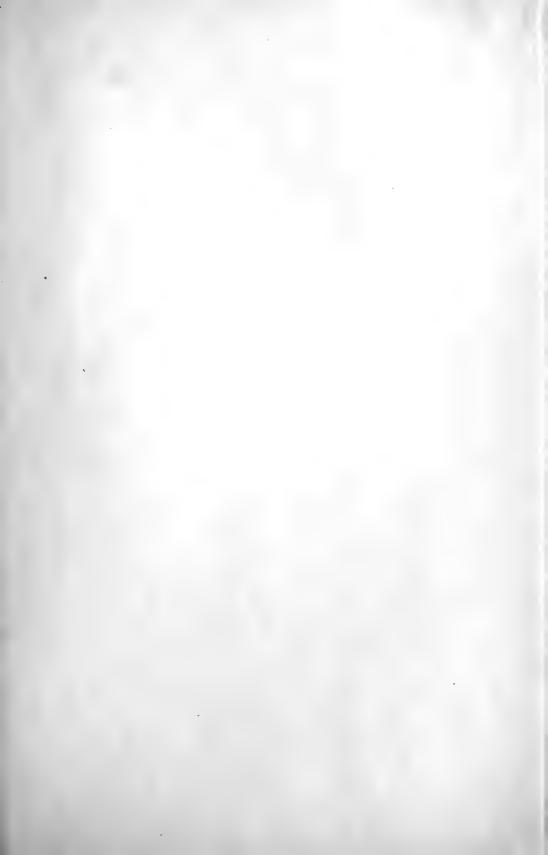
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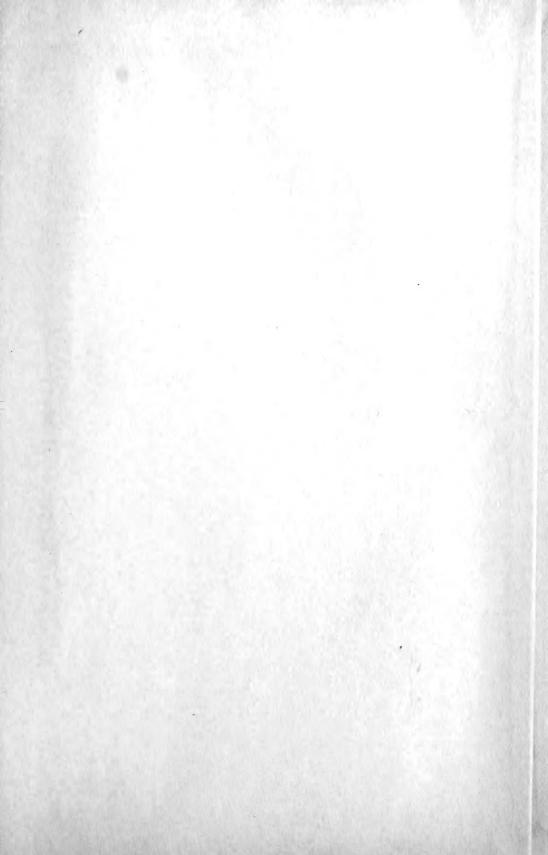


Scene of Excavation of Mastaba Tombs. (Stones Boxed and Ready for Shipment.)

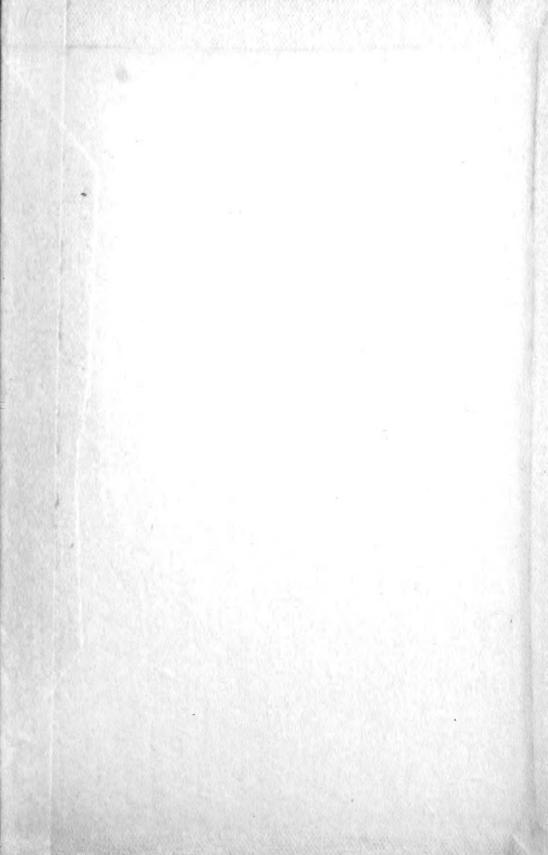
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