ANNUAL REPORT
OF THE
BOARD OF REGENTS
OF THE
SMITHSONIAN INSTITUTION,
SHOWING
THE OPERATIONS, EXPENDITURES, AND CONDITION
OF THE INSTITUTION
FOR THE
YEAR ENDING JUNE 30, 1892.

REPORT
OF THE
U. S. NATIONAL MUSEUM.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1893.
Resolved by the Senate (the House of Representatives concurring), That there be printed of the reports of the Smithsonian Institution and of the National Museum for the year ending June 30, 1892, in two octavo volumes, 10,000 extra copies; of which 1,000 copies shall be for the use of the Senate, 2,000 copies for the use of the House of Representatives, 5,000 copies for the use of the Smithsonian Institution, and 2,000 copies for the use of the National Museum.
REPORT
OF THE
U. S. NATIONAL MUSEUM,
UNDER THE DIRECTION OF
THE SMITHSONIAN INSTITUTION,
FOR THE
YEAR ENDING JUNE 30, 1892.
SUBJECTS.

I. Report of the Assistant Secretary of the Smithsonian Institution, in charge of the National Museum, upon the condition and progress of the Museum.

II. Reports of the Curators.

III. Papers illustrative of collections in the U. S. National Museum.

IV. Bibliography.

V. List of accessions.
U. S. National Museum
Under direction of the Smithsonian Institution,
Washington, December 1, 1892.

Sir: I have the honor to submit herewith a report upon the present condition of the U. S. National Museum and upon the work accomplished in its various departments during the fiscal year ending June 30, 1892.

Very respectfully,

G. Brown Goode,
Assistant Secretary in charge of U. S. National Museum.

Mr. S. P. Langley,
Secretary, Smithsonian Institution.
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REPORT

UPON THE

CONDITION AND PROGRESS OF THE U. S. NATIONAL MUSEUM DURING THE YEAR ENDING JUNE 30, 1892.

BY

G. BROWN GOODE,

ASSISTANT SECRETARY OF THE SMITHSONIAN INSTITUTION, IN CHARGE OF U. S. NATIONAL MUSEUM.
REPORT
UPON
THE CONDITION AND PROGRESS OF THE U. S. NATIONAL MUSEUM
DURING THE YEAR ENDING JUNE 30, 1892.

BY
G. Brown Goode,
Assistant Secretary, Smithsonian Institution, in charge of U. S. National Museum.

A.—GENERAL CONSIDERATIONS.

The report now presented relates to the operations of the National Museum during the fiscal year ending June 30, 1892.

The history of the origin and development of the National Museum has been discussed in previous reports, both in the introductory pages and in a paper published in the report for 1891, entitled "The Genesis of the National Museum."* It will therefore be sufficient for our present purpose to repeat a few of the most essential facts.

The Smithsonian Institution was established by act of Congress in 1846. One of the provisions of the act was that all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens belonging to the United States, should be placed in the custody of the Smithsonian Institution. As one of the results of this provision, the collections, both of ethnological and natural history objects, made by the numerous Government exploring expeditions, came into the possession of the Institution. These, with the "National Cabinet of Curiosities," which was exhibited in the Patent Office building, and which was transferred to the Smithsonian Institution in 1858, formed an important nucleus around which thousands of other collections have since gathered. The "National Cabinet of Curiosities" was a name given to the collections of the "National Institution," which was organized six years before the act creating the Smithsonian Institution had been passed.

The National Museum thus grew up under the care of the Smithsonian Institution, and the Secretary of the Institution was appointed by Congress "Keeper of the Collections."

*P. 273.
The National Museum has been recognized as such by Congress for many years, but it was not until 1879 that an appropriation was made, providing money for the construction of a building especially intended for the display of the national collections. This action of Congress had been doubtless precipitated by the large increase made in the collections of the Government at the close of the Centennial Exhibition in 1876. The building was completed in 1881, during which year the collections were in part transferred to it from the Smithsonian building. In the following year a careful estimate of the extent of the collections, including the results of Government expeditions and gifts from private individuals, showed that the total number of specimens in the National Museum was 193,362. At the end of June, 1892, this total had increased to 3,223,941. Thus in one decade from what was practically the date of occupancy of the Museum building, the collections have increased sixteenfold. This result is certainly very gratifying. The Museum building is, however, very much overcrowded, and a new building is urgently needed. The attention of Congress has been frequently called to this matter, but nothing has yet been done. If the present unsatisfactory conditions are to exist much longer, such a rate of increase in the collections will, as has been already pointed out, become exceedingly embarrassing, and instead of endeavoring to interest people in contributing to the national collections, it will soon become necessary to discourage them from doing so. Indeed, this policy has already been adopted in certain instances, and the National Museum has lost control of several large and important collections. In the case of collections made by various branches of the Government, the Museum is obliged by law to receive them, having been appointed by Congress the custodian of such collections. The necessity of receiving these makes it the more incumbent to decline offers from private sources.

During the year the Museum has accomplished much in connection with the preparation of an exhibit for the World's Fair, to be opened in Chicago next May. In this the following departments of the Museum will be represented: Mammals, Birds, Reptiles, Fishes, Insects, Marine Invertebrates, Comparative Anatomy, Minerals, Physical Geology, Ethnology, American Prehistoric Pottery, Prehistoric Anthropology; as well as several sections of the Department of Arts and Industries, viz., Animal Products, Oriental Antiquities, Graphic Arts, and Musical Instruments.

**Principal Sources of the Collections of the National Museum.**

The collections of the National Museum are made up, to a very large extent, of the following materials:

1. The natural history and anthropological collections, accumulated since 1850 by the efforts of the officers and correspondents of the Smithsonian Institution.
(2) Collections which have resulted from explorations carried on more or less directly under the auspices of the Smithsonian Institution.

(3) Collections which have been obtained through the courtesy of the Department of State and the cooperation of United States ministers and consuls.

(4) Collections which have been obtained by naval expeditions, such as the Wilkes exploring expedition, the Perry expedition to Japan, and other expeditions conducted by the Navy Department.

(5) Collections made by the scientific officers of Government surveys, such as the Pacific railroad survey, the Mexican boundary survey, and the surveys carried on by the Engineer Corps of the U.S. Army.

(6) Collections made by officers of the Signal Corps of the U. S. Army, stationed in remote regions.

(7) Collections obtained by the U. S. Geological Survey.

(8) Collections made by officers of the U. S. Fish Commission.

(9) Collections resulting from expeditions conducted by other departments of the United States Government.

(10) Collections resulting from explorations carried on by the Smithsonian Institution in connection with educational institutions or commercial establishments.

(11) Collections resulting from explorations conducted by private individuals.

(12) The collections made by the United States to illustrate the animal and mineral resources, the fisheries, and the ethnology of the native races of the country on the occasion of the International Exhibition at Philadelphia in 1876; the fishery collections displayed by the United States at the International Fisheries Exhibitions at Berlin in 1880 and at London in 1883, and the collections obtained from various local expositions—as, for instance, the New Orleans Cotton Centennial Exposition in 1884 and 1885, and the Cincinnati Exposition in 1887.

(13) The collections given by the governments of the several foreign nations, thirty in number, which participated in the Philadelphia exhibition in 1876.

(14) The industrial collections given by numerous manufacturing and commercial houses of Europe and America at the time of the Philadelphia exhibition and subsequently.

(15) The material received, in exchange for duplicate specimens, from museums in Europe and America, at the time of the Philadelphia exhibition and subsequently.

(16) Collections received as gifts, deposits, or in exchange, from individuals, numbering usually from 1,000 to 1,500 each year.
B.—SPECIAL TOPICS OF THE YEAR.

INCREASE IN THE COLLECTIONS.

During the year the collections have been increased by the addition of more than 228,000 specimens. These are, for the most part, contributions, and have been obtained without any special effort on the part of the Museum. The total number of specimens now in the collections is 3,223,941.

INCREASE IN THE MUSEUM LIBRARY.

The number of publications added to the Museum library during the year was 11,892, including 693 volumes of more than 100 pages, 1,642 pamphlets, and 8,486 parts of regular serials.

DECREASED EDITION OF THE REPORTS OF THE SMITHSONIAN INSTITUTION AND NATIONAL MUSEUM.

The edition of the Report of the Smithsonian Institution, including that of the National Museum, has been reduced by the Fifty-second Congress to 10,000 extra copies.

VISITORS.

The number of visitors to the Museum building during the year ending June 30, 1892, was 269,825, and during the same period 114,817 persons visited the Smithsonian building. The total number of visitors since 1881 to the Museum building is 2,668,200, and to the Smithsonian building, 1,196,498.

MUSEUM APPROPRIATIONS FOR 1892-93.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservation of collections</td>
<td>$132,500</td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>15,000</td>
</tr>
<tr>
<td>Printing</td>
<td>12,000</td>
</tr>
<tr>
<td>Heating and lighting</td>
<td>11,000</td>
</tr>
<tr>
<td>Postage</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>171,000</strong></td>
</tr>
</tbody>
</table>

This is $42,500 less than for the preceding year.

PROPOSED ADDITIONAL MUSEUM BUILDING.

On January 21, 1892, the bill providing for a new Museum building was introduced in the Senate and referred to the Committee on Public Buildings and Grounds. It was favorably reported by this committee February 26, and passed the Senate April 14. The bill was referred to the same committee in the House of Representatives, but was not reported. It has now passed the Senate three times, but has failed of action in the House.
REPRESENTATION OF THE UNITED STATES AT THE MADRID EXPOSITION.

In accordance with an act of Congress, approved May 13, 1892, the President appointed a commission to represent the United States at the Columbian Historical Exposition to be held in Madrid in 1892, in commemoration of the fourth centenary of the discovery of America. The commission consisted of Rear-Admiral S. B. Luce, U. S. Navy, commissioner-general; Dr. James C. Welling, president of the Columbian University, Washington, and Dr. G. Brown Goode, Assistant Secretary of the Smithsonian Institution, commissioners.

The act of Congress authorizing the participation of the United States in the Madrid Exposition reads as follows:

For the expense of representation of the United States at the Columbian Historical Exposition to be held in Madrid in eighteen hundred and ninety-two in commemoration of the four-hundredth anniversary of the discovery of America, fifteen thousand dollars, or so much thereof as may be necessary, to be expended under the direction and in the discretion of the Secretary of State; and the President is hereby authorized to appoint a commissioner-general and two assistant commissioners, who may, in his discretion, be selected from the active or retired list of the Army or Navy, and shall serve without other compensation than that to which they are now entitled by law, to represent the United States at said exposition; that it shall be the duty of such commissioners to select from the archives of the United States, from the National Museum, and from the various Executive Departments of the Government such pictures, books, papers, documents, and other articles as may relate to the discovery and early settlement of America and the aboriginal inhabitants thereof; and they shall be authorized to secure the loan of similar articles from other museums and private collections, and arrange, classify, and install them as the exhibit of the United States at the said exposition; that the President is authorized to cause the detail of officers from the active or retired list of the Army or Navy to serve without compensation other than that to which they are now entitled by law, as assistants to said commissioners; and the said commissioners shall be authorized to employ such clerical and other assistance as may be necessary, subject to the approval of the Secretary of State.

NECROLOGY.

Prof. H. N. Moseley, of Oxford, England, a highly valued correspondent of and contributor to the National Museum, died on November 10, 1891.

Prof. Sereno Watson, curator of the herbarium of Harvard University, died March 9, 1892. Prof. Watson was recognized as one of the foremost botanists of the world, and was for many years a correspondent of the Museum.

Another valued correspondent, Gen. Mariano Jiménez, governor of the State of Michoacan, Mexico, and founder of the museums of Oaxaca and Michoacan, died February 28, 1892.
C.—THE CONDITION OF THE COLLECTIONS.

CENSUS OF THE COLLECTIONS.

Although no special effort has been made to increase the collections during the year, the accessions to the Museum since July, 1891, have exceeded that of the preceding fiscal year by 94,639 specimens, the total number of specimens received during the year covered by this report being 228,249, as is shown in the following table:

<table>
<thead>
<tr>
<th>Departments</th>
<th>Number of specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and industries:</td>
<td></td>
</tr>
<tr>
<td>Materia medica</td>
<td>207</td>
</tr>
<tr>
<td>Domestic animals</td>
<td>6</td>
</tr>
<tr>
<td>Historical collections, coins, medals, etc.</td>
<td>4,509</td>
</tr>
<tr>
<td>Musical instruments</td>
<td>94</td>
</tr>
<tr>
<td>Transportation and engineering</td>
<td>265</td>
</tr>
<tr>
<td>Modern pottery, porcelain, and bronzes</td>
<td>88</td>
</tr>
<tr>
<td>Graphic arts</td>
<td>200</td>
</tr>
<tr>
<td>Ethnology</td>
<td>2,241</td>
</tr>
<tr>
<td>American aboriginal pottery</td>
<td>1,817</td>
</tr>
<tr>
<td>Prehistoric anthropology</td>
<td>9,326</td>
</tr>
<tr>
<td>Mammals (skins and alcohoids)</td>
<td>1,086</td>
</tr>
<tr>
<td>Birds</td>
<td>5,810</td>
</tr>
<tr>
<td>Birds' eggs and nests</td>
<td>3,094</td>
</tr>
<tr>
<td>Reptiles and batsrachians</td>
<td>1,004</td>
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<tr>
<td>Fishes</td>
<td>1,906</td>
</tr>
<tr>
<td>Vertebrate fossils</td>
<td>1,001</td>
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<td>Mollusks (including cenozoic fossils)</td>
<td>6,225</td>
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<td>Insects</td>
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<td>Marine invertebrates</td>
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<td>Invertebrate fossils:</td>
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<td>Paleozoic</td>
<td>869</td>
</tr>
<tr>
<td>Mesozoic</td>
<td>3,099</td>
</tr>
<tr>
<td>Fossil plants</td>
<td>100,000</td>
</tr>
<tr>
<td>Recent plants</td>
<td>53,384</td>
</tr>
<tr>
<td>Minerals</td>
<td>4,121</td>
</tr>
<tr>
<td>Geology</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>228,249</strong></td>
</tr>
</tbody>
</table>

The yearly growth of the collections since 1882 is presented in the following table, the total number of specimens now in the Museum being 3,223,941;
<table>
<thead>
<tr>
<th>Name of department</th>
<th>1882</th>
<th>1883</th>
<th>1884</th>
<th>1885-86</th>
<th>1886-87</th>
<th>1887-88</th>
<th>1888-89</th>
<th>1889-90</th>
<th>1890-91</th>
<th>1891-92</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arts and industries</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materia medica</td>
<td>4,000</td>
<td>4,412</td>
<td>4,850</td>
<td>5,356</td>
<td>5,762</td>
<td>5,912</td>
<td>5,915</td>
<td>6,083</td>
<td>6,299</td>
<td></td>
</tr>
<tr>
<td>Foods</td>
<td>1,244</td>
<td>1,589</td>
<td>822</td>
<td>877</td>
<td>911</td>
<td>1,111</td>
<td>1,111</td>
<td>1,111</td>
<td>1,111</td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>2,000</td>
<td>3,063</td>
<td>3,144</td>
<td>3,144</td>
<td>3,222</td>
<td>3,288</td>
<td>3,288</td>
<td>3,288</td>
<td>3,288</td>
<td></td>
</tr>
<tr>
<td>Fisheries</td>
<td>5,000</td>
<td>9,870</td>
<td>10,078</td>
<td>10,078</td>
<td>10,078</td>
<td>10,089</td>
<td>10,089</td>
<td>10,089</td>
<td>10,089</td>
<td></td>
</tr>
<tr>
<td>Animal products</td>
<td>1,000</td>
<td>2,792</td>
<td>2,822</td>
<td>2,822</td>
<td>2,916</td>
<td>2,949</td>
<td>2,994</td>
<td>2,994</td>
<td>2,994</td>
<td></td>
</tr>
<tr>
<td><strong>Graphic arts.</strong></td>
<td></td>
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<tr>
<td><strong>Transportation and engineering</strong></td>
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<tr>
<td><strong>Naval architecture.</strong></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical relics</td>
<td>1,002</td>
<td></td>
<td></td>
<td>13,634</td>
<td>14,610</td>
<td>18,900</td>
<td>20,680</td>
<td>23,890</td>
<td>28,309</td>
<td></td>
</tr>
<tr>
<td>Musical instruments</td>
<td>1,005</td>
<td>1,005</td>
<td>100</td>
<td>117</td>
<td>127</td>
<td>147</td>
<td>154</td>
<td>144</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td>Modern pottery, porcelain, and bronzes</td>
<td>2,278</td>
<td>2,236</td>
<td>3,041</td>
<td>3,041</td>
<td>3,132</td>
<td>3,144</td>
<td>3,272</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paints and dyes</td>
<td>77</td>
<td>199</td>
<td>199</td>
<td>199</td>
<td>197</td>
<td>197</td>
<td>197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;The Catlin Gallery&quot;</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical apparatus</td>
<td>239</td>
<td>239</td>
<td>239</td>
<td>239</td>
<td>239</td>
<td>239</td>
<td>239</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oils and gums</td>
<td>197</td>
<td>198</td>
<td>198</td>
<td>198</td>
<td>198</td>
<td>198</td>
<td>198</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic animals</td>
<td>659</td>
<td>663</td>
<td>663</td>
<td>663</td>
<td>688</td>
<td>688</td>
<td>688</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnology</td>
<td>200,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>American aboriginal pottery</td>
<td>12,000</td>
<td>25,000</td>
<td>26,023</td>
<td>27,012</td>
<td>28,022</td>
<td>28,022</td>
<td>28,022</td>
<td>28,022</td>
<td>28,022</td>
<td>28,022</td>
</tr>
<tr>
<td>Oriental antiquities</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
<td>839</td>
</tr>
<tr>
<td>Mammals (skins and alcoholicics)</td>
<td>4,060</td>
<td>4,920</td>
<td>3,684</td>
<td>7,451</td>
<td>7,811</td>
<td>8,058</td>
<td>8,275</td>
<td>8,836</td>
<td>9,301</td>
<td>10,367</td>
</tr>
</tbody>
</table>

1. No census of the collection taken.
2. The actual increase in the collections during the year is much greater than appears from a comparison of the totals for 1889 and for 1890. This is explained by the apparent absence of any increase in the departments of lithology and metallurgy, the total for 1890 in both of these departments combined showing a decrease of 46,314 specimens, owing to the rejection of worthless material.
3. Although about 200 specimens have been received during the year, the total number of specimens in the collection is now less than that estimated for 1889, owing to the rejection of worthless material.
4. The collection now contains between 3,000 and 4,000 specimens.
5. No estimate of increase has been made since 1889.
6. Included in the historical collection.
<table>
<thead>
<tr>
<th>Year</th>
<th>Collectors'</th>
<th>Comparative anatomy</th>
<th>Vertebrate fossils</th>
<th>Insects</th>
<th>Marine fossils</th>
<th>Palaeozoic fossils</th>
<th>Cenozoic fossils</th>
<th>Fossil plants</th>
<th>Lithology and physical geology</th>
<th>Living animals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1882</td>
<td>35,299</td>
<td>4,416</td>
<td>5,641</td>
<td>56,789</td>
<td>5,489</td>
<td>50,000</td>
<td>10,000</td>
<td>1,453</td>
<td>3,232</td>
<td>1,453</td>
<td>153,492</td>
</tr>
<tr>
<td>1883</td>
<td>47,256</td>
<td>2,460</td>
<td>3,428</td>
<td>62,016</td>
<td>5,400</td>
<td>50,000</td>
<td>1,453</td>
<td>1,453</td>
<td>3,232</td>
<td>1,453</td>
<td>153,492</td>
</tr>
</tbody>
</table>

*For notes 1 and 2 see p. 9.

1. The total number of specimens in the Department of Arts in 1880-30 was 62,400, instead of 62,016. The figures given in the tables for the years 1890-91 include for the first time the number of specimens received both at the National Museum and in the British Museum, and the figures have consequently been corrected.

2. The official figures for the years 1880-90 show that more than 50 per cent of the estimated total for 1890 is assumed.

3. For (1) the collection of several thousand specimens from the collection of the Department of Zoology, the figures given in the following tables for (2) the collection of specimens available for exhibition and study in the several thousand specimens having been discarded.

4. The figures given in the National Zoological Park, for the years relating to the same collection of the frame, do not necessarily imply that there has been an increase in the collection.
CATALOGUE ENTRIES.

The number of catalogue entries made in the books of the several departments during the year amounts to 40,550. One entry may include one specimen, or a number of specimens, if from the same locality, or several individuals of the same species.

<table>
<thead>
<tr>
<th>Departments</th>
<th>Number of entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materia medica</td>
<td>55</td>
</tr>
<tr>
<td>Historical collections</td>
<td>75</td>
</tr>
<tr>
<td>Musical instruments</td>
<td>59</td>
</tr>
<tr>
<td>Transportation and engineering</td>
<td>161</td>
</tr>
<tr>
<td>Modern pottery</td>
<td>111</td>
</tr>
<tr>
<td>Graphic arts</td>
<td>179</td>
</tr>
<tr>
<td>Ethnology</td>
<td>1,243</td>
</tr>
<tr>
<td>American aboriginal pottery</td>
<td>18,874</td>
</tr>
<tr>
<td>Prehistoric anthropology</td>
<td>1,268</td>
</tr>
<tr>
<td>Mammals</td>
<td>1,066</td>
</tr>
<tr>
<td>Birds</td>
<td>5,609</td>
</tr>
<tr>
<td>Birds' eggs and nests</td>
<td>840</td>
</tr>
<tr>
<td>Reptiles and batrachians</td>
<td>1,055</td>
</tr>
<tr>
<td>Fishes</td>
<td>553</td>
</tr>
<tr>
<td>Vertebrate fossils</td>
<td>1,124</td>
</tr>
<tr>
<td>Mollusks (including cenozoic fossils)</td>
<td>2,546</td>
</tr>
<tr>
<td>Insects</td>
<td>295</td>
</tr>
<tr>
<td>Marine invertebrates</td>
<td>1,318</td>
</tr>
<tr>
<td>Comparative anatomy:</td>
<td></td>
</tr>
<tr>
<td>Osteology</td>
<td>574</td>
</tr>
<tr>
<td>Anatomy</td>
<td>95</td>
</tr>
<tr>
<td>Paleozoic fossils</td>
<td>419</td>
</tr>
<tr>
<td>Mesozoic fossils</td>
<td>512</td>
</tr>
<tr>
<td>Recent plants</td>
<td>1,454</td>
</tr>
<tr>
<td>Minerals</td>
<td>1,045</td>
</tr>
<tr>
<td>Geology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40,550</td>
</tr>
</tbody>
</table>

DEVELOPMENT AND ARRANGEMENT OF THE EXHIBITION SERIES.

The overcrowded condition of the Museum building has prevented any extensive changes in the arrangement of the exhibition halls. Although a large number of interesting objects has been received during the year in almost every department, it has not been possible to place them on exhibition. They have, therefore, for the most part been stored away until additional facilities for exhibition purposes shall have been obtained. This can only be brought about by the passage by Congress of an act authorizing the construction of an additional Museum building. In spite of the many disadvantages under which the work of the Museum has been carried on during the year, considerable progress has been made in connection with the rearrangement of the collections on exhibition and in preparing specimens for installation, when it has been possible to provide the necessary space.
The curator of the department of ethnology has continued to mount and label new specimens, which will be held in readiness for exhibition when practicable. A large number of specimens of aboriginal pottery, consisting mainly of fragments collected by the officers of the Bureau of Ethnology in the tide-water districts of Maryland and Virginia, have been installed. In the section of graphic arts several important gaps have been filled. Table-cases have been placed in the alcoves to accommodate new specimens, and considerable progress has been made in the substitution of printed for written labels. Several exhibits relating to the development of the railroad and telegraph have been added to the collections in the section of transportation and engineering. The collection of birds' eggs has been carefully rearranged and relabeled, and new insect-proof cases have been provided. Numerous illustrations have been added to the systematic series of insects, making it nearly complete. A large collection of vertebrate fossils, from regions in the west, secured by Prof. O. C. Marsh, in connection with his official work for the U. S. Geological Survey, has been placed upon exhibition. This collection is arranged in a wall-case especially constructed for it, extending the entire length of the east side of the exhibition hall. The collection of Cambrian and Ordovician fossils has been completed, labeled, and placed upon exhibition. A large collection of Mesozoic fossils has been received from the Geological Survey, and a part of it has been placed upon exhibition. The herbarium has been practically rearranged. New genus covers and genus labels have been substituted for the old ones. An entirely new arrangement of the exhibition series of fossil plants was begun during the year. Heretofore, the plants have been arranged with a view to illustrating the origin and development of plant life, but it has been found desirable to substitute for this a geological arrangement. A large and exceedingly valuable collection of fossil plants has been presented by Mr. R. D. Lacoe, of Pittston, Pa., and portions of it will be placed upon exhibition as opportunity offers. A considerable portion of the exhibition series in the department of minerals has been remounted on ebonized blocks, and the entire collection will soon be similarly provided for. Two large mahogany cases have been provided for the exhibition of the gems and semi-precious stones. This collection embraces 2,215 specimens. There have been transferred to the exhibition hall about 1,800 specimens belonging to the exhibition and study series, which had accumulated in the mineral laboratory. In the department of geology considerable time has been devoted to the installation, in the south-west court, of the economic series, which may now be said to be in an approximately satisfactory condition. The collection of ores, tin, nickel, manganese and antimony are systematized, and temporary labels have, in most cases, been prepared. The laying of new pavements in the south-west court and west-south range necessitated the moving of all the floor-cases, and, incidentally, the rearrangement of the specimens.
Very few important changes in the personnel of the scientific depart-
ments of the Museum have occurred during the year.

Dr. James M. Flint, U. S. Navy, who has been honorary curator of
the section of materia medica during the greater part of the time since
its organization, was recalled by the Secretary of the Navy in Novem-
ber, 1891. He was succeeded by Dr. John C. Boyd, U. S. Navy, who
remained until April 6, 1892, when he was relieved by Dr. William S.
Dixon, U. S. Navy, who now occupies that position.

There are at the present time thirty-two organized departments and
sections in the Museum under the care of curators, including honorary
and acting curators, and assistant curators.

LIST OF CURATORS, ASSISTANT CURATORS, AND AIDS.

**Arts and Industries:** Dr. G. Brown Goode, Honorary Curator.
**Materia Medica:** Dr. William S. Dixon, U. S. Navy, Honorary Curator.
**Animal Products:** Mr. R. Edward Earll, Acting Curator.
**Naval Architecture:** Capt. J. W. Collins, U. S. Fish Commission, Honorary
Curator.
**Fisheries:** Capt. J. W. Collins, U. S. Fish Commission, Honorary Curator.
**Foods:** Prof. W. O. Atwater, Department of Agriculture, Honorary Curator.
**Historical Collections, Coins and Medals:** Mr. A. Howard Clark, Curator.
**Transportation and Engineering:** Mr. J. E. Watkins, Curator.
**Oriental Antiquities:** Prof. Paul Haupt, Johns Hopkins University, Honorary
Curator; Dr. Cyrus Adler, Johns Hopkins University, Assistant Curator.
**Graphic Arts:** Mr. S. R. Kochler, Boston Museum of Fine Arts, Curator.
**Forestry:** Dr. B. E. Fernow, Department of Agriculture, Honorary Curator.
**Physical Apparatus:** Mr. W. C. Winlock, Smithsonian Institution, Honorary
Curator.

**Ethnology:** Prof. Otis T. Mason, Curator: Mr. Walter Hough, Assistant.

**American Prehistoric Pottery:** Mr. William H. Holmes, Bureau of Ethnology,
Honorary Curator.

**Prehistoric Anthropology:** Dr. Thomas Wilson, Curator: Mr. E. P. Upham, As-
sistant.

**Mammals:** Mr. Frederick W. True, Curator.
**Birds:** Mr. Robert Ridgway, Curator.
**Birds’ Eggs:** Capt. C. E. Bendire, U. S. Army, Honorary Curator.
**Reptiles and Batrachians:** Dr. Leonard Stejneger, Curator.
**Fishes:** Dr. Tarleton H. Bean, U. S. Fish Commission, Honorary Curator: Mr. Barton
A. Bean, Assistant.

**Vertebrate Fossils:** Prof. O. C. Marsh, Yale College, Honorary Curator: Mr. Freder-
ric A. Lucas, Assistant Curator.

**Mollusks:** Mr. William H. Dall, U. S. Geological Survey, Honorary Curator: Dr.
R. E. C. Stearns, Adjunct Curator.

**Insects:** Dr. C. V. Riley, Department of Agriculture, Honorary Curator: Mr. Martin L.
Linell, Aid.

**Marine Invertebrates:** Mr. Richard Rathbun, U. S. Fish Commission, Honorary
Curator; Mr. James E. Benedict, Assistant Curator.

**Comparative Anatomy:** Dr. Frank Baker, National Zoological Park, Honorary
Curator: Mr. Frederic A. Lucas, Assistant Curator.
Invertebrate Fossils:

**Paleozoic:** Mr. C. D. Walcott, U. S. Geological Survey, Honorary Curator.

**Mesozoic:** Dr. C. A. White, U. S. Geological Survey, Honorary Curator.

**Cenozoic:** Mr. William H. Dall, U. S. Geological Survey, Honorary Curator.

**Fossil Plants:** Mr. Lester F. Ward, U. S. Geological Survey, Honorary Curator; Mr. F. H. Knowlton, Assistant Curator.

**Botany:** Dr. George Vasey, Botanist of the Department of Agriculture, Honorary Curator.

**Minerals:** Prof. F. W. Clarke, Chief Chemist, U. S. Geological Survey, Honorary Curator; Mr. William S. Yeates, Assistant Curator.

**Geology:** Mr. George P. Merrill, Curator; Mr. W. H. Newhall, Aid.

**THE ADMINISTRATIVE STAFF.**

No important changes in the administrative departments have been made during the year.

In the office of the Assistant Secretary, who has been appointed representative of the Smithsonian Institution and the National Museum at the World’s Columbian Exposition, Mr. R. E. Earll has assisted in the preparation of the exhibit for the World’s Fair.

The Department of Supplies and Accounts remains under the charge of Mr. W. V. Cox. A statement of the work of this department will be found on page 56.

The Division of Correspondence and Reports is under the charge of Mr. R. I. Geare. For a statement of the work accomplished, see page 61.

Mr. S. C. Brown is in charge of registration and storage. A report of his work will be found on page 23.

Mr. A. Howard Clark has continued his work as editor of the Proceedings and Bulletin of the Museum. He also has charge of the preparation and printing of labels.

Mr. John Murdoch, who has filled the position of librarian of the Museum since 1887, resigned May 15, 1892. At the close of the fiscal year his successor had not been appointed. A report upon the operations of the Library during the year will be found on page 31.

The superintendent of the Museum, Mr. Henry Horan, with Mr. Charles A. Steuart as assistant superintendent, continues in charge of the mechanics and laborers.

E.—**REVIEW OF WORK IN THE SCIENTIFIC DEPARTMENTS.**

**DIVISION OF ANTHROPOLOGY.**

**ETHNOLOGY.**

The work in this department for the past year has been chiefly confined to the preparation of an exhibit for the World’s Columbian Exposition. After consultation, it was decided to unite the work of the Bureau of Ethnology, under the direction of the Smithsonian Institution, with that of the Department of Ethnology in the National Museum.
Several valuable contributions to the collections were received during the year. From the Cocopa, Yaki, Yuma, Papago, and other tribes of Sonora, Mexico, and Lower California, Mr. Edward Palmer collected for the Museum objects illustrating the industries of these tribes. Valuable material was also received from Mr. R. W. Bartleman, United States legation, Caracas, Venezuela; Prof. Henry H. Giglioli, director of the Royal Zoological Museum, Florence, Italy; Hon. Rounsevel Wildman, United States consul at Singapore, India; Prof. I. C. Russell, U. S. Geological Survey; Lieut. G. B. Harber, U. S. Navy, and Mr. J. Walter Fewkes, Cambridge, Mass. The number of specimens received during the year was 2,241, and the number of catalogue entries 1,243.

prehistoric anthropology.

The curator, Dr. Thomas Wilson, has continued his investigations of the evidences of the remote antiquity of man in America, and in this connection has made a special study of arrow-heads and spear-heads, or knives. He was called upon to prepare exhibits for the Madrid Exposition and also for the World’s Columbian Exposition.

About 10,000 specimens were added to the collections of this department during the year. The principal collections were received from Edward Palmer; the Royal Zoological Museum, Florence, Italy; the National Museum of Anthropology and Ethnology, Florence, Italy; A. C. Carlisle, De Witt Webb, the Bureau of Ethnology, Edward Lovett, Henry Balfour, and others.

oriental antiquities.

This section is devoted to biblical archaeology, and to the archaeology, history, languages, arts and religions of the people of western Asia and Egypt, and is under the immediate charge of Dr. Cyrus Adler, as assistant curator. During Dr. Adler’s recent visit to the east, in the interests of the World’s Columbian Exposition, he obtained several interesting objects. Two carefully made and well-preserved paper molds of a piece of sculpture and a cuneiform inscription from Persepolis, have been received through the Department of State, from the Hon. Truxton Beale, United States minister to Persia. The Telfair Academy of Arts and Sciences of Savannah, Ga., has deposited a portion of the collection of oriental books and manuscripts owned by the late William B. Hodgson.

graphic arts.

The most important additions of the year, as reported by Mr. S. R. Koehler, curator, are the illustrations of the half-tone relief screen-process, and of a variety of the photo-aquatint intaglio process. Interesting specimens illustrating the advances made in chromo-collographic process-work were given by Mr. E. Bierstadt, of New York, and by the
J. B. Lippincott Company, of Philadelphia. About 200 specimens were added during the year, the catalogue entries numbering 179.

FORESTRY.

Dr. B. E. Fernow, honorary curator, reports that the forestry collection has not received many additions during the year. The lack of space for exhibition purposes has restricted his efforts toward developing the collection, and the bulkiness of the material makes it undesirable to add to it in the storage-rooms. The curator has, during the year, prepared for publication a list, with notes, of all the species of trees found in the parks of Washington, D. C.

AMERICAN ABORIGINAL POTTERY.

The operations of this department, as reported by Mr. William H. Holmes, honorary curator, consisted in the installation of a number of specimens from the tide-water districts of Maryland and Virginia, and the Gila Valley, Arizona. Among the principal contributions were fragments of ancient Pueblo ware from Arizona, received from the U. S. Geological Survey, and earthen vessels from Guadalajara, Mexico, collected by Capt. John G. Bourke, U. S. Army. The estimated number of specimens received during the year was 1,817.

TRANSPORTATION AND ENGINEERING.

Satisfactory progress is reported by the curator, Mr. J. E. Watkins. The accessions during the year are both valuable and interesting. They include, among other things, an electrical locomotive, which made a speed of 120 miles an hour at Laurel, Md., in 1889. The value of the collection of telegraphic apparatus has been greatly enhanced through the cooperation of Mr. George C. Maynard, secretary of the American Association of Inventors and Manufacturers. The collection showing the development of the typewriting machine has also received several important additions. Messrs. Wyckoff, Seaman & Benedict have deposited a model of the Sholes & Glidden typewriter, invented in 1867, and the original machine made from this model. Mr. J. T. Richards, assistant chief engineer of the Pennsylvania Railroad, presented a model of the monument erected at Bordentown, N. J. in 1891, to commemorate the first movement by steam on a railroad in the State of New Jersey, which occurred on November 12, 1831. Miss Katherine Parsons, of Washington, deposited a sedan chair decorated with gold, owned and used by the royal family of France during the reign of Louis xiv. The number of specimens received during the year was 265, the catalogue entries numbering 161.

FOODS.

Prof. W. O. Atwater, the honorary curator, while in Europe during the past fiscal year, spent considerable time in collating data available for use in preparing labels, charts, diagrams, and plans for the food
collection in the National Museum. With this object in view he conferred with a number of experts and investigators and visited museums in which food collections are to be found. His recent study of the subject has strengthened his belief in the practicability of developing the collection in the National Museum in such a manner as to make it of great popular interest, to say nothing of its educational and scientific value.

MATERIA MEDICA.

Dr. William S. Dixon, U. S. Navy, who assumed charge of this section in October, 1891, as honorary curator, states that the labeling of the collection has been completed. The estimated number of specimens received during the year was 207, the larger portion of which was from the Royal Gardens at Kew, England. The catalogue entries numbered 55.

DIVISION OF ZOOLOGY.

MAMMALS.

Mr. Frederick W. True, curator, states that the work in this department has been seriously arrested by the necessary preparations for the exhibit at the World's Columbian Exposition.

Many foreign and domestic mammals were obtained from various sources. Dr. W. L. Abbott sent a valuable collection of East African mammals, and Mr. William Astor Chanler presented two excellent mounted heads of giraffes from the same locality. Dr. Edgar A. Mearns, U. S. Army, of the Mexican Boundary Commission, has sent in some finely prepared specimens from the border. The President of the United States deposited an armadillo which had been sent to him by Mr. R. R. Skaggs, of Breckenridge, Tex. More than fifty mammals were received from the National Zoological Park. The estimated number of specimens received during the year was 1,086.

BIRDS.

This department, under the charge of Mr. Robert Ridgway, as curator, shows a gratifying growth during the past year. The work of transferring the specimens in the study collection to new trays and cabinets has been vigorously pushed. The preparation of an exhibit of birds for the World's Columbian Exposition occupied a large share of the curator's time. The present state of the collection is more satisfactory than during the preceding year, the arrangement of the specimens being better adapted for the convenience of visitors. The estimated number of specimens added was 5,610, involving 5,609 catalogue entries.

BIRDS' EGGS.

The honorary curator, Capt. Charles E. Bendire, U. S. Army, reports that the collections are in excellent shape, having been carefully overhauled and relabeled. The most important contribution during H. Mis. 114, pt. 2—2
the year was made by Dr. William L. Ralph, of New York, consisting of 1,630 eggs and 100 nests, several of the species being new to the Museum collection. This is the most valuable gift which has been made to this collection for several years. In view of the large number and great value of the contributions made by Dr. Ralph to the collection of birds' eggs in the National Museum, it is understood that this collection will not be drawn upon for purposes of exchange or donation, and that it will form an integral part of the national collection of birds' eggs. A number of specimens, gathered in the Death Valley region of southern California, were received from the Department of Agriculture. There were received during the year 3,094 specimens, involving 840 catalogue entries.

**Reptiles and Batrachians.**

The curator, Dr. Leonhard Stejneger, reports that satisfactory progress has been made during the year. The work of installing, identifying, and labeling the collections has been actively continued, and preparations were made for an exhibit at the World's Columbian Exposition. The most valuable and interesting collection of reptiles received by the Museum since 1890 was the material sent by Dr. C. Hart Merriam, through the U. S. Department of Agriculture. These specimens, over 900 in number, were collected by the Death Valley Expedition in 1891 from the desert regions of California, Nevada and Utah. In addition to the collections mentioned in the last report, there has been received a number of specimens from Mr. P. L. Jouy, obtained by him in southern Arizona. Facilities for studying the collections were afforded to Dr. O. P. Hay, of Irvington, Ind., and Dr. G. Baur, of Worcester, Mass. In addition to his other duties the curator has continued his work on the supplementary volume of the "Nomenclator Zoologici." There were 1,055 entries in the catalogue of the department during the year, embracing 1,004 specimens.

**Fishes.**

The work accomplished has, in general, been similar to that of the preceding year. The honorary curator, Dr. Tarleton H. Bean, has been occupied with his duties in connection with the U. S. Fish Commission, and the routine work has chiefly devolved upon Mr. Barton A. Bean, assistant curator. Fifty-five sets of duplicate fishes were prepared for distribution to educational establishments. Each set contained about 125 species, including both fresh and salt water forms. Valuable collections were received from the U. S. Fish Commission, Prof. B. W. Evermann, Mr. P. L. Jouy, and Mr. Charles W. Richmond. The estimated number of specimens added to the collection was 1,906, the catalogue entries being 553.

**Vertebrate Fossils.**

A large collection of vertebrate fossils, secured by the honorary curator, Prof. O. C. Marsh, during his official work for the U. S. Geological
Survey, was received at the National Museum in July, 1891, and was immediately placed upon exhibition. This is the first installment in the Museum of the official collections of Professor Marsh. The specimens have been well catalogued and arranged by the assistant curator, Mr. F. A. Lucas. Another valuable collection, sent from New Haven by the honorary curator in 1886, is still in storage, on account of lack of room in the exhibition hall. Professor Marsh is now preparing two memoirs, containing a full description of the more important specimens lately deposited in the Museum. During the year, 1,124 catalogue entries were made, and about 1,061 specimens were added to the collection.

MOLLUSKS (INCLUDING TERTIARY INVERTEBRATE FOSSILS).

Mr. William H. Dall, honorary curator, reports that a large amount of time has been devoted to sorting, naming, cataloguing, and storing the duplicate shells. The greater portion of them is now packed in small boxes in the storage room, each specimen bearing its catalogue-number. A card-catalogue makes it possible to refer at a moment’s notice to any duplicates in the collection. It has also been found necessary to arrange and catalogue the drawings of shells. The report on the “Later Tertiary of the United States,” though in type, will be issued a few days too late to appear in the Bibliography of this year. Considerable labor has been bestowed on the continuation of the report on the “Florida Tertiary Mollusks,” for the Wagner Institute of Philadelphia. The most valuable contribution during the year was a collection of shells from St. Helena, donated by Capt. W. H. Turton, of the Royal Engineers, Chatham, England. Mr. Rownsevelle Wildman, United States consul at Singapore, sent a collection of shells representing the principal marine forms of that vicinity. The number of specimens added during the year was 6,225, the catalogue entries being 2,546.

INSECTS.

Prof. C. V. Riley, honorary curator, reports that a large amount of time has been devoted to the study collections in the laboratory, although important additions have been made to the systematic exhibition series. Among the more important accessions are: 400 specimens of Heteroptera, received from Prof. A. L. Montandon, Bucharest, Romania; a collection of Californian insects, from Mr. D. W. Coquillet, of Los Angeles; material collected by Mr. A. Koebele during the Death Valley expedition, in 1891, from the Department of Agriculture; 1,900 specimens of Lepidoptera (native and exotic) from Mr. G. Beyer, of New York; and 57 specimens, embracing 27 species, mostly Coleoptera, from Mr. Charles Dury, of Cincinnati, Ohio. Mr. Dury has also expressed his willingness to contribute more material, and to aid in every way possible in increasing the value of the collection. In September, 1891, Prof.
John B. Smith, entomologist of the New Jersey Agricultural Experiment Station, was requested by the National Museum to compare the North American Noctuidae in several of the museums of Europe, while visiting that country for purposes of study. In London he studied the British Museum collections, and succeeded in identifying most of the Walker types and the species described by Guenee. He also made critical comparisons between the collections of Grote, Zeller and Walker. At the museum in the Jardin des Plantes, Paris, he succeeded in finding many of the insects studied by Guenee and Boisduval, which form, at least in part, the basis of their work on the North American Lepidoptera. At Berlin he examined the collections of the Royal Museum, including material which has been used as the basis of papers on North American species. At Dresden he examined the Staudinger collections, and compared long series from the Siberian, Alaskan, Icelandic, and other Arctic faunal districts. In the course of these studies Professor Smith collected considerable information for publication in the Proceedings of the National Museum, and he also succeeded in obtaining from Mr. W. Schaus, jr., who has collected extensively in Mexico and South America, a promise to present to the Museum his collection, which is very large and contains many of the types described in the Biologia Centrali Americana. About 16,500 specimens were added to the collection during the year, the catalogue entries numbering 295.

MARINE INVERTEBRATES.

Mr. Richard Rathbun, honorary curator, states that considerable progress has been made during the year in the study of the collections of this department. The accessions of the year show a marked increase both in number and in extent and value. The U. S. Fish Commission has transferred the collections of the Albatross in the North Pacific Ocean, and important collections made by the Fish Hawk and the Gram- pus have also been received. Some additions have been made to the exhibition series; but little can be done in this direction until more space can be provided. Mr. J. E. Benedict, assistant curator, has conducted experimental work with a view to the manufacture of some plastic substance suitable for reproductions of soft substances. The preparation of an exhibit representing the families of American marine invertebrates for the World's Columbian Exposition has progressed. Mr. Benedict and Miss Rathbun have completed a monograph of the genus Panopeus, and the latter has prepared catalogues of the Pericercidae and Maiidae. These will be published in the Proceedings of the U. S. National Museum. The department has received the assistance of several specialists in the determination of recently acquired material. The number of catalogue entries during the year is 1,318. The number of specimens received is 7,120.
The work of the year has consisted largely in the preparation and arrangement of osteological material by the assistant curator, Mr. F. A. Lucas. The most important accession of the year was the skeleton of a young sperm whale, obtained through the courtesy of the Life-Saving Service from the station at Green Run Inlet. The U. S. Fish Commission contributed valuable material. The increasing care of the collections has prevented any special researches. The exhibition series is in good condition. During the year 574 specimens were added to the collection, and a large number were transferred to the department of vertebrate fossils.

Invertebrate Fossils (Paleozoic).

Mr. C. D. Walcott, honorary curator, has necessarily devoted the greater portion of his time to work connected with the U. S. Geological Survey, with which he is associated. The principal accessions during the year were received from the Geological Survey. The collection of Cambrian and Ordovician fossils was placed upon exhibition.

In the latter part of 1891 the attention of the curator was called to an unworked collection of Lower Carboniferous crinoids and associated invertebrates from Crawfordsville, Ind., comprising specimens brought together by Prof. Frank Bradley, and presented by Prof. O. C. Marsh to the Yale University Museum, and others gathered by the Rev. D. A. Bassett upon his farm at Crawfordsville, and also the property of the Yale Museum. The National Museum possessed at that time but one or two small specimens from this formation, and plaster casts of several others. The curator urged the extreme desirability of securing a full representation from this classic locality of North American Lower Carboniferous fossils. After some correspondence with Prof. Marsh, with this end in view, Mr. Charles E. Beecher, of the Yale Museum, submitted a proposition, offering to give to the National Museum a large number of the Bassett and Bradley fossils, provided the Museum would be willing to work up the collection and supply the necessary tools. This proposition was accepted, and the task of working up the collection was begun at New Haven, the university kindly furnishing abundant laboratory room and every facility for properly carrying on the work. The material, as it was received at New Haven, weighed two tons, and contained between 3,000 and 4,000 specimens, many of them, however, being duplicates. In addition to the single crinoids and groups of crinoids upon slabs, the collection includes fossil brachiopods, corals, and other invertebrates. It is estimated that the value of the share which will come to the National Museum will exceed double the amount of money expended in working up the collection. The material is very showy and attractive, and will form a valuable addition to the exhibition series.
The number of specimens received during the year was about 869, involving 95 catalogue entries.

INVERTEBRATE FOSSILS (MESOZOIC).  

Dr. C. A. White, honorary curator, reports gratifying progress during the year. The most important accession was received from the U. S. Geological Survey. This embraced a large number of specimens, including some of the most important paleontological material studied by members of the Survey. There were 419 catalogue entries during the year, representing about 3,099 specimens.

DIVISION OF BOTANY.

FOSSIL PLANTS.

Prof. Lester F. Ward, honorary curator, states that the work has been chiefly confined to the installation and care of specimens. There were added to the collection more extensive and valuable accessions than in any previous year. The most important was the collection of fossil plants, presented by Mr. R. D. Lacoe, of Pittston, Pa. This collection numbers 100,000 specimens and is of world-wide reputation. Prof. F. H. Knowlton continued during the year his study of the Laramie flora, and identified a large collection of plants from the Bozeman (Montana) coal fields. The "Flora of the Dakota Group," by the late Prof. Leo Lesquereux, was printed during the year.

RECENT PLANTS.

Dr. George Vasey, botanist of the Department of Agriculture, and honorary curator of the department of botany in the National Museum, reports that the growth of the National Herbarium has been steady, although the percentage of increase has not been as great as in the preceding year. The collections have been practically rearranged and new labels provided. The duplicate specimens were threatened with destruction by insects, and it became necessary to poison them to prevent further damage. New specimens are now treated in this manner when they first arrive. Considerable time has been spent in the preparation of a card-catalogue of all the botanical works in the libraries to which this department has access. Among the more important accessions were the collections made by Mr. F. V. Coville, assistant botanist of the Department of Agriculture (2,150 specimens); Mr. G. C. Nealley (1,709 specimens from Texas and Arizona); Edward Palmer (3,521 specimens from Mexico and Arizona); Mr. J. N. Sandberg (15,191 specimens from Minnesota and Idaho), and Mr. J. M. Holzinger (2,530 specimens from the United States and Europe). There were 512 catalogue entries made during the year, embracing about 53,384 specimens. Of the total number of accessions, 41 were transmitted directly to the National Museum, the remainder being received by the Department of Agriculture.
DIVISION OF GEOLOGY.

MINERALS.

Prof. F. W. Clarke, of the U. S. Geological Survey, continues to act as honorary curator of this department, with Mr. W. S. Yeates as assistant curator. The preparation of an exhibit of minerals and gems for the World's Columbian Exposition has occupied considerable time. A large part of the systematic exhibition series has been remounted on ebonized blocks, and the specimens in the reserve series have been transferred to the exhibition hall. It is intended to provide species labels for the systematic exhibition series, indicating the chemical composition of each species, its crystallographic form, hardness, specific gravity, and different varieties with their characteristics. The systematic duplicate series was thoroughly overhauled and reclassified. Among the more important accessions were twenty-five boxes of minerals, presented by Mr. Joseph Willcox, of Philadelphia; several specimens of minerals from Connecticut, and a crystal of spangolite from Tombstone, Ariz., presented by Prof. S. L. Penfield, of Yale College; four specimens of ornamental stones and one specimen of chalchite, from Mr. Clarence S. Bement, of Philadelphia; two cut specimens of transparent spessartite, from Mr. Ira R. Allen, of Fair Haven, Vt.; three specimens of native gold from the Potomac mine, Montgomery county, Md., presented by Mr. A. B. Russ, of Washington, D. C. Several lots of minerals were also received from the U. S. Geological Survey. There have been 4,121 specimens added to the collection during the year, the catalogue entries numbering 1,454.

GEOLoGY.

Mr. G. P. Merrill, curator, reports that the work in this department has been largely confined to the arrangement and classification of material, and the preparation of about 200 sets of specimens for distribution to educational establishments. Several expeditions for collecting specimens were made during the summer and autumn by the curator, and by Mr. W. H. Newhall, his assistant. The work of preparing an exhibit for the World's Columbian Exposition was entered upon, and the curator visited Arizona, New Mexico, Virginia, Tennessee, Kentucky, Indiana, and Missouri, collecting a large amount of volcanic and cave material. The contributions made by Mr. G. F. Becker, of the U. S. Geological Survey, Mr. W. B. Robertson, of Saltville, Va., Mr. F. W. Crosby, and Mr. Henry G. Bryant were among the most important received during the year. The catalogue entries numbered 1,045, embracing more than of 4,000 specimens.

F.—REVIEW OF THE ADMINISTRATIVE WORK.

REGISTRATION AND DISTRIBUTION.

In the report of Mr. S. C. Brown, registrar, it is stated that the total number of packages of all kinds received during the year is 36,702—an
increase of 3,016 over the previous year. The entries covering these receipts number 2,970, of which 980 consisted of specimens and 918 of supplies intended for the National Museum. The record of outgoing packages for the year embraces 1,408 entries, covering 2,342 packages of various kinds. The storage register shows that during the year 57 packages have been withdrawn from storage by officers of the Museum, and that 290 packages have been temporarily placed in storage. During the year 98 transportation bills have been subdivided and copied, and 184 letters written relating to the transmission of packages through custom houses and to railroad and express companies. In addition, 546 notices of transmission have been sent out. The total number of accessions, i.e., lots of specimens received for the National Museum, during the year was 1,357. In addition, there were received 527 packages of specimens sent for examination and report. The disposition of the accessions among the departments in the Museum is shown in one of the appendices to the accession list, which constitutes Section V of this report.

The distribution records show that during the year 172 packages, containing 16,616 specimens, were sent out. These sendings included specimens given, lent, sent in exchange, and returned to the owners.

The following statement indicates, by geographical arrangement, the recipients of the duplicate specimens distributed, and the character of the material:

Geographical statement of the distribution of specimens during the year ending June 30, 1892.

NORTH AMERICA.

CANADA.

Peter Redpath Museum, Montreal: Cast of trilobite showing appendages. Gift. (D. 7059.)


University of Toronto, Toronto: Collection of echinoderms, etc.; duplicate collection of casts of stone implements (set 10). Gift. (D. 7142.) (D. 7274.)

UNITED STATES.

ARIZONA. Edgar L. Storment, Tempe: Mud-puppy (1 specimen); lobsters (2 specimens); horseshoe crabs (2 specimens); holothurians (2 specimens), in exchange. (D. 6987.) (D. 7280.)

CALIFORNIA. Leland Stanford jr. University, Menlo Park: Fishes (3 specimens); duplicate collection of marine invertebrates (series IV, set 188). Gift. (D. 7096.) (D. 7234.)


COLORADO. University of Colorado, Boulder: Duplicate collection of minerals (set 121); duplicate collection of alcoholic fishes (set 45). Gift. (D. 7308.)

CONNECTICUT. Bridgeport Scientific Society, Bridgeport: Duplicate collection of minerals (set 109); duplicate collection of alcoholic fishes (set 50). Gift. (D. 7029.) (D. 7212.)

""D." refers to the distribution record kept in the registrar's office.
G. R. Lumsden, Greenville: Gorgonians and sponges (2 packages). Gift. (D. 7179.)

H. S. Williams, Haddam: Ores (24 specimens), in exchange. (D. 7005.)

Hartford Theological Seminary, Hartford: Duplicate collection of minerals (set 11); duplicate collection of casts of stone implements (set 6). Gift. (D. 7071.) (D. 7230.)

Peabody Museum, New Haven: Panopopens (1 specimens), in exchange. (D. 7087.)

Yale College Museum, New Haven: Cast of trilobite showing appendages. Gift. (D. 7055.)

**DISTRICT OF COLUMBIA.** Miss Nellie Baird, Washington: Collection of massorted Foraminifera. Gift. (D. 7166.)

Miss Mary Clark, Washington: Specimen of Moki Indian basket tray, in exchange. (D. 6805.)


Commissioner of Patents, Washington: Crude petroleum (31 samples). Gift. (D. 7157.)

E. E. Howell, Washington: Specimens of minerals (2 boxes, 1 bottle and 1 package); minerals (6 specimens), in exchange. (D. 6831.) (D. 6865.) Miscellaneous ores (183 specimens); three slabs of onyx and 300 pounds of iron ore; rocks (39 specimens) for exchange. (D. 6875.) (D. 6898.)


S. Ward Loper, National Museum: Specimen of onyx, in exchange. (D. 7252.)


**ILLINOIS.** William A. Morris, Aledo: Unios (7 specimens), in exchange. (D. 6882.)

Arizona Oynx Company, Chicago: Seven slabs of oynx, in exchange. (D. 7226.)

**INDIANA.** Indiana University, Bloomington: Rocks (51 specimens). Gift. (D. 7028.)

Hanover College, Hanover: Duplicate collection of alcoholic fishes (set 16). Gift. (D. 7223.)

Indiana State Normal School, Terre Haute: Duplicate collection of alcoholic fishes (set 10). Gift. (D. 7181.)

**INDIAN TERRITORY.** A. T. Odeneal, Lehigh: Lodestone (1 specimen). Gift. (D. 6819.)

**IOWA.** Iowa State Normal School, Cedar Falls: Duplicate collection of marine invertebrates (series iv, set 185); duplicate collection of alcoholic fishes (set 54). Gift. (D. 7084.) (D. 7192.)

Museum of State Library, Des Moines: Indian pottery (136 specimens). Gift. (D. 7089.)


Parsons College, Fairfield: Duplicate collection of alcoholic fishes (set 53). Gift. (D. 7191.)

Herbert E. Brock, Mason City: Indian implements (57 specimens); arrow and spear heads (50 specimens), in exchange. (D. 6820.) (D. 7218.)

Cornell College, Mount Vernon: Duplicate collection of minerals (set 106); duplicate collection of alcoholic fishes (set 2). Gift. (D. 6977.)

**KANSAS.** Baker University, Baldwin: Duplicate collection of minerals (set 116). Gift. (D. 7193.)

College of Emporia, Emporia: Duplicate collection of alcoholic fishes (set 21). Gift. (D. 7216.)

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KENTUCKY. L. C. Lane, Frankfort: Collection of shells, in exchange. (D. 7332.)

State University, Louisville: Duplicate collection of minerals (set 117). Gift. (D. 7201.)

Central University, Richmond: Duplicate collection of alcoholic fishes (set 43). Gift. (D. 7295.)

LOUISIANA. Louisiana State University, Baton Rouge: Duplicate collection of alcoholic fishes (set 49). Gift. (D. 7211.)

Tulane University, New Orleans: Duplicate collection of alcoholic fishes (set 6); duplicate collection of minerals (set 118); duplicate collection of casts of stone implements (set 5); special collection of marine invertebrates (6 boxes). Gift. (D. 7140.) (D. 7225.) (D. 7226.)

MAINE. Dr. A. C. Hamlin, Bangor: Miscellaneous minerals (60 specimens), in exchange. (D. 6979.)

Maine State College, Orono: Miscellaneous ores (111 specimens), in exchange. (D. 7265.)

T. F. Lamb, Portland: Miscellaneous minerals (29 specimens), in exchange. (D. 7011.)


Colby University, Waterville: Duplicate collection of alcoholic fishes (set 14). Gift. (D. 7207.)

MARYLAND. Dr. George H. Williams, Baltimore: Minerals (15 specimens), in exchange. (D. 7152.)


MASSACHUSETTS. George H. Barton, Boston: Ores (1255 pounds), for exchange. (D. 6871.)

Prof. W. O. Crosby, Boston: Collection of Nevada nickel ores, in exchange. (D. 6908.)

Massachusetts Institute of Technology, Boston: Ores (598 specimens), in exchange. (D. 7022.)

N. L. Wilson, Boston: Minerals (28 specimens), in exchange. (D. 7285.)

Museum of Comparative Zoology, Cambridge: Cast of trilobite showing appendages; specimen of Tile fish and 7 species of Scopelids. Gift. (D. 7056.) (D. 7289.)


Bigelow School, Marlboro: Specimens of wulfenite and azurite. Gift. (D. 7001.)


MICHIGAN. University of Michigan, Ann Arbor: Collection of casts of stone implements (set 7). Gift. (D. 7249.)

Frederick Stearns, Detroit: Collection of Unionidae; miscellaneous shells (71 specimens), in exchange. (D. 6810.) (D. 6893.)

MINNESOTA. Hamline University, Hamline: Duplicate collection of alcoholic fishes (set 25). Gift. (D. 7231.)

State Normal School, Mankato: Duplicate collection of marine invertebrates (series IV, set 189); duplicate collection of alcoholic fishes (set 4). Gift. (D. 7062.)

Minnesota Academy of Natural Sciences, Minneapolis: Duplicate collection of alcoholic fishes (set 26). Gift. (D. 7277.)

University of Minnesota, Minneapolis: Fossil plants (12 specimens), in exchange. (D. 7245.)
State Normal School, St. Cloud: Duplicate collection of alcoholic fishes (set 17). Gift. (D. 7262.)

Gustavus Adolphus College, St. Peter: Duplicate collection of minerals (set 107). Gift. (D. 7083.)

Missouri, Hooper Institute, Clarksburg: Duplicate collection of minerals (set 111). Gift. (D. 7143.)

Missouri State University, Columbia: Duplicate collection of minerals (set 113). Gift. (D. 7153.)

C. A. Brockett, Kansas City: Stone (1 specimen). Gift. (D. 7132.)

Missouri Valley College, Marshall: Duplicate collection of alcoholic fishes (set 52). Gift. (D. 7185.)

Julius Hurter, St. Louis: Reptiles (7 specimens). Gift. (D. 6386.)

Montana, College of Montana, Deer Lodge: Duplicate collection of alcoholic fishes (set 15). Gift. (D. 7208.)

Homer Squyer, Mingusville: Shells (18 specimens), in exchange. (D. 7313.)

James Allen, Willis: Beauxite and cryolite (3 specimens). Gift. (D. 6800.)

Nebraska, Bellevue College, Department of University of Omaha, Bellevue:
Duplicate collection of casts of stone implements (set 9). Gift. (D. 7282.)

University of Nebraska, Lincoln: Duplicate collection of alcoholic fishes (set 8); duplicate collection of casts of stone implements (set 8). Gift. (D. 7159.)


Albert Mann, Jr., Newark: Samples of ocean bottom. Gift. (D. 7075.)

J. C. Smock, Trenton: Specimens of labels, blocks, bottles, and wires used in exhibition series of the National Museum. Gift. (D. 7113.)

New York, Wells College, Aurora: Duplicate collection of marine invertebrates (series IV, set 181); duplicate collection of minerals (set 101); duplicate collection of alcoholic fishes (set 1). Gift. (D. 6818.) (D. 6976.)


Society of Natural Sciences, Buffalo: Echinoderms (10 specimens). Gift. (D. 7081.)

Hamilton College, Clinton: Duplicate collection of alcoholic fishes (set 17). Gift. (D. 7209.)

State Normal School, Cortland: Duplicate collection of alcoholic fishes (set 51); duplicate collection of casts of stone implements (set 3). Gift. (D. 7196.) (D. 7182.)

Fort Edward Collegiate Institute, Fort Edward: Duplicate collection of minerals (set 112). Gift. (D. 7121.)

Charles Babcock, Cornell University, Ithaca: Onyx and syenite (1 specimen of each). Gift. (D. 7088.)

Cornell University, Ithaca: Rocks (48 specimens); bones of Great Auk, in exchange. (D. 7186.) (D. 7247.)

American Museum of Natural History, New York City: Cast of trilobite showing appendages. Gift. (D. 7090.)

S. P. Avery, New York City: Specimen of lithograph by Menzel, in exchange. (D. 7202.)

G. Beyer, New York City: Dried insects (2 boxes); dried insects (253 specimens), in exchange. (D. 7137.) (D. 7119.)

College of the City of New York, New York City: Duplicate collection of alcoholic fishes (set 22). Gift. (D. 7217.)

Robert Demcker, New York City: Minerals (52 specimens), in exchange. (D. 7085.)
George L. English & Company, New York City: Minerals (12 specimens); minerals (12 specimens), in exchange. (D. 6816.)

George F. Kunz, New York City: Minerals (9 specimens), in exchange. (D. 7138.)

Charles Mali, Belgian Consul, New York City: Coal (17 specimens). Gift. (D. 6859.)

Tiffany & Company, New York City: Minerals (6 specimens), in exchange. (D. 7118.)

Port Jefferson Union School, Port Jefferson: Duplicate collection of minerals (set 90). Gift. (D. 6786.)

Henry A. Ward, Rochester: Minerals (37 specimens), in exchange. (D. 6849.)

Union College, Schenectady: Two species of Pentacrinus; collection of Foraminifera. Gift. (D. 7100.) (D. 7111.)

Syracuse University, Syracuse: Duplicate collection of alcoholic fishes (set 18). Gift. (D. 7214.)

St. John's School, Utica: Duplicate minerals (26 specimens). Gift. (D. 6949.)


D. A. Bowman, Bakersville: Minerals (2 specimens). Gift. (D. 6798.)

Trinity University, Durham: Duplicate collection of marine invertebrates (series IV, set 192); duplicate collection of alcoholic fishes (set 55). Gift. (D. 6888.) (D. 7190.)


Oberlin College, Oberlin: Duplicate collection of alcoholic fishes (set 28). Gift. (D. 7102.)

Mansfield Memorial Museum, Mansfield: Duplicate collection of marine invertebrates (series IV, set 187); duplicate collection of alcoholic fishes (set 7). Gift. (D. 7141.)

Scioto College, Scioto: Duplicate collection of minerals (set 110). Gift. (D. 7053.)


St. Vincent College, Beatty: Duplicate collection of alcoholic fishes (set 9). Gift. (D. 7172.)

Academy of Natural Sciences, Philadelphia: Scopelids (5 specimens). Gift. (D. 7030.)

University of Pennsylvania, Philadelphia: Set of plaster casts of Haida gambling sticks; specimens of seeds used in games, in exchange; duplicate collection of casts of stone implements (set 11). Gift. (D. 6864.) (D. 7100.) (D. 7305.)

Wagner Free Institute of Science, Philadelphia: Unionidae (375 specimens, 176 species), in exchange. (D. 6974.)

Joseph Willecox, Philadelphia: Minerals (8 specimens), in exchange. (D. 7123.)

Duquesne College, Pittsburg: Duplicate collection of minerals (set 163). Gift. (D. 6921.)

Central State Normal School, Lock Haven: Duplicate collection of alcoholic fishes (set 46). Gift. (D. 7261.)


George Wieland, State College: Rocks (55 specimens), in exchange. (D. 7027.)

E. G. Dutton, Twin Oaks: Minerals (59 specimens), in exchange. (D. 7099.)


TENNESSEE. University of Tennessee, Knoxville: Duplicate collection of alcoholic fishes (set 20). Gift. (D. 7215.)
Obion Normal College, Troy: Duplicate collection of minerals (set 101). Gift. (D. 6945.)
TEXAS. Columbia College, Van Alstyne: Duplicate collection of minerals (set 100). Gift. (D. 6812.)
Fort Worth University, Fort Worth: Duplicate collection of marine invertebrates (series IV, set 183). (D. 7001.)
UTAH. R. Forrester, Castle Gate: Minerals (6 specimens), in exchange. (D. 6807.)
VIRGINIA. Miller Manual Labor Training School of Albemarle, Crozet: Collection of silver, copper, and lead ores including gold. Gift. (D. 6863)
Hampton Normal and Agricultural Institute, Hampton: Duplicate collection of minerals (set 105). Gift. (D. 6958.)
WEST VIRGINIA. University of West Virginia, Morgantown: Duplicate collection of alcoholic fishes (set 13). Gift. (D. 7178.)
WISCONSIN. High School, Antigo: Duplicate collection of minerals (set 120). Gift. (D. 7261.)
University of Wisconsin, Madison: Cast of trilobite showing appendages. Gift. (D. 7057.)
State Normal School, Milwaukee: Duplicate collection of alcoholic fishes (set 19). Gift. (D. 7210.)
State Normal School, Whitewater: Duplicate collection of minerals (set 102); duplicate collection of marine invertebrates (series IV, set 186). Gift. (D. 6896.) (D. 7186.)
WYOMING. Wyoming University, Laramie: Duplicate collection of alcoholic fishes (set 24). Gift. (D. 7227.)

TRANSMISSIONS TO FOREIGN COUNTRIES.

AUSTRALIA.

NEW SOUTH WALES.


NEW ZEALAND.

Auckland Museum, Auckland: Collection of photographs and working-drawings of museum cases, also specimens of labels. Gift. (D. 6971.)

Otago University Museum, Dunedin: Crinoids (3 specimens); reptiles (15 specimens), in exchange. (D. 7294.)

EUROPE.

AUSTRIA.

University of Vienna, Vienna, Austria: Cast of trilobite showing appendages. Gift. (D. 7051.)

DENMARK.

Royal Zoological Museum, Copenhagen: Deep-sea fishes (37 species); Crustacea and Radiata (324 specimens), in exchange. (D. 6825.)

ENGLAND.

Edward Lovett, Croydon: Forty ethnological specimens, in exchange. (D. 7039.)
Rev. A. M. Norman, Fence Houses, Durham: Marine invertebrates (5 specimens), for exchange. (D. 7095.)
Rev. Henry Baker Tristram, Durham: Bird skins (60 specimens), in exchange. (D. 6797.)

British Museum, London: Cast of trilobite, showing appendages; 63 specimens of ethnologica, in exchange. (D. 7065.) (D. 7201.)

Mr. Cosman, London: Shell marl from Alabama (2 barrels), in exchange. (D. 7065.)

Hugh Fulton, London: Turricula Bairdii (10 specimens), in exchange. (D. 7157.)

George F. Harris, London: Shell marl (1 barrel), in exchange. (D. 7175.)

Mr. Cossman, London: Cast of trilobite, showing appendages. Gift. (D. 7072.)

R. N. Worth, Plymouth: Ores (152 specimens), for exchange. (D. 6867.)

FRANCE.


University of Lille, Lille: Cast of trilobite showing appendages. Gift. (D. 7052.)


GERMANY.

Dr. A. Nehring, Berlin: Specimens of seeds of North American Nymphaeaceae; seeds of Brasenia and Nuphar, in exchange. (D. 7124.) (D. 7211.)

Museum of Natural History, Bucharest, Roumania: Cast of trilobite showing appendages. Gift. (D. 7050.)

Zoological, Archæological, and Ethnological Museum, Dresden: Four cast of Easter Island tablets, in exchange. (D. 7269.)

Prof. R. Wiedersheim, Freiburg: Siren lacertina (4 specimens). Gift. (D. 7098.)

Geological Museum of the University of Jena, Jena: Cast of trilobite showing appendages. Gift. (D. 7045.)

University of Munich, Munich: Cast of trilobite showing appendages. Gift. (D. 7048.)

ITALY.

Zoological Museum, Bologna: Prof. C. Emery, insects (5 specimens). Gift. (D. 7079.)

Royal Zoological Museum, Florence: Prof. Henry H. Giglioli, ethnological material (172 specimens) and archaeological material (100 specimens), in exchange. (D. 6888.)

NORWAY.

Zoological Museum of the University of Christiania, Christiania: Skin of young seal; model of skull; fishes (2 specimens), in exchange. (D. 6824.) (D. 7102.)

RUSSIA.

Geological Museum of the University of Moscow, Moscow: Cast of trilobite showing appendages. Gift. (D. 7016.)

Imperial Academy of Sciences, St. Petersburg: Cast of trilobite showing appendages; geological specimens (2 boxes), and publications, in exchange. (D. 7054.) (D. 7170.)

SWEDEN.

The following table shows the number of specimens distributed from the various departments of the Museum during the year ending June 30, 1892:

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<thead>
<tr>
<th>Department</th>
<th>Number of specimens</th>
<th>Department</th>
<th>Number of specimens</th>
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<tr>
<td>Vertebrate fossils</td>
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</table>

LIBRARY.

Mr. N. P. Scudder, assistant librarian, has furnished the following statement in regard to the operations of the Museum library during the year:

The number of publications added to the library is 11,892 (693 volumes of more than 100 pages, 1,642 pamphlets, and 8,486 parts of regular serials). Of these, 297 volumes, 774 pamphlets, and 6,363 parts of serials have been retained for the use of the Museum from the accessions of the Smithsonian Institution, the remainder being obtained, as usual, by gift, exchange, and purchase.

During the year, 6,094 books were borrowed from the library, of which 1,832 had been returned at the close of the year. The books assigned to the sectional libraries are counted with those borrowed, hence the great excess of these over those returned. During the year, 243 orders for books were sent to the Library of Congress. There have been added 2,235 titles to the card-catalogue by authors, and 1,989 cards were added to the subject-catalogue, making a total of 3,827 cards in this catalogue.

SECTIONAL LIBRARIES.

The designations of the sectional libraries now organized, and the number of books assigned to each, are as follows:

Administration.—111 volumes, 74 parts, and 81 pamphlets.
Aeronautics.—3 volumes and 29 parts.
Astronomy.—63 volumes, 522 parts, and 19 pamphlets.
Birds.—589 volumes, 155 parts, and 56 pamphlets.
Editor.—656 volumes, 229 parts, and 46 pamphlets.
Ethnology.—379 volumes, 99 parts, and 29 pamphlets.
Fishes.—52 volumes, 19 parts, and 10 pamphlets.
Geology.—717 volumes, 169 parts, and 155 pamphlets.
Insects. — 492 volumes, 310 parts, and 210 pamphlets.
Mammals. — 210 volumes and 295 pamphlets.
Marine invertebrates. — 89 volumes and 46 pamphlets.
Materia medica. — 251 volumes, 97 parts, and 23 pamphlets.
Mesozoic fossils. — 30 volumes and 2 pamphlets.
Mineralogy. — (A) 212 volumes, 63 parts, and 19 pamphlets; (B) 89 volumes, 24 parts, and 78 pamphlets.
Mollusks and cenozoic fossils. — 110 volumes, 275 parts, and 89 pamphlets.
Oriental archæology. — 311 volumes, 157 parts, and 157 pamphlets.
Plants. — 396 volumes, 302 parts, and 335 pamphlets.
Prehistoric anthropology. — 79 volumes, 40 parts, and 42 pamphlets, in addition to the Ran Memorial Library of 1,609 titles.
Reptiles. — 16 volumes, 7 parts, and 4 pamphlets.
Transportation. — 121 volumes, 189 parts, and 2 pamphlets.

Owing to the failure of Congress to appropriate any money for binding, it has been impracticable to bind any of the books belonging to the Museum library. There are at least 1,500 volumes which need binding, some being of great value.

In several instances it has been found necessary, in order to preserve the books, to withdraw them from circulation, while in other instances where the work of curators would not permit this, the books are being worn out by constant though careful use.

Of the Smithsonian deposit 500 volumes were bound upon application to the Librarian of Congress.

SPECIMENS SENT TO THE MUSEUM FOR EXAMINATION AND REPORT.

The record which has been kept of the specimens sent during the year for examination shows that 526 lots have been received (Nos. 1248 to 1774, inclusive). Specimens forwarded to the Museum for this purpose are referred to the curator of the proper department, who prepares a report embodying the result of his examination, a copy of which is transmitted to the sender.

A list* of the specimens received for examination, arranged alphabetically by name of sender, is here given:

Adams, C. F., Champaign, Ill.: Birds’ skins. 1659 (V–A).
Adams, W. W., Mapleton, N. Y.: Shell beads. 1342 (III).
Alderson, Hon. J. D. (See under Mrs. B. T. Beirne.)
Allen, James, Willis, Mont.: Mineral. 1600 (XVI).
American Museum of Natural History, New York City: Squirrel. 1631 (IV).
Anastasiades, K., Norfolk, Va.: Two glass cases containing 2 silk ribbons made by silkworms. (Returned.) 1493 (X).
Anderson, John V., Little Creek, Del.: Portion of owl. 1557 (V–A).
Angel, L. C., Ridge Spring, S. C.: 3 specimens of minerals. 1515 (XVI).
Appleton, John W. M., Salt Sulphur Springs, W. Va.: An object having the appearance of a soft-shelled egg—dug from the ground. 1482 (X).

*The number accompanying each entry is the number assigned to the sending on the Museum records. The number in parentheses indicates the department in the Museum to which the specimen was referred for examination.
Arthur, F. G., Sioux City, Iowa: Ball-shaped object fastened to an oak leaf. 1250 (XIV).

Ashton, H. H., Thorntown, Ind.: Silk-moth. 1724 (X).

Austin, Mrs. R. M., Davis Creek, Cal.: Butterflies. 1411 (X).

Ayer, N. J., Carthus Flat, Cal.: Butterfly. 1121 (X).

Ayres, T. F., Richland Center, Wis.: Small carved image. 1602 (III).

Bachel, George H., Phillipsburg, Mont.: Two specimens of tale. 1436 (XVII).

Bachmann, George, Tannersville, N. Y.: Ore and bottle of fluid. 1631 (XVII).

Bailey, M. J., Castle City, S. Dak.: Two specimens of rocks. 1110 (XVII).

Bannon, F. T., Jessupps, Md.: Insert. 1395 (X).

Barker, S. R., Chambersburg, Ind.: Insect. 1437 (X).

Barlow, C. F., Canastota, N. Y.: Worms and grubs found infesting celery and onion fields. 1738 (X).


Barnes, E. A., Syracuse, N. Y.: Dandelion, with ten flowers on one stalk. 1727 (XV).

Barnett, J. D., Gainesville, Tex.: 3 shells. 1410 (IX).

Barnum, Dr. Eugene E., Lancaster, Va.: Bone. 1721 (XII).


Bash, C. B., Cle-Elum, Wash.: Plants. 1664 (XV).

Bartholomew, W. L., Buckley, Wash.: Ore. 1718 (XVII).

Bassler, Thomas, Louisiana, Mo.: 45 species of Coleoptera. 1361 (X).

Barr, Dr. G., Worcester, Mass.: Collection of birds. 1624 (V-A).

Bear, M. O., Orechala, Ariz.: Plant. 1468 (XV).

Bearden, C. C., Comanche, Tex.: Insect. 1390 (X).

Beaver, Charles, Tamora, Nebr.: Fossil bones of mammal. 1402 (XII).

Beirne, Mrs. B. T., Lewisburg, W. Va.: through Hon. J. D. Alderson: Sun-dial supposed to have belonged to Thomas Jefferson. 1739 (II-A).


Belden, Dr. C. K., Jamaica, N. Y.: Insects. 1277 (X).

Bell, A. McVilley, Washington, D. C.: Luna-moth. 1328 (X).


Bennett, Richard, Eureka Springs, Ark.: 2 specimens of rocks. (Returned.) 1564 (XVII).

Bentley, Dr. Henry, Mystic, Conn.: Fossil teeth. 1503 (XII).


Bloch, A., Bowling Green, Ky.: Ore. 1516 (XVII).


Bohanan, F. A., Luray, Va.: Moth. 1261 (X).

Boker, Edward W., Washington, D. C.: 17 silver coins and medals of Germany, Italy, and Poland. (Returned.) 1489 (I).

Bonelli, George, Tooele City, Utah: Ore. 1615 (XVII).


Box, Henry, Terraville, S. Dak.: Quartz crystals. 1629 (XVI).

Boyle, Mrs. Mary, Flemington, N. J.: Small stone. 1157 (25065) (IX).

Bracken, A. H., Hensley, N. C.: Ore. (Returned.) 1565, 1712 (XVII).

Bradford, George D., New York City: 10 species of Coleoptera. 1608 (X).

Bradley, I. S., Dayton, Ohio: Worm. 1257 (X).

Brandt, Carl L., Savannah, Ga.: 177 manuscripts, 39 printed books, and 3 newspapers. 1450 (I).


Braziel, H. P., Daytona, Fla.: Small fragments of fossil bone; mineral. 1467 (XVII, XVI).

H. Mis. 114, pt. 2—3
Breseman, Henry, Wayne Wis.: Copper implement. 1554 (III).
Bringham, Dr. William, Philadelphia, Pa.: Insect; water containing egg-shaped insects. 1470, 1477 (X).
Brinkley, Thomas C., Cleveland, Ohio: Insect. 1303 (X).
Broek, A. B., Osceola, Mo.: Mineral. 1711 (XVI).
Broek, Herbert E., Mason City, Iowa: 11 specimens of crinoids. 1626 (25508) (XIII-A).
Broekway, W. J., Vallicita, Cal.: Substance found after a rain shower in roads, fields, etc. 1547 (XV).
Brooke, A. C., Lexington, Va.: Insect. 1143 (X).
Brown, Abram, Robertstown, Pa.: Ore. 1315 (XVII).
Brown, G. S., Vandalia, N. Y.: Insect. 1316 (X).
Brown, Phil. F., Blue Ridge Springs, Va.: Insect. 1750 (X).
Brown, Prof. W. J., U. S. Grant University, Athens, Tenn., through G. P. Merrill: Pharyngeal of Aplodinotus grunniens. (Returned.) 1736 (XVII).
Bryan, William A. C., Nephi City, Utah: Ore. 1309 (XVII).
Bryan, T. J., Fort Gibson, Ind. T.: Plaster cast of a piece of metal found at Bush Creek, Adams County, Ohio. 1706 (XIII).
Buell, A. D., Palm Springs, Fla.: Insect. 1323 (X).
Bullene, George W., Seattle, Wash.: Rock. 1301 (XVII).
Bullock, David J., Bar Harbor, Me.: 2 specimens of wasps. 1271 (X).
Burk, Frank, Nephi City, Utah: Mineral. 1422 (XVII).
Campbell, H. C., Lansingburg, N. Y.: Beetle. 1670 (X).
Carver, E. E., South Sioux City, Nebr.: Insect. 1263 (X).
Carlisle, Dr. J. P., Cold Springs, Tex.: Cretaceous echinoid (?). (Returned.) 1603 (XIII-B).
Carter, I. C., Macon, Ga.: Vegetable substance. 1772 (XV).
Carter, Miss Sue, Cloverport, Ky.: Mineral. 1682 (XVI).
Case, Mrs. H. M., Emmetsburg, Iowa: Plant. 1315 (XV).
Chambers, G. W., Egger, Ark.: 2 specimens of ores. (Returned.) 1647 (XVII).
Chambers, J. C., Paint Rock, Tenn.: Ancient Hebrew manuscript, ancient Hebrew book, 2 phylacteries in cases with straps. (Returned.) 1723 (I).
Chapman, Gilman, Bethel, Me.: Insect. 1262 (X).
Chase, James H., Wenatchee, Wash.: Quartz; rock. 1340, 1419 (XVI, XVII).
Chatham, W. S., Roanoke, Va.: Mineral substance found in sinking a shaft for iron. 1685 (XVI).
Chesney, J. C., Northumberland, Pa.: Ore. 1361 (XVII).
Christy, W. H., New York City: Metallized fossil from Peru. 1405 (XII).
Church, F. L., Shushan, N. Y.: Alcoholic specimen of six-legged frog. 1337 (24770) (VI).
Church, Mrs. J. L., Woodlake, Ky.: Insect. 1355 (X).
Clark, A. Howard, Gloucester, Mass.: Portion of shoulder-girdle of skate. (Returned.) 1113 (XII).
Clark, Alexander, Port Angeles, Wash.: Ore. (Returned.) 1461 (XVII).
Clarke, D. O., Perico, Fla.: Insect. 1588 (X).
Clouse, Henry, Phebe, Tenn.: Ore. 1608 (XVII).
Cole, James, Meadville, Pa.: 2 specimens of quartz. 1635 (XVI).
REPORT OF ASSISTANT SECRETARY.

Coleman, B. L., Poindexter’s Store, Va.: Moth. 1282 (X).

Collins, Dr. William, Somerset, Pa.: Surveyor’s compass made by Rittenhouse and Potts, and used on the Mason and Dixon line survey in 1763-1767. (Returned.) 1505 (I).

Cone, C. C., Lagrange, Ind.: Moth. 1249 (X).

Cook, E. F., Omaha, Nebr.: Butterfly. (1375 (X).

Cook, Frank, Houston, Idaho: Rock. (Returned.) 1272 (XVII).

Cook, R. E., Nottingham, Ala.: Clay. 1637 (XVII).

Cooper, L. F., Crescent City, Cal.: Rock. 1657 (XVII).

Cooper, Samuel. (See under George Weston.)

Copeland, J. B., Harrisburg, Pa.: 2 specimens of stones. 1341 (XVII).

Cornick, Miss L. A. B., Genito, Va.: Minerals. (Returned.) 1287 (XVII).

Couey, P. J., Gratersville, Ariz.: (Pottery (?) 1770 (III).

Craig, J. W., Musket, Va.: Micaceous hematite. 1476 (XVII).


Crockett, J. T., Chambersburg, Ind.: Insect. 1445 (X).

Crook, Robert L., Eastonville, Colo.: Insect. 1493 (X).

Crosby, Prof. W. O., Boston, Mass.: Eruptive rocks. 1408 (XVII).

Cunningham, Burton L., Fort Klamath, Oregon: Butterflies. 1382 (X).

Curry, Mrs. Hattie G., Sioux City, Iowa: Moth. 1264 (X).

Dahl, F. O., Libby, Mont.: Stone implement. 1546 (25432) (III).

Daniel, Dr. Z. T., Blackfeet Agency, Piegan, Mont.: Stone, supposed to be a petrified imprint of a moccasin foot in soft sand, found by a Blackfeet Indian in Two Medicinal Creek. 1745 (25834) (III).

Daniels, William H., Fairhaven, Wash.: Insect. 1357 (X).

Darling, Eliska, Ridgway, Colo.: Mineral. 1687 (XVI).

Davis, B. S., Charlotte, N. C.: Plant. 1738 (XV).


Demeker, Robert, New York City: Minerals. 1703 (25758) (XVI).


Dennett, W. S., Saco, Me.: Insects. 1491 (X).

Detrick, W. L., Julian, Cal.: 3 specimens of ores. (Returned.) 1616 (XVII).

Devereaux, A., Decatur, Tex.: Fossil: stone. 1320, 1559 (XVIII, XVII).

Dietz, Ottomar, New York City: 237 species of Coleoptera. (Returned.) 1623 (X).


Diggles, Mrs. J. A., Etna, Cal.: Insect. 1313 (X).

Dodge, Mrs. Charles, jr., San Carlos, Ariz.: Large basket made by Chilchuma, an Apache Indian chief. 1523 (25088) (II-A).

Downman, R. H., Warrenton, Va.: Insect. 1417 (X).

Driker, Harry, Hatton, Ill.: Insect. 1386 (X).

Dugès, Prof. A., Guanajuato, Mex.: Insects; coral, parasitic worms. 1536, 1716 (25780), 1385, 1409 (X, XI).

Dunlap, R. S., Greenfield, Ohio: Carved bone. 1632 (III).


Duscoll, M., Billings, Mont.: 2 butterflies. 1762 (X).

Eaton, Lucy C., Truro, Nova Scotia: Insects. 1690 (X).

Ebaugh, Jeremiah, Carrollton, Md.: Ore. 1610. (Returned.) 1666 (XVII).

Eckart, Edward, Waupun, Wis.: Butterfly. 1336 (X).

Eells, A. F., Boston, Mass.: Granite from Buck’s Harbor, Maine. 1571 (XVII).

Eggleston, Mrs. L. T., Forest Depot, Va.: Leaf of plant. 1307 (XV).


Ellis, F. G., Hogan, Mont.: Skull of mammal. 1663 (IV).

Emerson Brothers, Santa Ana, Cal.: Insect. 1719 (X).
Emmert, John W., Bristol, Tenn.: Chipped implements and a human skull. 1697
(III).
Ensigh, George A., Defiance, Ohio: Insect. 1309 (X).
Evans, Hon. H. Clay, Chattanooga, Tenn.: Rock. 1572 (XVI).
Evans, William A., Jacksonville, Fla.: Insect. 1518 (X).
Faulk, Charles, East Liverpool, Ohio: Ore. (Returned.) 1560 (XVII).
Ferguson, J. M., Bald Creek, N. C.: Mineral. 1501 (XVI).
Ferris, C. L., West Auburn, Pa.: Insect. 1279 (X).
Finnigan, Thomas, Dunlap, Ariz.: 3 specimens of rock. 1702 (XVII).
Fitch, M. L., Logansport, Ind.: Insect. 1701 (X).
Fitzjohn, A. W., Toledo, Ohio: Insect. 1326 (X).
Flagg, H. W., Martinsburg, W. Va.: Rock. (Returned.) 1662 (XVII).
Fletcher, S., Phebe, Tenn.: 7 specimens of rocks. (Returned.) 1691 (XVII).
Ford, R. T., Naillon, Tenn.: 2 small specimens of rock. 1612 (XVII).
Forrer, R., Strasburg, Germany: 43 specimens of antique Roman and Byzantine textile fabrics, and 10 tablets of wood with Greek, Egyptian, and Coptic inscriptions. (Returned.) 1394 (III).
Forrester, Robert, Ste. Genevieve, Utah: Seeds; fossils; fossil shells; fossils; eruptive rock; 1653 (returned); 1656 (returned); 1675 (returned); 1678, 1684 (returned) (one specimen retained, 26000). (XIII-B, XV, XVII).
Fox, J. J., Hargi, Fla.: Insects. 1370, 1661 (X).
Foy, Alfred D., Lookout Mountain, Tenn.: Plants. 1725 (XV).
Frazee, C. T., Villa Grove, Colo.: Small portion of the skeleton of a mammal. 1253
(IV).
Galvin, C. D., New York City: Sample of supposed phosphate from North Carolina. (Returned.) 1324 (XVII).
Garner, R. L., Roanoke, Va.: 4 teeth and 2 mammal horns (?) from the phosphate beds, Ashley River, South Carolina: 2 specimens of minerals. 1361, 1520 (VIII, XVI).
(See under J. Williams.)
Gaskill, S. L., Salesville, Mont.: Ore. 1586 (XVII).
Gay, Miss Agatha, Staunton, Va.: Insects. 1773 (X).
Gibbs, W. B., Jackson, W. Va.: Rocks. (Returned.) 1380 (XVII).
Glezer, Martha A., Silver, Wash.: Ores. 1313 (XVII).
Gilbert, Mrs. L. R., Plainfield, N. J.: 44 species of Lepidoptera; 37 species of Lepidoptera from the United States and Ireland. 1481 (returned), 1535 (X).
Gilmore, C. W., Pipestone, Minn.: Worm. 1407 (X).
Gilmore, Mrs. J. W., North Fork, Cal.: Butterfly. 1331 (X).
Goldsmith, J., Carlisle, N. Mex.: Ore. (Returned.) 1251 (XVII).
Graham, Miss Rebecca, Davenport College, Lenoir, N. C.: Wasp. 1439 (X).
Gray, Harry and Ethel, Dell, Oregon: Insect. 1356 (X).
Griffin, Miss Anna H., Columbus, Ga.: Insect. 1398 (X).
REPORT OF ASSISTANT SECRETARY.

Gudie, Robert, Nashville, S. Dak.: Sample of sand, small piece of rock out of which it was taken, and 24 small pebbles. 1609 (XVII).


Hale, Dr. E. M., Chicago, Ill.: Snakc. 1654 (25305) (VI).

Hall, Dr. C. H., Madison, Wis.: 2 lead models of turtle. (Returned.) 1394 (III).

Halle, J. T., Middletown, Ky.: Fossil plants. 1760 (XIV).

Ham, Mrs. R. C., Albany, N. Y.: Insect. 1341 (X).

Hammers, J. E., Laray, Va.: Butterfly, insect. 1522, 1761 (X).


Harris, D. M., Homer, La.: Moth. 1260 (X).

Harris, Mary V., Cherry Creek, Miss.: Sample of earth. (Returned.) 1371 (XVII).

Harris, T. S., New York City: Sample of clay; brown sandstone. 1655, 1669. (Returned.) (XVII).

Hart, Mrs. J. M., Blackstone, Va.: Insect. 1330 (X).


Haskell, L., Fort Meade, Fla.: Specimen of supposed phosphate. 1671 (XVII).

Hassett, E., Atoka, Ind. T.: Two specimens of rocks. 1433 (XVII).


Hatch, Prof. John W., Agricultural Institute, Hampton, Va.: Insect. 1511 (X).

Hauschild, Henry, Sioux City, Iowa: Butterfly. (Returned.) 1280 (X).

Henry, Miss Mattie C., Lexington, Mich.: Butterfly. 1729 (X).

Heron, D. S., Globe, Ariz.: Ore. (Returned.) 1553 (XVII).

Herring, Mrs. E. B., Plainfield, N. J., through F. O. Herring: 25 species of Lepidoptera. (Returned.) 1500 (X).

Herring, F. O. (See under Mrs. E. B. Herring.)

Hester, L. G., Marble Falls, Tex.: Insect. 1349 (X).

Heymann, S., Lafayetteville, Tenn.: Three specimens of supposed gold. (Returned.) 1576 (XVII).

Hill, E. E., Rockland, Me.: Living specimens of beetles. 1455 (X).

Hill, T. Scott, Augusta, Me.: Rock. 1569 (XVII).

Hillyer, Miss Daisy, Corsicana, Tex.: Bone. 1672 (XI).

Honore and Fett, Findlay, Ohio: Radish shaped like a man's hand. 1286 (XV).

Hobson, W. P., Pueblo, Colo.: Stone of peculiar formation. (Returned.) 1541 (XVII).

Hodges, Miss Corine L., Georgetown, Tex.: Butterfly. 1371 (X).

Hollingsworth, Miss Sarah, Dogwood, Mo.: Minerals, stone, ore. 1358, 1472, 1570 (XVI, XVII).


Holmes, N. D., Toledo, Ark.: Rock. (Returned.) 1435 (XVII).

Holmes, W. H. (See under C. G. Brashear.)

Hooper, J. J., Selma, Ala.: Insect. 1367 (X).

Hopkins, H., La Fayette, Oregon: Clay. 1710 (XVII).


Houston, Joseph, Cumberland House, Canada: Mineral and a small piece of the same material melted. 1688 (XVI).

House, Miss Lily, State Mills, Virginia: Moth. 1378 (X).

Hovey, George F. S., White Church, Kans.: Stone. 1750 (XVII).

Howard, Ezra E., Edgar, Nebr.: Skin and skull of mountain goat from British Columbia. (Returned.) 1350 (IV).


Hummel, James, Gloversville, N. Y.: 2 rocks. 1679 (XVII).

Hungate, J. H., La Harpe, Ill.: 2 inscribed stones and 4 fragments of arrowheads found by Weyman Huston. (Returned.) 1504 (III).
Hunt Bros., Sturgis, Miss.: Rocks. (Returned.) 1601 (XVII).
Hunt, George H., Kingston, Ill.: Spear-head. 1497 (III).
Hunt, J. R., jr., Sturgis, Miss.: Ore. (Returned.) 1641 (XVII).
Hunt, W. T., Sturgis, Miss.: Mineral. 1591 (XVI).
Hurd, Charles V., Harrisonburg, Va.: Insect. 1348 (X).
Huston, W. (See under J. H. Huston.)
Hyatt, C. J., Iuka, Miss.: Geological material from the mountains of Alabama.
1720 (XVII).
Ijima, I. (See under Science College, Imperial University, Tokio.)
Intram, Robert, Chenowith, Wash.: Insects. 1753 (X).
James, H. A., Quartz, Okla.: Minerals, rock. 1575, 1652 (XVI, XVII).
Jaske, Brother Herman. Normal School, Brothers of Mary, Dayton, Ohio: Fossils from Besancon, France; specimens of marble. (Returned.) 1368 (XIII-A, XVII).
Johnson and James, Asheville, N. C.: 14 specimens of minerals. 1544 (XVI).
Johnson, W. E., Galena, Kans.: Insect. 1373 (X).
Jones, E. Walley & Sons, Seattle, Wash.: 3 specimens of minerals. 1451 (XVI).
Kayser, William, Wapakoneta, Ohio: Insects. 1387, 1544 (X).
Kelly, C. M., Lewistown, Mont.: Insect. 1420 (X).
Kennedy, George, Elk, N. C.: Ore. (Returned.) 1604 (XIV) (XII).
Kepler, Rev. William, Crestline, Ohio: 2 specimens of fossil cladodus. (Returned.) 1412 (XII).
Kinend, Trevor, Olympia, Wash.: Series of Coleoptera. 1159 (X).
King, T. G., Rochester, N. Y.: Clay. 1297 (XVII).
Kirksey, John R., Brindleton, N. C.: 230 Indian beads, grooved stone axe, 5 arrow-points taken from an Indian grave in North Carolina. (Returned.) 1755 (III).
Kitthen, E. C., Brownwood, Tex.: Ore. 1086 (XVII).
Knowles, F. E., Spencer, Iowa: Iowa grasses. 1519. (Returned.) 1298 (XV).
Kunz, George F., New York City: 12 reproductions of ancient gems. 1524 (XVI).
Lane, L. C., Frankfort, Ky.: Fossil shells. 1621 (25523) (XIII-A).
Lartigue, Dr. G. B., Blackville, S. C.: Plant. 1610 (XV).
Lea, J. S., Roswell, N. Mex.: Rock. 1585 (XVII).
Legare, Miss Clara, Charleston, S. C.: Twelve buttons, taken from the uniform of Thomas Jones, who served in the Revolutionary war. (Returned.) 1226 (I).
Lewis, B., Thurber, Utah. Rock. 1580 (XVII).
Lighton, William R., Omaha, Nebr.: Fossils. 1658 (XIII-A).
Lintzheim, Cassidy, Hyattstown, Md.: Ores. 1376. (Returned.) 1734.
Lipscomb, R. S., Beams Creek, Tenn.: Spider. 1327 (X).
Livingston, Alexander, Wichita, Kans.: Four specimens, supposed to be Chinese or Japanese coins. 1530 (I).
Long, John, Sand Point Station, Idaho: Ore. 1432 (XVII).
Lowe, Camille, Knights Ferry, Cal.: Insects. 1406, 1480 (X).
Lowe, James II, Knights Ferry, Cal.: Butterfly. 1318 (X).
Lowenstein, William, Jr., Keokuk, Iowa: Four specimens of beetles. 1271 (X).
Luce, George S., Galesville, Wis.: Clay found in a phosphate bed in Florida. 1739 (XVII).
Luse, J. E., Cisco, Tex.: Ore. 1452 (XVII).
Lyle, S. W., Madison, Ind.: Moth. 1311 (X).
McAnerney, C. W., Plymouth, Pa.: 4 specimens of rock. (Returned.) 1578 (XVII).
McCann, A. F., Jeffersonville, Ind.: Insect. 1400 (X).
McConnel, Willaim, Muncie, Ind.: Insect. 1363 (X).
McDonald, Col. Marshall, U. S. Commissioner of Fisheries, through Mr. Richard Rathbun: 2 specimens of minerals. 1302 (XVI).
McGuire, F. M., Chico, Mont.: Ore. 1456 (XVII).
McIntyre, James M. R., River Dennis, Nova Scotia: Insect. 1495 (X).
McKendree, Mrs. M. L., Fort Klamath, Oregon: Collection of butterflies. 1769 (X).
McLucas, J. D., Marion, S. C.: Scales of Gar. 1275 (XVII).
MacRae, Hugh, Wilmington, N. C.: Small seed. 1757 (XV.)
Main, H. H., Lincoln, Nebr.: Insects. 1285 (X).
Malone, George W., Hornbeuk Post Office, Tenn.: Ore. (Returned.) 1532 (XVII).
Marsh, Charles W., Topkea, Kans.: Spider. 1397 (X).
Martin, John, & Company, Montreal, Canada: Two musk oxen. (Returned.) 1754 (IV).
May, William, Cooperstown, N. Y.: 2 specimens of moth. 1278 (X).
Mercer, R. W., Cincinnati, Ohio: 25 specimens of arrow-points made by Prof. J. C. Steele, of Wallula, Wash. (Returned.) 1431 (III).
Merchant, Rufus B., Fredericksburg, Va.: Insect. 1289 (X).
Merrill, G. P. (See under Prof. W. J. Brown.)
Miles, William H., Salt Lake City, Utah: Clay. (Returned.) 1673 (XVII).
Miller, H. D., Plainville, Conn.: 2 specimens of mica and specimen of quartz crystal. 1485 (XVI).
Miller, J. S., Chewelah, Wash.: Ore. 1722 (XVII).
Miller, W., Grand Rapids, Mich.: Fossil shells and other material. 1619 (XIII-A).
Moyers, F. H., Copp's Ford, Tenn.: Ore. (Returned.) 1426 (XVII).
Murch, Elmer F., Ellsworth, Me.: Birds' skins. 1617, 1746. (Returned.) (V-A).
Murn, Paul, Boulder, Mont.: Ore. 1638 (XVII).
Myers, A., Havre, Mont.: Insects. 1111 (X).
Navarre, I. A., Chelan, Wash.: Ore. 1596 (XVII).
Neal, Dr. James C., Lake City, Fla.: Minerals. 1312 (XVI).
Neele, Miss Bessie, Sweden, Pa.: Insect. 1267 (X).
Nehring, Prof. A., Berlin, Germany: Specimens of a remarkable seed (fruit from the lower peat bogs of Klinge). 1751 (XV).
Nelson, William, Columbia, Va.: Specimen of supposed soapstone and a specimen of ore. 1339 (XVII).
Newlon, Dr. W. S., Oswego, Kans.: Mineral; doll’s head supposed to have been found in bituminous coal; mammal bones; mineral or rock; fossil wood. 1291, 1187. (Returned.) 1519, 1619, 1769 (XVI, III, VII, XVI, XIV).

Newport, Miss Eddie, Glasgow, Ky.: Living snake, sent with a view to purchase. 1116 (21894) (VI).

Ohl, H. C., Blairsville, Pa.: Owl, woodchuck, and partridge. (Returned.) 1529 (V-A).

Oliver, Stanley A., Texarkana, Ark.: Insect. 1749 (X).


Osburn, William, Nashville, Tenn.: Insects from Colorado. 1597 (X).

Overstreet, J. T., jr., Elmwood, Tenn.: Indian pipe. (Returned.) 1552 (III).

Overstreet, Robert L., Dale City, Fla.: Butterfly. 1728 (X).

Palmer, James, Grantsville, Utah: Ore from Eagle Mine, Skull Valley mining district. (Returned.) 1257 (XVII).

Peel, Hon. Samuel W., M. C. (See under Edward H. Dell.)

Pence, W. C., Shenandobah, Va.: Spider. 1353 (X).


Perkins, E. S., Burlington, Wis.: 395 copper implements and perforated tooth of a bear. 1761 (III).

Perry, George W., State geologist, Rutland, Vt.: Teeth of mammal. (Returned.) 1359 (IV).

Picher, Miss Annie B., Pasadena, Cal.: Samples of Indian drawn-work, East Indian drawn-work, and Spanish drawn-work. 1465 (I-A).

Pisor, J. H., Horr, Mont.: Stones, rock. 1276 1726 (XVII).

Player, P. P., Bloedsoe, Ala.: 2 specimens of ore. (Returned.) 1574 (XVII).

Pleas, C. E., Clinton, Ark.: 3 wasps. 1710 (X).

Porter & Butler, Baker City, Oregon: 2 specimens of stone. 1684 (XVII).

Powell, Dr. Tate, Starke, Fla.: Insect. 1141 (X).

Price, Samuel, Dunlap, Ariz.: 2 specimens of rock. 1702 (XVII).


Queck, Bertram, Wilmington, N. C.: 2 butterflies. 1332 (X).

Raber, Charles A., South Riverside, Cal.: Ore. (Returned.) 1573 (XVII).


Rathbun, Richard. (See under Col. Marshall McDonald.)

Rathfin, Jesse, West Fairview, Pa.: Insects. 1306 (X).

Rawlings, L. A., Box Elder, Colo.: Rock. (Returned.) 1661 (XVII).

Rawson, Frank, Judson, Ga.: Copper coin. (Returned.) 1259 (I).


Remington, S. C., Phillipsburg, Mont.: Ore. (Returned.) 1563 (XVII).

Reinsburg, George J., Oak Mills, Kans.: Fragments of bones found in a mound near Oak Hill. 1521 (III).


Richardson, W. D., Frederickburg, Va.: Insects. (Returned.) 1660 (X).

Richmond, Charles W., Greytown, Nicaragua: Bows and arrows; 2 archeological objects; mammal skin; birds’ skins; birds’ eggs; reptiles and batrachians; fishes; shells; insects; crustaceans; bone. (Purchased, with the exception of mammal skin, birds’ eggs, and bone). 1682 (I-A. III, IV, V-A, V-B, VI, VII, IX, X, XI, XII). (The bone—sternum of Brown Pelican—was retained under accession 26160).

Ricketts, Miss L. W., Baton Rouge, La.: Worm. 1418 (X).
Ridenour, Joseph, Buckton, Va.: Insect. 1381 (X).
Rider, L. L., Granite Canon, Wyo.: Water insects. 1714 (25779) (X).
Roberts, P. H., Graball, Tex.: Medal supposed to have belonged to La Salle, which was lost in Montgomery County, Tex., and recently found while plowing. (Returned.) 1517 (I).
Robinson, S. A., Orlando, Fla.: Small fossils; samples of phosphatic deposits. 1473, 1628 (XII, XVI).
Rogan, James W., Rogersville, Tenn.: Bird in the flesh. 1469 (XII).
Rogers, Archibald, Hyde Park on Hudson, N. Y.: Collection of drawings by George Catlin. (Returned.) 1667 (I).
Rogers, O. P., Marengo, Ill.: Supposed meteoric iron and bog-iron ore. 1544 (XVI).
Rosborough, J. B., Aransas Pass, Tex.: Rock deposits and soil. 1553 (XVII).
Rothenline, Peter U., San Antonio, Tex.: Violin. (Returned.) 1336 (I).
Ruggles, Charles, Bronson, Mich.: Ivory implement from near Orland, Ind. (Returned.) 1581 (III).
Sampsell, Miss Addie, New Orleans, La.: Insect. 1506 (X).
Sanders, A. G., Sanders, Cal.: Plants. 1507 (XV).
Schrann, Ernst, Leavenworth, Kans.: Insect. 1347 (X).
Science College, Imperial University, Tokio, Japan, through Prof. I. Ijima: 68 Japanese birds. 1712 (V-A).
Shannon, W. W., Clay Lick, Ohio.: Small image from a mound on Flint Ridge. (Returned.) 1539 (III).
Sharp, Dr. D. (See under British Museum.)
Shearer, Mrs. R. A., Stojic, Nev.: Insects. 1372, 1496, 1525 (X).
Shelton, J. C., Roseland, Va.: Minerals. 1116 (XVI).
Shumaker, P. F., Flat Creek, La.: Sample of black and white sand. 1683 (XVII).
Simpson, A. M., Forman, N. Dak.: Cocoons taken from box elder trees. 1676 (X).
Sinaw, William, Entaw, Ala.: 3 stone implements. 1698 (III).
Slocum, J. W., Knoxville, Tenn.: Mineral. 1730 (XVI).
Smith, A. M., Minneapolis, Minn.: Collection of American colonial coins and paper money. (The larger part of this collection was returned.) 1713 (I).
Smith, B. O., Lyerly, Ga.: Minerals. 1311 (XVI).
Smith, Charles N., Bell Branch, Mich.: 5 archaeological objects. (Returned.) 1707 (III).
Smith, Mrs. E. L., La Plata, N. Mex.: Stone and an ornament made of stone. (Returned.) 1639 (XVII).
Smith, G. A., Liberty, Tenn.: Insect. 1428 (X).
Smith, Harlan L., Saginaw, Mich.: Alcoholic specimen of a portion of the leg of a water amphibian, covered with a peculiar growth; alcoholic specimens of some parts of crayfish with parasites attached. 1735 (XV).
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Smith, John E., Fort Supply, Ind. Terr.: Spider. 1483 (X).

Smith, Joseph E., Post Oak Springs, Tenn.: Mineral. 1627 (XVI).

Snyder, Jacob, Two Taverns, Pa.: Supposed meteorite. (Returned.) 1329 (XVI).

Snyder, W. E., Beaver Dam, Wis.: 46 species of coleoptera; 24 specimens of coleoptera. 1299, 1717 (25781) (X).

Somers, Dr. J. F., Cristfield, Md.: Slug. 1478 (24942) (XI).

Somers, John, Cle-Elim, Wash.: Specimen of supposed quartz and 2 specimens of supposed coal. 1360 (XVII).

Soule, George, Billings, Mont.: Male Rocky Mountain sheep. 1561 (25298) (IV).

Speer, Mrs. F. S. (See under L. S. V. Speer.)

Speer, I. S. V., Wooster, Ohio, through Mrs. F. S. Speer: Moth. 1281 (X).

Spencer, E., Big Pine, Cal.: 4 specimens of ore. 1677 (XVII).

Spencer, Miss Florence J., Lake Worth, Fla.: Insect. 1448 (X).

Sprinkel, Mrs. H. A., Dulissville, Va.: Insect. 1492 (X).

Sprinkel, J. W., Dulissville, Va.: Insects. 1450, 1460 (X).


Stacey, W. D., Hampton, Va.: Specimens of dried rats. (Returned.) 1605 (IV).

Staples, E., jr., Riverside, Cal.: Shark's egg. 1583 (VII).

Steele, Prof. John C., Rock Hill, S. C.: Rock. 1538 (XVII).

(See under R. W. Mercer.)

Stephenson, A., Cincinnati, Ohio: Indian arrow-head from San Miguel Island, opposite Santa Barbara, Cal. 1693 (25720) (III).


Stinson, B., New York City: Clay from Indiana. 1540 (XVII).

Storey, Thomas H., Duluth, Minn.: Mammal skins. (Returned.) 1411 (IV).

Stouffer, Jeremiah, Wooddale, Pa.: Ores. 1583, 1589, 1639. (Returned.) (XVII).

Stont, R. C., Caddo, Tex.: Rocks. 1686. (Returned.) 1708 (XVII).


Supernant, J. V., Anaconda, Mont.: Ores. (Returned.) 1537 (XVII).


Taylor, Jones, Ivanpah, Cal.: Ores. (Returned.) 1325 (XVII).

Taylor, N. W., Oberlin, Ohio: Arrow-head. (Returned.) 1528 (III).

Teagarden, G. H., Memphis Mine, Organ, N. Mex.: Rocks. 1499 (XVII).

Thompson, H. G., Menequaunee, Wis.: Insect. 1449 (X).

Thompson, William Nelkes, Chatham, Kent County, Ontario, Canada: Confederation belt. (Returned.) 1575 (II-A).

Thomson, G. S., Nashville, Tenn.: Cryptogams. 1638 (XV).

Thorne, R. F., Juka, Miss.: Red clay and mineral. (Returned.) 1606 (XVII).

Thornton, H. R., New York City: Ivory coat of mail obtained from an Eskimo of Cape Prince of Wales, and plates of iron dug up at the same place. 1590 (26018) (II-A).

Thorpe, Keedie E., Renwick, Iowa: Insect. 1481 (X).

Tifton, MeN. (No address given except Green Mountains): Mineral. 1646 (XVI).

Tingley, D. S., San Mateo, Florida: Insect. 1427 (X).

Tompkins, Charles C., Salem, Va.: Insect. 1665 (X).


Trump, A. C., Lake Valley, N. Mex.: Ore. (Returned.) 1551 (XVII).

Truslow, Edward, Summit, N. J.: Insects. 1425 (X).

Turner, Dr. J. S., Granbury, Tex.: Insects. 1650 (X).


Van Deren, C. E., Cottonwood, Ariz.: Stone. 1645 (XVII).

Van Dyke, J. C., Buffalo, Wyo.: Insect. 1438 (X).
Vaill, E. E., St. Augustine, Fla.; Clay. 1533 (XVII).

Velic, Dr. J. W., Academy of Natural Science, Chicago, Ill.; Calcareous sponges from northern Michigan. 1558 (XI).

Vickers, George H., Lame Deer, Mont.; Supposed volcanic material. (Returned.) 1508 (XVII).


Wallace, C. C., Alta City, Utah; Ore. 1615 (XVII).

Wallace, James L., Shreveport, La.; Insect. 1718 (X).


Warner, Claude C., Carthage, Mo.; Insect. 1704 (X).

Warren, Henry & Son, Oregon, Tenn.; Ore. 1292 (XVII).

Wayman, G. Turner, Port-of-Spain, Trinidad, West Indies; About 1,050 specimens, representing 90 species of butterflies from Trinidad. 1471 (25335) (X).

Weary, Conrad, Seattle, Wash.; Hair ball taken from the stomach of a cow. (Returned.) 1651 (IV).

Weiuert, Felix, Steamboat Springs, Colo.; Supposed stone. (Returned.) 1466 (XVI).


Weston, George, Stevens Point, Wis., through Mr. Samuel Cooper; Wax impressions of coins. 1429 (XVI).


White, A. W., Albert Lea, Minn.; Stone implement. (Returned.) 1635 (III).

Whiteknight, Rev. George H., Harwood, N. Dak.; Insect. 1415 (X).


Wilkes, Miss Sarah E., Charlie Hope, Va.; Sample of earth. 1354 (XVII).

Williams, J. H., Charleston, S. C., through R. L. Garner; Bones from the phosphate beds near Charleston. 1365 (VIII).

Wilson, Reid A., Connecticut; Moth. 1268 (X).

Wilson, Miss Tillie, Stockton, N. J.; Worm. 1305 (X).

Wilvert, E., Sunbury, Pa., through S. P. Wolverton; Ores; mineral. 1310, 1680, 1522 (XVI, XVII).

Winthers, Milo, Crown Point Center, N. Y.; Ores. (Returned.) 1536 (XVII).

Wolverton, S. P.; (See under Emilie Wilvert.)

Woodruff, Miss Anna, Wessington, S. Dak.; Butterfly. 1333 (X).


Woodward, Charles L., New York City; Three of Catlin's cartoons, full-length portraits of Indians. (Returned.) 1614 (II-A).

Worthen, C. K., Warsaw, Ill.; Wolves' skins; mammal skin; 91 named skins and skulls. 1321, 1542, 1577 (IV).


Yeatts, L. K., Elba, Va.; Ores. 1283 (XVII).
### Index to list of specimens sent for examination and report, arranged geographically.

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<td>North Dakota</td>
<td>1415, 1676</td>
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<td>Oklahoma Territory</td>
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<td>Oregon</td>
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<td>1252, 1267, 1579, 1294, 1306, 1310, 1329, 1341, 1345, 1361, 1470, 1477, 1505, 1522, 1529, 1534, 1566, 1578, 1593, 1599, 1639, 1680, 1695, 1713, 1766</td>
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</table>
Index to list of specimens sent for examination and report, arranged geographically—Continued.

<table>
<thead>
<tr>
<th>Source</th>
<th>No. of lot</th>
<th>Total</th>
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<td>South Dakota</td>
<td>1323, 1419, 1545, 1699, 1629</td>
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</tr>
<tr>
<td>Tennessee</td>
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<tr>
<td>Virginia</td>
<td>1248, 1261, 1282, 1283, 1287, 1289, 1307, 1322, 1330, 1339, 1348, 1353, 1354, 1357, 1383, 1393, 1396, 1416, 1417, 1443, 1450, 1460, 1476, 1488, 1492, 1508, 1511, 1520, 1527, 1539, 1605, 1613, 1660, 1665, 1668, 1721, 1750, 1764, 1773</td>
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<tr>
<td>Washington</td>
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<tr>
<td>West Virginia</td>
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<tr>
<td>Wisconsin</td>
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</tr>
<tr>
<td>Wyoming</td>
<td>1476, 1714</td>
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</tr>
<tr>
<td>From unknown locality</td>
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<td>1</td>
</tr>
<tr>
<td>West Indies</td>
<td>1471</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1336</td>
<td>1</td>
</tr>
<tr>
<td>South America:</td>
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<tr>
<td>Peru</td>
<td>1495</td>
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</tr>
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<td>Great Britain</td>
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<td>France</td>
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<td>Germany</td>
<td>1489, 1751</td>
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<td>Italy</td>
<td>1449, 1584</td>
<td>2</td>
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<td>Poland</td>
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<td></td>
</tr>
<tr>
<td>Japan</td>
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</tr>
</tbody>
</table>

FOREIGN EXCHANGES.

Exchanges of specimens with foreign museums has been continued during the year, with results as given below. The "domestic" exchanges are indicated in the "Accession List" (Section V).

ETHNOLOGY.

From the British Museum, London, England, have been received four throwing-sticks from Australia, for which ethnological objects have been sent in return.

From the Royal Zoological Museum,* Florence, Italy (through Prof. Henry H. Giglioli, director), has been received a collection of ethno-

*Other parts of the collection received from this museum are referred to under Prehistoric Anthropology and Marine Invertebrates.
logical objects obtained principally from New Guinea, for which an equivalent has been sent. A very valuable and interesting collection of objects from the Andaman Islands, has been promised by Prof. Giglioli.

The Icelandic Natural History Society (through Mr. B. Gröndal, president) transmitted articles of clothing forming part of a woman’s costume, and carved wooden vessels used for food, in return for a collection of marine invertebrates.

Casts of Easter Island tablets have been sent to Dr. A. B. Meyer, director of the Royal Zoological and Anthropological-Ethnographical Museum, Dresden, Germany, for which an equivalent has been promised.

PREHISTORIC ANTHROPOLOGY.

Mr. Henry Balfour, The Museum, Oxford, England, has sent several flint cores, paleolithic implements, scrapers and hatchets. Five specimens of candle-fish (Thaleichthys pacificus) have been transmitted to Mr. Balfour.

A collection of archaeological objects from France, Italy, Egypt, British Honduras, and a few from the Andaman Islands (not forming a part of the collection referred to under Ethnology), have been received from Prof. Henry Giglioli, director of the Royal Zoological Museum, Florence, Italy.

Mr. Edward Lovett, Croydon, England, transmitted a number of paleolithic implements and worked flints from various parts of England, for which an equivalent has been sent.

Thirty-seven objects relating to prehistoric anthropology have been received from Dr. Paolo Mantegazza, director of the National Museum of Anthropology, Florence, Italy, for which fifty-five similar specimens have been returned.

MAMMALS.

From the British Museum, London, England (through Dr. Henry Woodward) were received four teeth of a mammoth, Elephas primigenius.

The skin and model of skull of a California sea-lion have been sent to Dr. Robert Collett, director of the Zoological Museum, Christiania, Norway, in return for specimens already received.

From the Australian Museum, Sydney, New South Wales (through Dr. Edward P. Ramsey, curator), has been received a very fine collection of marsupials, in continuation of an exchange.

The Auckland Museum, Auckland, New Zealand (through Prof. T. F. Cheeseman, director), transmitted birds’ skeletons in return for a collection sent by the museum.

From the Museum of Natural History, Paris, France (through Dr.
E. Beauregard), have been received mammal skins, birds' skeletons, and an alcoholic specimen of Chimpanzee, in continuation of an exchange.

BIRDS.

A collection of birds' skins has been sent to Mr. H. E. Dresser, London, England, for which an equivalent has been promised.

From Rev. Henry B. Tristram, The College, Durham, England, have been received birds' skins from New Guinea, New Caledonia, New Hebrides, and Fiji Islands, for which similar specimens have been sent.

Birds' skins have been sent from the Auckland Museum, Auckland, New Zealand (through Prof. T. E. Cheeseman), in return for specimens already transmitted by the National Museum.

From the Museum of Natural History, Paris, France (through Dr. E. Beauregard), have been received birds' skins from Madagascar, the Philippine and adjacent islands, in continuation of an exchange.

From the Australian Museum, Sydney, New South Wales (through Dr. Edward P. Ramsay, curator), have been received birds' skins, in continuation of exchanges.

MOLLUSKS.

From Mr. C. F. Ancey, Boghari, Algeria, have been received very fine specimens of African shells, for which an equivalent will be sent.

Mr. M. Cossman, Paris, France, transmitted Tertiary fossils from the Paris basin, France (the first installment), in return for Claiborne shell-marl already transmitted by the National Museum.

Mr. Hugh Fulton, London, England, transmitted specimens of Voluta anile La., from the Indo-Pacific Ocean. Specimens of Turricula Bairdii have been sent to Mr. Fulton in return for specimens already received.

Specimens of shell-marl from Claiborne, Ala., have been sent to Mr. G. F. Harris, London, England, for which European Miocene fossils have been promised in return.

Mr. William Moss, Ashton-under-Lyne, England, has transmitted specimens of Bulimus acutus, with microscopic slides; specimens showing serrated organ and details, and 12 microscopical slides showing dentition of British mollusks, in return for publications sent.

INSECTS.

From Dr. William Eichhoff, Strasburg, Germany, have been received typical specimens representing species of North American and exotic
Scolytidae, all new to the collection, for which an equivalent has been sent.

Mr. Paul Noël, Rouen, France, has sent specimens of European insects, for which an equivalent will be transmitted.

From the Auckland Museum, Auckland, New Zealand (through Prof. T. F. Cheeseman, director), have been received specimens of insects in return for specimens already sent.

MARINE INVERTEBRATES.

From Prof. George S. Brady, Mowbray Villa, Sunderland, England, have been received specimens of British fresh-water Cyclopidae, in exchange for echinoderms and corals already sent.

From the Royal Zoological Museum, Florence, Italy (through Prof. Henry Gigioli, director), have been received sponges from the banks of the Lampedusa, for which an equivalent has been sent.

Specimens, representing 22 species of European Paguridae and Pycnogonida have been transmitted by Rev. A. M. Norman, Durham, England, in return for specimens of Pycnogonida already sent.

The Otago University Museum, Dunedin, New Zealand (through Prof. T. Jeffrey Parker), transmitted specimens of crustaceans, for which crinoids and specimens of Nesturus and Amblystoma have been sent as an equivalent.

From the Australian Museum, Sydney, New South Wales (through Dr. Edward P. Ramsay, curator), have been received specimens of crustaceans and asteroidea; also specimens of echinoderms. Echinoderms have been sent in exchange for those received.

Crustaceans and radiates have been transmitted to the Royal Zoological Museum, Copenhagen (Prof. Dr. C. Lütken, director), in return for specimens which have been received.

INVERTEBRATE FOSSILS (PALEOZOIC).

A collection of graptolites have been received from the Australian Museum, Sydney, New South Wales (through Dr. Edward P. Ramsay, curator), for which a similar collection will be returned.

Mr. L. Tornquist, Lund, Sweden, transmitted specimens of graptolites, in exchange for specimens of similar nature previously sent.

FOSSIL PLANTS.

Prof. Dr. A. Nehring, Berlin, Germany, transmitted specimens of Cratopleura helvetica Nehring, for which an equivalent in seeds has been sent.

From the Royal Swedish Academy of Sciences, Stockholm, Sweden, have been received specimens of Siberian Phanerogams, for which an equivalent will be sent.
BOTANY.

Botanical specimens have been received from the Auckland Museum, Auckland, New Zealand (through Prof. T. F. Cheeseman, director), for which an equivalent has been sent.

MINERALS.

Prof. A. Streng, Giessen, Germany, transmitted minerals, for which an equivalent will be sent.

GEOLOGY.

Mr. R. N. Worth, Plymouth, England, transmitted ores and geological material in exchange for specimens already sent.

PUBLICATIONS.

The public demand for the publications of the Museum is constantly increasing, but comparatively few applications can be favorably considered on account of the very limited appropriation for printing. Some years ago both the Proceedings and Bulletins of the Museum were reprinted by the Smithsonian Institution in its Miscellaneous Collections. By this means it was possible to supply a large number of libraries with these publications. The Institution has, however, for several years ceased to do this. The entire distribution of these publications now falls upon the Museum, and with an edition of only 3,000 copies of the Proceedings and of the Bulletins, it is evident that a large number of deserving libraries must be excluded from the mailing-list, as well as many students to whom these volumes would be of great assistance.

REPORTS OF THE NATIONAL MUSEUM.

During the year the Report for 1889 was distributed. This volume contains the following papers:

3. Aboriginal skin dressing; a study based on material in the U. S. National Museum. By Otis T. Mason.
4. The puma, or American lion (Felis concolor of Linnaeus). By Frederick W. True.
5. Animals recently extinct, or threatened with extermination, as represented in the collection of the U. S. National Museum. By Frederic A. Lucas.

The manuscript of the reports for 1890 and 1891 has been transmitted to the Public Printer.

H. Mis. 114, pt. 2——4
Volume XIII (1890) of the Proceedings, embracing separates 790 to 841, was issued during the year. This volume contains 665 pages, with 38 plates and 11 text-figures. A list of the titles of the separate papers is given on pp. 61, 62 of the Report for 1891. A table containing an enumeration of the papers by subjects is given on p. 63 of that Report.

All the papers constituting Volume XIV of the Proceedings and embracing numbers 842–886, inclusive, have been published separately during the year. A list of these papers is here given by title:


Of Volume xv the following papers were issued separately during the year:

Of the Bulletin, Parts A to E of No. 39 have been issued. This Bulletin is published in separate pamphlets, each one containing instructions to collectors in some special department of natural history. The manuscripts of Parts F (Directions for Collecting and Preserving Insects) and G (Instructions for Collecting Mollusks, and other UsefulHints for the Conchologist) have been transmitted to the Public Printer. It is hoped that this series of instructions to collectors will prove of service to naturalists and others engaged in making natural history collections. It is probable that before very long additional contributions to this series will be made, containing suggestions to collectors in other branches of natural history.

In addition, No. 41, Bibliography of Dr. Charles Girard, and No. 42, A Preliminary Descriptive Catalogue of the Systematic Collections in Economic Geology and Metallurgy in the National Museum, by Mr. F. P. Dewey, have been published. The manuscript of Bulletin No. 40, Bibliography of George N. Lawrence, by Dr. G. Brown Goode, has been temporarily withdrawn.

In order to meet special requirements in connection with the description of certain valuable collections in the National Museum, it has been decided to issue, from time to time, monographs of collections in quarto form. This series of publications will be known as the "Special Bulletin." During the year, No. 1 of this series, entitled "Life Histories of North American Birds," has been issued. This book has been prepared by Charles E. Bendire, U. S. Army, honorary curator of the department of birds' eggs in the U. S. National Museum. It is based largely upon the collections in the Museum. The preparation of this book was commenced in accordance with the wishes of Professor Baird. The present volume relates only to land birds. It is hoped that before long Capt. Bendire will be enabled to prepare for publication subsequent volumes relating to the same general subject.

A large number of papers upon scientific subjects has been published by officers of the Museum and other specialists. These are, for the most part, based on collections in the museum, and are referred to by title in the Bibliography, constituting Section IV of this report. The authors of these papers are seventy-five in number, thirty-two of whom are connected with the Smithsonian Institution or the National Museum. The papers referred to in the Bibliography number 238, and relate to the following subjects:
## Subject.

<table>
<thead>
<tr>
<th>Subject</th>
<th>By officers of the Museum</th>
<th>By investigators not officially connected with the Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>3</td>
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<tr>
<td>Biography</td>
<td>1</td>
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</tr>
<tr>
<td>Birds</td>
<td>6</td>
<td>18</td>
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<tr>
<td>Ethnology</td>
<td>9</td>
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<tr>
<td>Exploration</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Fishes</td>
<td>18</td>
<td>6</td>
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<tr>
<td>Fossils</td>
<td>17</td>
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<tr>
<td>Geology</td>
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<td>2</td>
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<tr>
<td>Graphic arts</td>
<td>2</td>
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<td>History</td>
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<tr>
<td>Mammals</td>
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<td>Marine invertebrates</td>
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<td>Minerals</td>
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<td>Mollusks</td>
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<td>Oriental antiquities</td>
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<tr>
<td>Prehistoric anthropology</td>
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<tr>
<td>Recent plants</td>
<td>12</td>
<td>27</td>
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<tr>
<td>Reptiles and batrachians</td>
<td>15</td>
<td>4</td>
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<tr>
<td>Transportation</td>
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<tr>
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<tr>
<td><strong>Total</strong></td>
<td><strong>166</strong></td>
<td><strong>72</strong></td>
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</table>

### VISITORS.

During the year the total number of visitors to the Museum building was 269,825, and to the Smithsonian Institution, 114,817.

The monthly register of visitors is as follows:

<table>
<thead>
<tr>
<th>Year and month</th>
<th>National Museum building</th>
<th>Smithsonian Institution</th>
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</thead>
<tbody>
<tr>
<td>1891:</td>
<td></td>
<td></td>
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<tr>
<td>July</td>
<td>20,415</td>
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<td>August</td>
<td>21,033</td>
<td>9,856</td>
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<td>September</td>
<td>26,977</td>
<td>9,552</td>
</tr>
<tr>
<td>October</td>
<td>22,387</td>
<td>9,331</td>
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<tr>
<td>November</td>
<td>17,520</td>
<td>7,638</td>
</tr>
<tr>
<td>December</td>
<td>20,982</td>
<td>9,069</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>293,825</strong></td>
<td><strong>114,817</strong></td>
</tr>
</tbody>
</table>

Approximate daily average on a basis of 315 days in the year

<table>
<thead>
<tr>
<th></th>
<th>National Museum building</th>
<th>Smithsonian Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>862</td>
<td>367</td>
</tr>
</tbody>
</table>
Since 1881 a careful record of visitors to the Museum and Smithsonian buildings has been kept. The results up to June 30, 1892, are here presented:

<table>
<thead>
<tr>
<th>Year</th>
<th>Museum building</th>
<th>Smithsonian building</th>
<th>Total to both buildings</th>
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<tbody>
<tr>
<td>1881</td>
<td>150,000</td>
<td></td>
<td>150,000</td>
</tr>
<tr>
<td>1882</td>
<td>165,455</td>
<td>152,744</td>
<td>328,199</td>
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<tr>
<td>1883</td>
<td>202,188</td>
<td>104,823</td>
<td>307,011</td>
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<tr>
<td>1884</td>
<td>195,322</td>
<td>91,130</td>
<td>286,452</td>
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<tr>
<td>1885 (January–June)</td>
<td>167,365</td>
<td>60,428</td>
<td>167,793</td>
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<tr>
<td>1885–86</td>
<td>174,225</td>
<td>88,960</td>
<td>263,185</td>
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<tr>
<td>1886–87</td>
<td>216,502</td>
<td>98,552</td>
<td>315,114</td>
</tr>
<tr>
<td>1887–88</td>
<td>240,965</td>
<td>102,863</td>
<td>352,828</td>
</tr>
<tr>
<td>1888–89</td>
<td>374,843</td>
<td>149,618</td>
<td>524,461</td>
</tr>
<tr>
<td>1889–90</td>
<td>274,324</td>
<td>126,894</td>
<td>395,218</td>
</tr>
<tr>
<td>1890–91</td>
<td>286,426</td>
<td>111,669</td>
<td>398,095</td>
</tr>
<tr>
<td>1891–92</td>
<td>299,825</td>
<td>114,817</td>
<td>384,642</td>
</tr>
<tr>
<td>Total</td>
<td>2,668,200</td>
<td>1,196,498</td>
<td>3,864,698</td>
</tr>
</tbody>
</table>

LECTURES AND MEETINGS OF SOCIETIES.

As in previous years, the use of the lecture hall has been granted for lectures and meetings of societies. Lectures have been held under the auspices of the National Geographic Society as follows:

December 30, 1891.—Peary and the West Greenland expedition. By Dr. Benjamin Sharp.

February 26, 1892.—Military surveying during the civil war. By Mr. Gilbert Thompson and Maj. Joel Hotchkiss.

March 15.—Coon Mountain, Arizona, and the Diablo meteorites. By Mr. G. K. Gilbert.

March 25.—Greece and Palestine. By Mr. W. A. Crofut.

April 1.—The cruise of the Albatross through the Straits of Magellan. By Prof. Leslie A. Lee.


April 15.—The Cliff Dwellers. By Mr. W. H. Holmes.

April 22.—The Challenger Expedition, with some of its scientific results. By Prof. John Murray.

May 13.—The gates and straits of Europe and Africa. By Mr. Talcott Williams.

The following meetings of associations and scientific societies have been held: The American Pomological Association, September 23; the American Historical Association (eighth annual meeting), December 30; the American Forestry Association, December 30; the American Geographical Association, December 30; the National Association of Dairy and Food Commissioners, March 30 and 31; the National Academy of Sciences, April 19–22.

At the meeting of the National Academy of Sciences the following papers were presented:

An American Maar. G. K. Gilbert.

The form and efficiency of the ice-floe base apparatus of the U. S. Coast and Geodetic Survey. R. S. Woodward.
On Atmospheric Radiation of Heat in Meteorology.  C. Abbe.
On the Deflecting Forces that Produce the Diurnal Variation of the Normal Terrestrial Magnetic Field.  F. H. Bigelow.

Abstract of Results from the U. S. Coast and Geodetic Survey Magnetic Observatory at Los Angeles, Cal., 1882-1889, Part III.  Differential Measures of the Horizontal Component of the Magnetic Force.  C. A. Schott.

On the Recent Variations of Latitude at Washington.  T. C. Mendenhall.

Disruption of the Silver Haloid Molecule by Mechanical Force.  M. Carey Lea.
The Astronomical, Geodetic and Electrical Consequences of Tidal Strains within an Elastic Terrestrial Spheroid.  C. Abbe.

Asiatic Influences in Europe.  E. S. Morse.
Exhibition of Chladni's Acoustic Figures transferred to paper without distortion.  A. M. Mayer.

On Electrical Discharges through poor vacua, and on Coronoidal Discharges.  M. I. Pupin.
Biographical Memoir of William Ferrel.  C. Abbe.
A definition of Institutions.  J. W. Powell.

Several other societies held their annual meeting in Washington, Among them may be mentioned the National Art Association, May 16-30; American Microscopical Society, August 11, 12; Association of American Agricultural Colleges and Experiment Stations, August 12-15; Association of Official Agricultural Chemists, August 13, 15; Society for the Promotion of Agricultural Sciences, August 17, 18; Washington Chemical Society, August 17, 18; Geological Society of America, August 23, 24; International Congress of Geologists, August 25-September 1; American Association for the Advancement of Science, August 17-September 2.

STUDENTS.

During the past year, as heretofore, the National Museum has continued to aid students and others engaged in scientific work by lending them material to be used in connection with their researches. Among the more important loans made during the year are the following: A specimen of Maia to Mr. J. E. Ives, of the Philadelphia Academy of Natural Sciences. Pieces of Gorgonians and sponges for microscopic work to Mr. G. R. Lumsden, Greeneville, Conn. Crayfishes, from Lake Chapala, Mexico, to Prof. Walter Faxon, Museum of Comparative Zoology, Cambridge, Mass. An example of Dendroica pityophila to Mr. C. B. Cory, Boston, Mass. Central American birds to Mr. Osbert Salvin, London, England. Turtles to Dr. G. Baur, Clark University, Worcester, Mass. Anatomical specimens to Prof. R. Wiedersheim, Freiburg, Germany. Anatomical specimens to Mr. W. B. Barrows,
Department of Agriculture, Washington. Skins and skulls of Capromys to Dr. J. A. Allen, New York City. Skeletons of Fruit Bats to Dr. Harrison Allen, Philadelphia, Pa. A series of California Hemiptera heteroptera to Prof. A. L. Montandon, Bucharest, Roumania. A fossil plant, Zamiostrobus mirabilis, to Prof. H. Graf zu Solms-Laubach, University of Strasburg, Germany. Material has also been furnished to the Bering Sea Commission, in connection with its investigations concerning the fur-seal.

During the session of the International Congress, in August, many of the leading paleontologists and geologists of Europe examined the collections of the Museum. Dr. O. P. Hay, of Irvington, Ind., spent some time studying the Indiana reptiles and batrachians. Prof. R. L. Packard availed himself of the opportunities offered for study in the department of geology during a portion of the year, and has rendered valuable service in determinative and analytical work. Dr. G. Baur, of Clark University, Worcester, Mass., has examined the collection of Cheloniens.

FINANCE, PROPERTY, SUPPLIES, AND ACCOUNTS.

The statements relating to these branches of the administrative work have been prepared by Mr. W. V. Cox, chief clerk.

The appropriations made by Congress in behalf of the U. S. National Museum for the fiscal year ending June 30, 1892, are as follows:

1. For continuing the preservation, exhibition, and increase of the collections from the surveying and exploring expeditions of the Government, and from other sources, including salaries or compensation of all necessary employes, $145,000.

2. For cases, furniture, fixtures, and appliances required for the exhibition and safe keeping of the collections of the National Museum, including salaries or compensation of all necessary employes, $25,000.

3. For the expense of heating, lighting, electrical, telegraphic, and telephonic service for the National Museum, $12,000.

4. For removing the old boilers under the Museum hall in the Smithsonian building, and replacing them with new ones, and for necessary alterations and connections of steam-heating apparatus, and for covering pipes with fire-proof material, $3,000.

5. For removing decayed wooden floors in the Museum building, substituting granolithic or artificial stone therefor, and for slate for covering trenches containing heating and electrical apparatus, including all necessary material and labor, to be immediately available, $8,000.

6. For the Smithsonian Institution, for printing labels and blanks, and for the bulletins and annual volumes of the proceedings of the National Museum, $15,000.

7. For postage stamps and foreign postal cards for the National Museum, $500.
Preservation of Collections.

At the time of submitting the report for 1891 from this office, the unexpended balance of the appropriation for the preservation of collections held to meet liabilities contracted during the fiscal year ending June 30, 1891, was $7,979.99. Since then bills have been vouchered and paid as follows: $489.93 have been expended for services; $1,079.37 for supplies; $4,191.51 for specimens; $765.15 for books; $420.46 for stationery; $273.04 for travel; $465.95 for freight, making a total of $7,688.41, and leaving an unexpended balance July, 1892, of $291.58, to settle an account of Elkington & Company, London, and to meet a few other small bills still outstanding.

From the appropriation of $145,000 for the fiscal year ending June 30, 1892, the disbursements are as follows:

For salaries or compensation, $119,911.79; for special or contract services, $2,839.64; for specimens, $6,310.12; for general supplies, $2,038.76; for freight and cartage, $2,180.95; for travel, $1,574.81; for stationery, $842.79; for books and periodicals, $453; a total of $136,181.86, which leaves an unexpended balance of $8,818.14. July 1, 1892, to meet outstanding liabilities.

Furniture and Fixtures.

The unexpended balance of the appropriation for furniture and fixtures for 1891, held to meet liabilities contracted during that fiscal year, was $3,690.54. The following bills have been vouchered and paid from this balance: One thousand one hundred and eighteen dollars for exhibition cases; $43.50 for drawers, trays, etc.; $397.91 for glass; $240.77 for hardware, tools, cloth, etc.; $723.76 for glass jars and containers for specimens; $737.65 for lumber; $52.77 for paints, oils, and brushes; $316.70 for office furniture; $42.40 for tin, lead, etc.; $11.88 for rubber goods; $2.85 for traveling expenses, making a total of $3,688.19, and leaving an unexpended balance July 1, 1892, of $2.35.

From the appropriation of $25,000 for furniture and fixtures for the fiscal year ending June 30, 1892, the disbursements are as follows:

For salaries or compensation, $13,885.81; for special or contract services, $87.96; for exhibition cases, with designs and drawings for same, $365; for drawers, trays, and boxes, $543.72; for frames, stands, and miscellaneous woodwork, $169.50; for lumber, paints, oils, glue, and brushes, $2,159.91; for tools, glass, hardware, and interior fittings for cases, $1,407.34; for apparatus, glass jars, vials, etc., $1,191.97; for office and hall furniture and other fixtures, $765; for plumbing, tin and lead, $999.14; for leather belting, rubber tubing for rendering cases moth proof, etc., $122.28; for traveling expenses, $2, making a total of $21,699.63, and leaving a balance of $3,300.37 on hand July 1, 1892, to meet outstanding liabilities.
The following is a detailed list of cases, unit tables, fixtures, etc., made or furnished during the year by persons outside of the Museum:

Two mahogany double-width cases (for lay figures), $350; 2 mahogany unit table cases, $221; 12 mahogany wall cases, $410; 5 mahogany Kensington cases. Gray pattern, $390; 75 pairs mahogany wing frames, $166.50; 200 mahogany case heading frames, $66; 2 insect cabinets, $300; 200 insect boxes, $220; 1 oak desk, $102; 1 oak desk, $145; 1 oak table, $95; 1 small oak desk, $32; 12 pine, half-unit, moth-proof cases, $321; 1 drawing table, $12.50; 1 revolving office chair, $5; 1 umbrella stand, $1.75.

The following is a list of cases, tables, bases, etc., built in the Museum workshops:

Three mahogany American cases; 2 mahogany table-cases, upright; 7 walnut table-cases, double width; 75 moth-proof tables, quarter size; 11 unit tables, half size; 1 pine bookcase, in three sections; 2 pine bookcases, single; 7 pine storage cases, large size; 2 pine unit cases, for poisoning specimens; 1 ash case, special; 1 walnut catalogue-case; 1 pine case for press-copy books.

Cases and tables repaired or remodeled:

One floor case; 2 small Kensington cases; 1 Liverpool case; 1 unit table; 2 unit tables changed into half unit; 2 unit tables, half size, rendered moth proof; 2 unit tables, quarter size, rendered moth proof; wall cases on east and west sides of north hall; 2 pier cases; 11 slide-screen cases; 2 slide-screen cases for costume boxes; 6 floor cases; 1 cherry case for bird group; 1 Kensington case; 2 unit tables, half size; 1 bird case, old style; 1 standard bookcase; 2 catalogue cases; 6 unit tables; 2 unit tables, quarter size; 10 table cases; 2 wall cases; 1 storage cases; 13 cases glazed; 884 cases painted and repolished.

Miscellaneous furniture, fittings, etc., made during the year:

Fifty-two tank boxes; 17 tin boxes for collecting specimens; 60 tin cans for shipping specimens; 721 packing and storage boxes; 740 blocks for the exhibition of specimens; 600 special blocks, index, etc.; 163 bases; 500 brass label holders; 4,000 tin tags; 200 oak tags; 12 copper tanks; 2 lead-lined tanks; 91 label frames; 33 picture frames; 107 unit drawers; 132 unit drawers, half size; 1,049 unit drawers, quarter size; 336 drawers for table cases; 25 drawers for storage, etc.; 381 shelves; 19 doors.

Miscellaneous furniture, fittings, etc., repaired and altered during the year:

Twenty-seven unit boxes repaired; 8 unit boxes, double size, altered; 9 costume boxes altered; 25 tank boxes repaired; 66 tin cans for shipping specimens repaired; 18 packing and storage boxes repaired and altered; 1,440 blocks shellacked and polished; 289 bases repaired, painted, and polished; 52 copper tanks repaired; 644 miscellaneous frames hinged, painted, and glazed; 71 unit drawers repaired; 1,583 drawers fitted; 216 shelves repaired and painted; 21 doors altered; 999 doors repaired,cased, and adjusted.

HEATING AND LIGHTING.

The unexpended balance of the appropriation for heating and lighting and electric and telephonic service for 1891, held to meet unpaid liabilities for that year, was $642.34. Bills have been vouchers and paid from this balance as follows: $46.20 for coal and wood; $74.75 for
REPORT OF ASSISTANT SECRETARY. 59

gas; $200.25 for telephones; $384.95 for electric supplies; $32.75 for
electric work; $20 for rental of call boxes; $81.79 for heating supplies,
making a total of $840.69, and leaving an unexpended balance July 1,
1892, of $41.65.

From the appropriation of $12,000 for heating and lighting for the
fiscal year ending June 30, 1892, the disbursements are as follows:

For salaries or compensation, $5,218.93; for special or contract serv-
ices, $20; for coal and wood, $3,365.85; gas, $1,360.51; telephones,
$622.65; electric work and supplies, $124.53; rental of call boxes, $100;
heating repairs, $329; heating supplies, $433.62; making a total of
$11,575.09, and leaving an unexpended balance July 1, 1892, of $424.91,
to meet outstanding liabilities.

From the appropriation of $5,000 for removing decayed wooden floors
in the Museum building, and replacing them with artificial stone pavi-
ment, and for the purchase of slate for covering trenches containing
heating and electrical apparatus, the expenditures for materials and
services to July 1, 1892, are $4,471.64, leaving on that date an unex-
pended balance of $525.36 on hand to meet outstanding liabilities.

With a view to securing the best pavement possible, as well as for
the purpose of obtaining for future guidance a practical knowledge of
the merits of the artificial stone flooring made by different bidders, three
proposals, which did not vary materially in amount, were accepted. It
will require a greater length of time than has yet elapsed to pronounce
upon the relative merits of these pavements, but they have already
proved themselves far more satisfactory than the wooden floors for
which they were substituted, and it is hoped that it will soon be possi-
ble to put down the same or some equally durable form of pavement in
other parts of the Museum.

From the appropriation of $3,000 for removing the old boilers under
the Museum hall in the Smithsonian building, and replacing them with
new ones, making necessary alterations and connections of steam-heat-
ing apparatus, and covering pipes with fire-proof material, the expen-
ditures are as follows: Alteration of pipes, etc., $121; purchase of two
new boilers, $2,769; black pipe, etc., $48.47; making a total expendi-
ture of $2,938.47, and leaving on hand July 1, 1892, an unexpended
balance of $61.53 to meet liabilities still outstanding.

The Museum is under obligation to Commodore Melville, U. S. Navy,
Chief of the Bureau of Steam Engineering, Navy Department, who, in
July, 1891, at the request of the Acting Secretary, appointed a board
of engineer officers to prepare specifications and examine bids for the
new steam-heating apparatus. The Museum was thus enabled to profit
by the skill and experience of Passed Assistant Engineer Baird and
Assistant Engineer Leopold, the officers designated to serve on this
board. The practical working of the steam-heating apparatus has
since demonstrated the wisdom of the board in the preparation of the
test questions and specifications submitted to the bidders, and of the
Museum in its final approval of the proposal of the firm to which the work of putting in the new heating apparatus was intrusted.

In addition to the work mentioned in the detailed list, much has been accomplished in the way of general repairs. The carpenter's shop has been extended to make room for two lathes; the storage shed south of the Smithsonian building has been enlarged and the roof timmed; the old paint shop has been reconstructed for use by the special employes detailed for service in connection with the World's Columbian Exposition; steam pipes have been furnished with casing; the old and worn-out fixtures connected with the plumbing of the Smithsonian building have been removed and replaced with new; much necessary repairing has been done to the roofs of both buildings; skylights have been repaired, painted, and glazed; windows have been glazed, painted, and furnished with weather strips; the walls in both buildings have been, to a considerable extent, painted and calcimined, and necessary repairs in general have been made within the means available for this purpose.

By the laying of the asphalt walk on the west side of the Museum, and the consequent raising of the grade in that locality, it was found that the surface water, being turned toward the wall of the building and having no way of escape, frequently collected there to the depth of several inches. Permission was accordingly asked of Col. Ernst, U. S. Army, the Superintendent of Public Buildings and Grounds, to provide for the drainage of this area by the laying of a small sewer to be connected with the large one from the Smithsonian building. The required permit having been issued, the work was done by the Museum force, with materials already available for this purpose.

The buffaloes were removed from the shed south of the Smithsonian building to their new quarters in the Zoological Park on the 20th of July, 1891. The building thus vacated was immediately renovated and remodeled for the use of the painters.

The number of requests for the use of the lecture hall by the scientific societies of Washington and the country has not varied materially, the average being about two a month. In some parts of the year, however, the hall is required in this way much more frequently, so that its proper preparation as a room of public assembly becomes an item of considerable importance in connection with the work of the Museum force. The Geographic Society used the room for lectures on five different dates in April, 1892, and in this month, as usual, the annual session of the National Academy was held here for four days, April 19 to 22. At the time of the annual sessions of the various scientific associations of the country, which are often held in the hall of the Museum, it generally becomes necessary, as in the case of the Academy, to prepare and set apart some of the smaller rooms of the building also for the meetings of the committees, a courtesy which is always cheerfully accorded. In addition to these meetings, held in
the lecture hall of the Museum, the National Art Association was given permission to use the room in the Smithsonian building, known as the chapel, for an art exhibition during the two weeks beginning May 16, 1892.

It should also be mentioned that various scientific and educational associations avail themselves more and more frequently of the privilege of using the oxyhydrogen lantern belonging to the Museum, for the purpose of illustrating their lectures, which, if not given in the lecture hall, are, as a rule, held at the Columbian University or the Cosmos Club. The lantern is always used under the direction of a skilled operator connected with the Museum, and, except on occasions for which the use of the lecture hall has been granted by the Regents of the Institution for the Washington meetings of national scientific and educational societies, the expenses incurred for gas, etc., are paid by the society under the direction of which the lecture is given. Among the bodies which have availed themselves of the use of the lantern during this year are the Association of Agricultural Colleges, the Association of Agricultural Chemists, the American Association for the Advancement of Science, the Geological Society of America, the International Geological Congress, the Philosophical Society, the Biological Society, the American Folk-Lore Society, the Cosmos Club, and the Corcoran School of Art.

In compliance with the request of the Department of State, and in accordance with the act of Congress making an appropriation for the purpose, preparations were begun in June, 1892, for an exhibit by the National Museum at the Columbian Historical Exposition, to be held in Madrid, in commemoration of the four hundredth anniversary of the discovery of America.

Preparations for the exhibit of the Museum at the World's Columbian Exposition, commenced last year, have been prosecuted vigorously. As the act of Congress making the appropriation for this exhibit provides for no clerical service, the work of this nature required for the Exposition has been performed by the Museum force, often, of course, at the expense of service beyond the regular departmental hours. While the necessity for extra work is always cheerfully complied with, it is but proper to put on record the fact that there exists a gradually increasing need for a permanent addition to the clerical force.

CORRESPONDENCE AND REPORTS.

The work of this office continues under the direction of Mr. R. I. Geare. The force of assistants in July, 1891, consisted of 2 stenographers, 2 typewriters, 2 indexers, 1 accession clerk, 1 copyist, and 1 messenger. During the year the work increased considerably, and before the close of the year it had been found necessary to obtain the services
of an additional clerk. In May, 1892, the distribution of Museum publications was added to the work of the office, and in the months of May and June there were partially distributed Dr. W. L. Abbott's Catalogue of Ethnological Collections in the U. S. National Museum from Kilimanjaro, East Africa (published in the Report of the National Museum for 1891), and a paper by Dr. G. Brown Goode, entitled Museums of the Future (published in the Report of the National Museum for 1890). During the year the routine work connected with the distribution of specimens has also been attended to in this office. The correspondence of the Museum (including the acknowledgment of gifts, loans, and exchanges, the preparation of reports upon material sent for examination, and replies to requests for technical information of all kinds), and the preparation, editing, and proof-reading of the Annual Report of the Museum, constitute the principal work of the office.

The routine work performed in the case of each letter received is as follows: The date of its receipt at the Museum is stamped upon it, after which the proper reference is indorsed upon it.* It is then charged to the person to whom it is referred, and inclosed in a wrapper, on which is written the name and address of the writer, the subject of the inquiry, and the name of the person to whom it is referred. On its return from the referee a reply is prepared, which, with the original letter, is transmitted to the Secretary, Assistant Secretary, or Curator-in-charge, for signature. It is then detached, marked for filing, and a label is attached giving the name and address of the writer, the subject, and date of letter. The letters written are copied in the current number of the appropriate series of letter-books. All letters written are indexed in the letter-books, and also on cards prepared for the purpose. These cards are filed alphabetically, and thus, at a glance, the amount of correspondence with any person, including the date of each letter, can be ascertained. A cross-reference is also prepared under every name mentioned in each letter written, and filed alphabetically. By this means a clew is often furnished to correspondence which it would otherwise be difficult to find.

A record is kept, in card-catalogue form, of all offers of specimens which are not at the time accepted, whether offered as gifts, loans, in exchange, or for sale. The possibility of bringing together in a moment all offers relating to material in a given department of the Museum, has frequently proved very useful, and has saved many hours' work in examining the letter-files.

*A large proportion of the letters does not require reference, in which case the intermediate steps of the routine are omitted.
PREPARATION OF LABELS.

During the year, 1,986 forms of labels were printed, as shown by the following table, 24 copies of each form being printed:

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnology</td>
<td>1,578</td>
</tr>
<tr>
<td>Minerals</td>
<td>229</td>
</tr>
<tr>
<td>Geology</td>
<td>116</td>
</tr>
<tr>
<td>Transportation and engineering</td>
<td>32</td>
</tr>
<tr>
<td>Naval architecture</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>1,986</td>
</tr>
</tbody>
</table>

BUILDINGS AND LABOR—POLICE AND PUBLIC COMFORT.

The report submitted by Mr. Henry Horan, superintendent of buildings, shows that the force of laborers and mechanics has been busily employed under his supervision, assisted by Mr. Charles A. Steuart. The following abstracts from his report indicate some of the principal items of work the force has accomplished:

1891.

July.—The buffaloes were removed from their quarters south of the Smithsonian Institution to the Zoological Park, and the shed thus vacated was remodeled for use as a paint shop. The Jackson sarcophagus was removed from the west hall of the Museum, and placed on the parking north of the building.

August.—The animal pens south of the Smithsonian building were removed. The Museum was opened to visitors on the evening of the 21st, and also of the 28th, on which occasions it was lighted by electricity.

September.—The American Pomological Association held a fruit exhibition in the northeast court from the 18th to the 25th, inclusive. The Japanese house, which has been in storage for some months, was set up in the west hall.

October.—The work of reconstructing the wall-cases on the west side of the north hall was completed. The remainder of the living animals were removed to the Zoological Park on the 24th.

November.—The laborers were employed in removing the exhibition cases preparatory to the work of tearing up the floors in the west-south and north-west ranges, for the purpose of laying granolithic pavements. Two heavy slabs of granite and sandstone were fastened to the wall in the west-south range. The work of putting in place the new boilers for the Smithsonian building was commenced on the 23d.

December.—The west end of the Smithsonian building was kalsomined and painted. The cases were removed from the lecture hall, and the room was prepared for the meetings of the American Forestry Association, the American Historical Association, and the American Geographic Association. Granolithic pavements were laid in the tank room, the photographic laboratory, and the north-east court, involving a large amount of work by the laborers in removing cases and cleaning.

1892.

January.—Both buildings were suitably draped in respect to the memory of Gen. M. C. Meigs, a Regent of the Smithsonian Institution, who died January 2. The
work of preparation of floors, preliminary to the laying of new pavements by the contractors, was continued during January and February.

February.—Shelves were placed at the west entrance, in order to provide storage room for the property clerk. The wall-case on the south side of the north hall was altered.

March.—A large number of exhibition cases were cleaned, the locks overhauled, and the doors eased. The preparation of the lecture-hall for meetings and lectures required the attention of the laborers several times during the month. It was found that the weight of the exhibition cases rendered the bird gallery in the Smithsonian building unsafe, and some of the cases were accordingly removed.

April.—An electric light was hung at the east entrance of the Museum. Skilled laborers were engaged in repairing the tiling around the building. Repairs were made in the chapel of the Smithsonian building.

May.—The boiler room in the Smithsonian building was thoroughly cleaned and whitewashed, and new window frames were placed in the coral hall. The chapel was prepared for an exhibit by the National Art Association. An electric alarm was placed in the Joseph Francis case, for the purpose of protecting the collection. Sewer traps were placed at the foot of the steps at the northwest entrance of the Museum and in front of the door to the World's Fair carpenter-shop, the work being done by Museum laborers. An addition was made to the south end of the Museum carpenter-shop, to provide room for two lathes.

June.—A number of exhibition cases were brought from storage in the Armory building and prepared for shipment to the Madrid Exposition. The large lathe was removed from the engine room to the carpenter shop. The shed at the west end of the Smithsonian building was extended to provide room for the storage of cases, etc. The work on the new return pipes of the Smithsonian building was completed on the 17th instant, so far as it was possible to carry them this fiscal year. A concrete walk was laid in the area at the south door of the Smithsonian, the work being done by laborers from the Museum force. Extensive repairs were made in the public-comfort rooms.

THE WORK OF THE MUSEUM PREPARATORS.

TAXIDERMISTS.

The force of taxidermists, under the charge of Mr. William Palmer, has been engaged, the greater part of the time, in the preparation of an exhibit for the World's Columbian Exposition. The entire exhibition series of mammals has been examined and cleaned, and a number of mounted specimens have been repaired and placed upon new stands. The skins in pickle have been overhauled. The total number of skins received from all sources during the year is 492. Of this number 368 have been worked up. The total number of skins on hand at the end of the year is 452. For the World's Fair exhibit, 181 mammals have been mounted and finished, including 6 Rocky Mountain sheep, 5 Newfound-land caribou, 3 Alaskan caribou, 3 Arizona deer, 4 armadillos, 5 badgers, 8 Californian sea lions, a male walrus, from Walrus Island, Bering Sea, and an African crocodile. A series of experiments have been successfully made with a view to preparing a composition for making casts of reptiles. Experiments, with good results, have also been made in preserving leaves and plants for use as accessories in groups of animals.
The greater part of the time of Mr. F. A. Lucas, the osteological preparator, has been devoted to matters other than those pertaining directly to his department. Important work has, however, been accomplished in the preparation of skulls and skeletons for the study series. Several weeks were spent in the preparation of the skeleton of a young sperm whale. A summary of the work accomplished is given in the following table:

<table>
<thead>
<tr>
<th>Mammals</th>
<th>Birds</th>
<th>Reptiles</th>
<th>Fishes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>17</td>
<td>10</td>
<td>52</td>
<td>86</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Received in the flesh:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire skeletons</td>
</tr>
<tr>
<td>Skulls</td>
</tr>
<tr>
<td>Incomplete skeletons</td>
</tr>
<tr>
<td>Complete skeletons</td>
</tr>
<tr>
<td>Skulls</td>
</tr>
<tr>
<td>Incomplete skeletons</td>
</tr>
<tr>
<td>Mounted:</td>
</tr>
<tr>
<td>Skeletons</td>
</tr>
<tr>
<td>Incomplete skeletons</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>465</td>
</tr>
</tbody>
</table>

In addition, 86 specimens of vertebrate fossils were cleaned, 29 molds and 25 casts of invertebrates were made, and 6 anatomical models were mounted.

**Photographer.**

Mr. T. W. Smillie, the photographer, reports that he has made 295 negatives during the year, as follows:

<table>
<thead>
<tr>
<th>Ethnology</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td>46</td>
</tr>
<tr>
<td>Geology</td>
<td>54</td>
</tr>
<tr>
<td>Prehistoric anthropology</td>
<td>20</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>130</td>
</tr>
</tbody>
</table>

There have also been made 1,656 silver prints, as shown by the following table:

<table>
<thead>
<tr>
<th>Ethnology</th>
<th>770</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td>61</td>
</tr>
<tr>
<td>Geology</td>
<td>333</td>
</tr>
<tr>
<td>Prehistoric anthropology</td>
<td>29</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>460</td>
</tr>
</tbody>
</table>

In addition, 181 cyanotypes and 36 lantern slides were made. For the U. S. Fish Commission there were prepared 719 silver prints, 389 cyanotypes, and 35 negatives. For this work the Commission furnishes the necessary material and an assistant to aid the photographer.

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COLORIST.

Mr. A. Zeno Shindler has been engaged in painting life-size casts for the Department of Ethnology, including among others the figure of an Una Indian, a group of five Kiowa children at play, an Eskimo woman at play, an Eskimo woman and child, Sitting Bull, and a Labrador woman and child. Mr. Shindler has also continued the work of painting in oil representations of the various races of man, and has made a copy from a photograph of a painting of Pocahontas, dated 1616.

G.—ACCESSIONS.

The number of accessions received during the year is 1,357* (accessions Nos. 24528 to 25884, inclusive). These accessions embraced 228,249† specimens, giving an average of about 168 specimens to each accession. This increase over the number of accessions received last year, as shown in the foot-note, is the more conspicuous, as no effort has been made to invite contributions on account of lack of space for exhibition or storage. A large proportion of the specimens received will, for this reason, have to remain in the boxes in which they were shipped to the Museum.

A tabulated statement, showing the number of accessions to the Museum annually since 1881 (the first year of occupancy of the Museum building) is here presented:

<table>
<thead>
<tr>
<th>Year</th>
<th>Accession numbers (inclusive)</th>
<th>Number of accessions during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881</td>
<td>9890—11000</td>
<td>1111</td>
</tr>
<tr>
<td>1882</td>
<td>11001—12500</td>
<td>1500</td>
</tr>
<tr>
<td>1883</td>
<td>12501—13800</td>
<td>1400</td>
</tr>
<tr>
<td>1884</td>
<td>13801—15550</td>
<td>1650</td>
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<td>1885 (January to June)</td>
<td>15551—16208</td>
<td>658</td>
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<td>1886</td>
<td>16209—17704</td>
<td>1406</td>
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<td>1887</td>
<td>17705—19350</td>
<td>1466</td>
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<td>1888</td>
<td>19351—20831</td>
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<td>1889</td>
<td>20832—22178</td>
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<td>1890</td>
<td>22179—23340</td>
<td>1162</td>
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<td>1891</td>
<td>23341—24527</td>
<td>1187</td>
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<tr>
<td>1892</td>
<td>24528—25884</td>
<td>1357</td>
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GEOGRAPHICAL REVIEW OF THE MORE IMPORTANT ACCESSIONS.

AFRICA.

CENTRAL AFRICA.

From the Department of State, through Hon. James G. Blaine, Secretary, was received a collection of butterflies; a specimen of Selaginella; the pappus of a seed, collected by Mr. J. H. Camp in Central Africa, and four photographs of natives of West Africa.

* An increase of 170 over the number of accessions received last year.
† An increase of 94,639 over the number of specimens received last year.
EAST AFRICA.

From Dr. Cyrus Adler, National Museum, were received manuscripts, parts of costumes, weapons, and instruments from Egypt. Dr. Adler also deposited a Soudanese girdle, worn by women, and a camel driver's coat from the Upper Nile region.

Mr. William Astor Chanler, of New York City, presented two mounted giraffe heads (male and female).

Mr. C. B. Cory, Boston, Mass., transmitted in exchange a skin of crocodile bird (*Pluvialis aegyrnicaeus*).

From Dr. James Grant-Bey, Cairo, were received two Arab glass-lamps.

NORTH AFRICA.

Mr. C. F. Aney, Boghari, Algeria, transmitted in exchange several specimens of rare African shells.

From the Royal Zoological Museum, Florence, Italy, through Prof. Henry Giglioli, director, were received in exchange archaeological objects from northern Africa.

SOUTH AFRICA.

Mr. A. L. Babcock, Sherborn, Mass., transmitted, in exchange, three species of South African coleoptera.

WEST AFRICA.

Mr. R. R. Gurley, U. S. Fish Commission, presented a hammock.

Seven specimens, representing four species of birds' skins from Angola, were collected for the National Museum and transmitted by Messrs. W. H. and A. H. Brown.

From Rev. A. C. Good, American mission, Gaboon, was obtained by purchase a collection of ethnological objects relating to the life and manners of the Fang tribe, and a number of musical instruments.

AMERICA.

NORTH AMERICA.

From the Department of Agriculture, through Prof. C. V. Riley, entomologist, were received species of coleoptera new to the collection; also specimens of North American coleoptera, collected by D. W. Coquillet.

From Prof. L. Bruner, Lincoln, Nebr., through Prof. Riley, were received specimens of coleoptera and four types of a new orthoptera.

From Dr. William Eichhoff, Strasburg, Germany, were received in exchange, typical specimens representing 100 species of North American and exotic Scolytidae, new to the collection.

From the U. S. Fish Commission, through Col. McDonald, commissioner, was received a collection of crustaceans obtained by the Fish
Commission vessels on the Atlantic coast, and also crustaceans chiefly from the North Pacific Ocean, collected during the cruises of the steamer Abatross for the past four or five years.

From Mr. William J. Fox, Academy of Natural Sciences, Philadelphia, through Prof. Riley, were received in exchange specimens of North American aculeate hymenoptera, most of which are new to the collection.

British America.

British Columbia.—From Mr. Ashdown Green, Victoria, was received a fine specimen of Chirolophus polyactocephalus.

From Mr. R. MacFarlane, Cumberland House, Saskatchewan, were received birds’ nests, skins and eggs, collection of fossil resin, and skin of a marmot (Arctomys monax).

From Dr. Karl Rominger, Ann Arbor, Mich., were received 145 specimens of Middle Cambrian fossils from Mount Stephen.

Mr. Frank Russell, Iowa City, Iowa, presented eight fossil shells.

Mr. Walter D. Wilcox, New Haven, Conn., presented valuable specimens of Middle Cambrian carboniferous fossils from Mount Stephen.

Labrador.—From the Department of Agriculture were received 3 gray seals.

Newfoundland.—From Col. Cecil Clay, Department of Justice, were obtained by purchase 5 specimens of woodland caribou.

Central America.

British Honduras.—From the Royal Zoological Museum, Florence, Italy, through Prof. Henry Giglioli, director, were received archaeological objects from British Honduras.

Costa Rica.—From the National Museum, San José, were received birds’ skins, and, through Mr. George K. Cherrie, were received type specimens of Mionectes semischistaceus, sp. nov., and Ornithion pusillum subflavum.

Mr. Gustave Michaud, San José, through Prof. C. V. Riley, United States entomologist, Department of Agriculture, transmitted specimens representing various orders of insects.

Yucatán.—Capt. Charles E. Bendire, U. S. Army, honorary curator of birds’ eggs, National Museum, presented a set of eggs of Tantalus loculator.

From the U. S. Fish Commission, through Col. McDonald, commissioner, were received shells and alcoholic specimens of lizards from Cozumel Island, off the coast of Yucatán, collected in 1885.

Mexico.

Capt. John G. Bourke, U. S. Army, presented a collection of Guadalajara pottery, and deposited soles of the "guarachi," or sandals, used by the Mexican foot-soldiers along the Rio Grande; throwing-stick and
bird-spear, and specimens of folk-medicine of the Lower Grande Valley.

Mr. Britton Davis, Corralitos, Chihuahua, transmitted a specimen of the rare snake, *Heterodon kennerlyi*.

Prof. A. Duges, Guanajutato, sent the skin of an orange-crowned warbler (*Helminthophila celata*).

From Dr. A. E. Foote, of Philadelphia, Pa., were obtained by purchase 2 specimens of calcite from Guanajutato.


From Dr. C. H. White, U. S. Navy, were received miscellaneous insects from Acapulco.

Mr. P. L. Jouy collected for the Museum in northern Mexico very interesting and valuable specimens. A full report upon these will be found in the accession list, Section V.

**UNITED STATES.**


**Alaska.**—Dr. Frank Baker, acting manager of the National Zoological Park, transmitted to the Museum an Arctic fox and a specimen of aguti, a day old. The fox was obtained from St. George Island by Dr. C. Hart Merriam, Department of Agriculture.

From the U. S. Fish Commission, through Col. McDonald, commissioner, were received birds' skins and eggs, collected by C. H. Townsend, and plants obtained during the cruise of the steamer *Albatross* in 1889 and 1890.

Maj. J. W. Powell, Director of the U.S. Geological Survey, transferred to the Museum two pairs of snow-shoes, collected by Mr. I. C. Russell, from Charley's Village, Yukon River.

Mr. Chase Littlejohn, Redwood City, Cal., presented eggs of the rare Steller's duck (*Eniconetta stelleri*), from the mouth of the Yukon River.

Mr. I. C. Russell, U. S. Geological Survey, transmitted a collection of Eskimo ivory carvings, dishes, and other ethnological objects from the Upper Yukon River.

**Arizona.**—From the Department of Agriculture was received a highly interesting collection of fresh-water shells from various localities in Arizona, principally in the vicinity of Death Valley.

From Mr. George A. Allen, U. S. Indian agent, Colorado River Agency, Parker, were received specimens of *Pepsis formosa* Say and *Sphexrophthalma censu* Cress; skins of two rare bats, *Macrotus californicus* and *Molossus californicus* Merriam.

From Dr. A. E. Foote, Philadelphia, Pa., were obtained by purchase specimens of meteoric iron and the same material altered to limonite, from Cañon Diablo.
Mr. P. L. Jousy collected for the National Museum some valuable reptiles, a full report upon which will be found in the accession list, Section V.

Mr. George P. Merrill, U. S. National Museum, presented specimens of *Asida sordida*, Lec., the only insect found on the plains about Cañon Diablo.

Mr. Cosmos Mindeleff, U. S. Bureau of Ethnology, presented specimens of calcite pseudomorph after glauberite.

Dr. Timothy E. Wilcox, U. S. Army, transmitted a valuable and interesting collection of reptiles and a living specimen of horned toad.

Arkansas.—Dr. W. P. Jenney, U. S. Geological Survey, transmitted two specimens of cadmaniferous smithsonite from Morning Star Mine, Marion County, and specimens of ores.

California.—From the Department of Agriculture was received a collection of fresh-water shells from Death Valley.

From the Department of Agriculture, through Prof. C. V. Riley, entomologist, were received specimens of Californian orthoptera, collected by D. W. Coquillett; specimens representing species of rare coleoptera, collected by D. W. Coquillett in San Diego and Los Angeles counties; specimens of Californian coleoptera, lepidoptera, hymenoptera, and diptera, also collected by Mr. Coquillett, and specimens of insects collected by Mr. A. Koebele, of the Death Valley Expedition.

Mr. L. Belding, Stockton, presented birds' skins, and the head, wing, and foot of a blue goose, *Chen caerulescens*.

The Hon. W. W. Bowers, House of Representatives, presented a block of pure pig-iron, and a specimen of tin ore from the Temescal Tin Mine, South Riverside, San Bernardino County.

From the Fish Commission, through Col. McDonald, commissioner, was transmitted the skin of a coast fox, *Orocyon virginianus littoralis* from Santa Rosa Island, collected by Mr. Charles Townsend, of the Fish Commission steamer *Albatross*.

Mr. L. L. Frost, Susanville, presented a collection of archaeological objects, and a polished stone object supposed to be a charm-stone.

Maj. J. W. Powell, director of the U. S. Geological Survey, transferred to the Museum 34 specimens of radiated brown tourmaline from Colfax, Nevada County, collected by Mr. W. Lindgren.


Miss Annie B. Picher, Pasadena, presented photographs of Padre Serra, a Mexican drawn-work maker; Father Serra's stirrup (Indian wood-carving), and a piece of drawn-work showing the "Little Jesus" stitch.

Lieut. Charles Pond, U. S. Navy, Mare Island, sent a sphinx-moth (*Smerinthus ophthalmicus* Bd.).
Colorado.—From Mr. T. Charlton, Denver, were received three teeth of extinct llama (*Auchenia hesteria*).

From Mr. Thomas H. Jackson, West Chester, Pa., was obtained, by purchase, a set of eggs of the white-tailed ptarmigan (*Lagopus leucurus*).

Mr. W. W. Jones, Silver Cliff, presented specimens of cerussite and nadorite with cerussite.

From Mr. S. Ward Loper, U. S. Geological Survey, were received specimens of banded jasper from Cañon City.

Dr. William L. Ralph, Utica, N. Y., presented two skins of saw-whet owl (*Nyctala acadica*), a flammulated screech owl (*Megascops flammulatus*), and a woodpecker (*Dryobates villosus hyloascopus*).

Maj. J. W. Powell, director of the U. S. Geological Survey, transferred to the Museum minerals and rock showing slickensides, collected by Prof. S. L. Penfield.

Connecticut.—Mr. S. Ward Loper, U. S. Geological Survey, presented a specimen of angite rock from East Rock, and sent in exchange two slabs of shale with rain-prints from Durham.

From Prof. William North Rice, Wesleyan University, Middletown, were received rocks and ores in exchange.

The Singer Manufacturing Company, Hartford, transmitted an old-style Singer sewing machine, and one of the latest style of manufacture.

District of Columbia.—Mrs. S. S. Cox deposited the memorial vase presented to her by the members of the Life-Saving Service of the United States in commemoration of the services of the late S. S. Cox.

From Mr. H. W. Henshaw, Bureau of Ethnology, was received a fine set of mounted herbarium plants, representing the fauna *Quercus*, *Aster*, and *Solidago*, forming a very complete and valuable addition to the collection.

From Gen. M. C. Meigs, through his executors, Montgomery Meigs and Mary M. Taylor, were received medals, bronzes, and other historical relics. A full description will be found in the accession list, Section V. A revolving rifle of very early pattern, invented about 1835, made at Rochester, by Billinghurst, seven colored sketches, and twenty-three pencil sketches had been previously transmitted by General Meigs.


Mr. Charles W. Richmond, of the Department of Agriculture, transmitted 3,000 birds' skins.

Florida.—The Florida Phosphate Company, Phosphoria, transmitted samples of phosphate rock from various counties.

From Dr. E. M. Hale, Chicago, Ill., was received a snake, *Osecola clapsoidea*.
Mr. Alexander Lynch, President of the Bloomfield Kaolin and Phosphate Works, Gainesville, sent specimens of kaolin.

From Dr. William L. Ralph, Utica, N. Y., was received a mounted wolf, *Canis lupus griseolabus*.

From Mr. De Witt Webb, St. Augustine, were received archeological objects from shell mounds.

Mr. George Webster, Lake Helen, transmitted specimens of land and fresh-water shells.

*Georgia.*—Mr. J. C. Hart, Union Point, through Mr. J. L. Black, Blacksburg, S. C., transmitted specimens of magnetic ores from the line of Green County.

From the U. S. Geological Survey, through Maj. J. W. Powell, director, were received specimens of minerals.


*Illinois.*—Mr. O. Chanute, Chicago, presented a collection of antique patterns of rail-sections, maps, and other objects.

*Indian Territory.*—Mr. W. H. Holmes, U. S. Geological Survey, transmitted 3 rude implements of novaculite from an ancient Indian quarry.

*Indiana.*—Mr. Frederick C. Test, U. S. National Museum, presented reptiles and batrachians.

From Mr. Benjamin Vail, Washington, D. C., was received a trilobite found 3 miles west of Aurora.


*Kentucky.*—From the U. S. Geological Survey, through Maj. J. W. Powell, director, was received a specimen of chaledony.

*Louisiana.*—Mr. T. Wayland Vaughn, Mt. Lebanon, Bienville Parish, presented fresh-water shells representing 11 species.

*Maine.*—From the Forest and Stream Publishing Company, New York City, was received the head and tail of an Atlantic salmon (*Salmo salar*) from the mouth of the Cabbasacontic River, sent by Mr. John T. Richards, Gardiner, Me.

From Dr. A. C. Haumlin, Bangor, were received in exchange 10 cut specimens of tourmaline and 19 samples of red and green tourmaline.

Dr. W. P. Jenney, U. S. Geological Survey, transmitted a specimen of kyanite from Windham.

*Maryland.*—From Mr. James E. Benedict, National Museum, were received specimens of *Gelasimus monac.*

From the Life-Saving Service, Treasury Department, was received a skeleton of *Physeter macrocephalus junx.*, from Green Run Inlet Life-Saving Station, collected by Capt. J. J. Dunton, keeper; also a rare specimen of fossil crab, sea-horses and specimens of quartz, obtained in the same manner.
From Mr. L. G. Eakins, of the Geological Survey, was received a specimen of native gold in quartz from Potomac Mine, Montgomery.

Mr. C. W. Richmond transmitted a marsh hawk (Circus hudsonius), and a long-eared owl (Asio wilsonianus).

Massachusetts.—Prof. William North Rice, Wesleyan University, Middletown, Conn., transmitted rock and ores in exchange.

Michigan.—Mrs. M. L. Narrin, Goodrich, transmitted specimens of serpentine quartzite.

Mr. George W. Webster, Lake Helen, Fla., sent 9 species of land and fresh-water shells.

Minnesota.—From the Bureau of Ethnology, through Maj. J. W. Powell, director, was received a collection of birch-bark scrolls and mnemonic songs, obtained by Dr. W. J. Hoffman during the years 1887-88, ’89 and ’90, relating to the ritual of the Society of Shamans, usually designated the “Grand Medicine Society.”

Missouri.—From the U. S. Geological Survey, through Maj. J. W. Powell, director, were received minerals collected by Dr. W. P. Jenney, in Aurora, Joplin and Sherwood.

Montana.—From Prof. B. W. Evermann, of the U. S. Fish Commission, were received two specimens of Anabrus simplex Hald., collected at Missoula.

From the Fish Commission, through Col. Marshall McDonald, commissioner, was received a collection of reptiles and batrachians collected by the Commission in 1891, and specimens of fishes, including a new species, collected during the summer of 1891, by a Fish Commission party under the direction of Prof. B. W. Evermann.

Mr. C. H. Hand, of Butte, transmitted through Messrs. Packard and Melville, of the U. S. Geological Survey, a specimen of granite with native copper oxide, from Rice’s Addition Mine.

From Prof. A. D. Meeds, University of Minnesota, Minneapolis, was received an exceedingly fine slab of stone from the Fort Union Group of southern Montana, bearing the impression of eight fossil leaves, among them a Populus, new to science.

Mr. R. S. Williams, Great Falls, transmitted the nest and four eggs of Geothlypis macgillivrayi, and nest and three eggs of Empidonax flaircentris, both of which are rare and valuable species.

Nevada.—From Mr. Walter F. Webb, Geneva, N. Y., were received 15 eggs (5 sets) of Larus Californicus from Pyramid Lake.

Nebraska.—Prof. Robert Hay, of Kansas, sent a block of sandstone from the sandstone dyke in northeast Nebraska.

Maj. Powell, director of the U. S. Geological Survey, transferred to the Museum, the tooth of a specimen of Petalodus destructor, a carboniferous selachian, collected by Mr. David A. Harrah.

New Hampshire.—From Mr. H. P. Sharpless, Boston, Mass., were received two specimens of columbite from Wakefield.
New Mexico.—Mr. George H. Thwaites, of Socorro, presented three fine specimens of lepidodendron.

New Jersey.—From Mr. W. G. Binney, of Burlington, were received photographs of the teeth of mollusks, the original drawings of shells, slugs, and cuts of shells used in various publications on land-shells. These constitute a valuable donation.

New York.—From Mr. Park Benjamin, New York City, was received the original application of Jesse Ramsden, dated December 2, 1775, for a patent in England, written and signed by himself, for an astronomical equatorial instrument.

Mr. E. H. Chapin, Baltimore, Md., transmitted a trilobite, *Phacops rana*, from the Hamilton group.

From Mr. F. L. Church, Shusha, was obtained, by purchase, a six-legged frog.

From Prof. Thomas Egleston, of the School of Mines, Columbia College, New York City, were received in exchange minerals from various localities.

From Messrs. Otis and Gorsline, Rochester, through Prof. H. L. Fairchild, were received specimens of well-drillings from a deep well at Rochester.

Dr. William L. Ralph, Utica, presented a magnificent collection of birds’ eggs, containing 1,630 specimens, representing 444 sets and 194 species, several of which are new to the Museum, and also 100 birds’ nests.

Prof. William North Rice, Wesleyan University, Middletown, Conn., transmitted rocks and ores in exchange.

Mr. C. D. Walcott, U. S. Geological Survey, presented four specimens of calcite from Smith’s Basin, Washington County.

From the Williamsburgh Scientific Society, Brooklyn, was received fossil rock found in the Catskill Mountains, at High Falls, Greene County.

North Carolina.—From H. A. Lindsey, Asheville, was obtained by purchase a specimen of fergusonite from Madison County.

The Morganton Land Improvement Company, Morganton, transmitted a specimen of almandite and specimens of corundum altering to dammarite from Burke County, and corundum from Yancey, collected by Mr. W. S. Yeates, of the National Museum.

From Dr. Hugh M. Smith, U. S. Fish Commission, were received 7 specimens of *Acris gryllus* from Plymouth.

From the U. S. Geological Survey, through Maj. J. W. Powell, director, were received 46 specimens of minerals.

Mr. W. S. Yeates, U. S. National Museum, presented an Indian banner-stone from near Zirconia.

North Dakota.—From Mrs. Mary C. Collins were received cretaceous fossils from the Montana formation.
Oklahoma Territory.—From Rev. T. R. Voth, Darlington, was obtained, by purchase, a tomahawk pipe.

Ohio.—Mr. William H. McGinniss, Youngstown, presented 116 crystals of selenite from Ellsworth, Mahoning County.

Oregon.—From Dr. C. T. Cooke were received 2 skins of Steller's jay (Cyanocitta stelleri), and a handsome nest of the same species, new to the collection.

Pennsylvania.—From Mr. R. D. Lacoe, of Pittston, was received the first installment of his collection of fossil plants (known as the Lacoe collection), presented by him to the National Museum.

The Pennsylvania Railroad Company, through Mr. Joseph T. Richards, assistant chief engineer, transmitted a plaster cast of a bronze table for the Bordentown monument, to mark the first piece of track laid in the State of New Jersey, and also to commemorate the sixtieth anniversary of the first movement by steam in New Jersey.

From Mr. Edward S. Thompson, Thomspontown, were received 108 archaeological objects found along the Juniata River between Thompsontown and Port Royal.

Titus Ulke, Washington, D. C., presented rare specimens of coleoptera collected at Blue Ridge Summit.

From the U. S. Geological Survey, through Maj. J. W. Powell, Director, was received a specimen of wavellite from Steamboat Springs, Chester County.

Rhode Island.—From Mr. George A. Lewis, Wickford, was received an American eider (Somateria dresseri) in the flesh.

South Carolina.—From the Wagner Free Institute of Science, Philadelphia, through Mr. Joseph Willecox, was received a collection of pliocene fossils from the Waccamaw River.

South Dakota.—Mr. John H. Ainley, Rapid City, transmitted specimens of hornblende schist, showing free gold, from the Cross Mine, Pennington County.

From Mr. J. H. Caton, Rosebud Agency, was received a fossil turtle, Stylonyx nebrascensis, from Bad Lands, and impure opal from the same locality.

From the Museum of Comparative Zoology, Cambridge, Mass., were received in exchange two lizards, collected by Prof. S. Garman.

Texas.—From Prof. H. P. Attwater, Rockport, was received a set of eggs of Otocoris alpestris giraudi (new to the collection) and eggs of Cardialis cardinalis and Mimus polyglottus, selected to show extremes in size and coloration, and forming a very interesting series.

From the Department of Agriculture, through Prof. C. V. Riley, were received 200 specimens of various orders of insects, collected by Mr. C. G. Schaupp.

Mr. L. G. Eakins, U. S. Geological Survey, presented gadolinite from Llano County.
Vermont.—Mr. C. D. Walcott, U. S. Geological Survey, transmitted specimens of contorted slate from Rutland County.

Virginia.—From the Bureau of Ethnology, through Maj. J. W. Powell, Director, was received a collection of archaeological objects from a mound in Rockingham County.

Mr. Walter Moreland, Washington, D. C., sent a specimen of *Lariimus fasciatus*, rarely found on our Atlantic coast. This is the second specimen so far recorded from Chesapeake Bay.

Washington.—Robert Intram, esq., of Chenoweth, presented a specimen of centiped (*Chomatobius ruber*), a species now occurring in the East, and a specimen of milleped, new to science.

West Virginia.—From Mr. John R. Huddleston, Kanawha Falls, was obtained, by purchase, a double-headed snake.

Wyoming.—From the U. S. Fish Commission, through Col. McDonald, were received 955 specimens of fishes, including *Leuciscus gilli*, a new species, collected during the summer of 1890, by a Fish Commission party, under direction of Prof. B. W. Evermann.

Miscellaneous.—Prof. S. L. Fairfield, New Haven, Conn., presented specimens of minerals from various localities.

Admiral and Mrs. James E. Jouett deposited a dish and ewer of precious metals, presented to Admiral Jouett for services rendered in saving from shipwreck the British steamship *Historian* in the Caribbean Sea in 1855.

Mr. Robert Ridgway, U. S. National Museum, presented birds' skins, consisting of selected specimens, each one remarkable for some more or less marked peculiarity of plumage.

From Dr. Leonhard Stejneger, U. S. National Museum, were received birds' skins, including a series of *Sitta casia*, from various localities.

The U. S. Geological Survey, through Maj. J. W. Powell, Director, transferred to the Museum a collection of fossil insects, described and figured by Prof. S. H. Scudder, of the Geological Survey, in volume XIII, Hayden Reports; fossil plants, transmitted by Dr. J. S. Newberry, of Columbia College, to the Survey, and specimens of minerals from various localities.

Islands in the Atlantic Ocean.

St. Helena.—From Capt. W. H. Turton, R. E., Brompton Barracks, Chatham, England, were received shells, comprising over 400 species, a contribution of special interest and value.

West Indies.

From Dr. John F. Chittenden, Victoria Institute, Trinidad, through Hon. William Pierce, U. S. Consul, were received specimens of *Achirus lineatus* and *Azeria* n. sp.

Mr. C. W. Cunningham, through Maj. J. W. Powell, Director of the Geological Survey, transmitted samples of crude petroleum.
From Dr. J. F. R. Dufour, Washington, D. C., was received a skin of brown pelican (Pelecanus fuscus).

Mr. Frank Everett, Washington, D. C., presented birds' eggs, and deposited a Carib stone hatchet from the island of Navassa.

From Mr. T. H. Morgan, Mawr College, Bryn Mawr, were received crustaceans from near Jamaica.

From the Wagner Free Institute of Science, Philadelphia, were received land-shells.

SOUTH AMERICA.

BRAZIL.

Messrs. Tiffany & Company, New York City, transmitted in exchange a specimen of "Phantom" quartz.

Mr. William Palmer, U. S. National Museum, presented a specimen of Jandaya Parakeet (Cornurus jandaya).

From the Royal Zoological Museum, Florence, Italy, through Prof. Henry Giglioli, director, were received in exchange archaeological objects from Brazil.

CHILE.

Dr. C. H. White, U. S. Navy, presented specimens of crude nitrate of soda from Iquique.

PERU.

Dr. White, U. S. Navy, transmitted a collection of insects from Payta.

UNITED STATES OF COLOMBIA.

From Mr. M. L. Marks, Washington, D. C., were received 5 gold ornaments obtained from ancient graves.

VENEZUELA.

Mr. R. M. Bartleman, United States legation, Caracas, transmitted photographs of native scenery and other objects relating to Venezuela. He also sent an armadillo (Tatusia sp.).

From Mr. C. B. Riker, New York City, were received birds' skins from the Lower Amazon.

ASIA.

CHINA.

From Mr. Romyn Hitchcock were received 6 copies of the "Peking Gazette," the oldest newspaper in the world and now published daily in Peking.

From Dr. J. Neumann, Hoihow, were obtained a collection of cocoa-nut ware, tools used for carving shells, and other ethnological objects.
Dr. William L. Abbott, Philadelphia, presented a very fine collection of mammal skins, skulls, bones, birds' skins, and a rope made of goat's hair used by the coolies of Kashmir in packing their loads. A full report of this sending will be found in the Accession List in Section v.

From the Calcutta Botanic Garden were received specimens of dried plants.

From the Science College Museum, Imperial University, Tokio, through Dr. J. Ijima, were received two skins of Japanese ptarmigan (Lagopus, species undetermined).

From Mr. P. L. Jouy, U. S. National Museum, was received the skin of a land otter (Lutronectes sp.). From Mr. Jouy was also obtained, by purchase, specimens of reptiles from a remote region of Korea.

From the Department of State were received specimens of wool and woollen fabrics, transmitted by Consul-General Samuel Merrill, from Chitteldroog and Davengire Taluks, in the Chitteldroog district, province of Mysore, collected by Mr. L. Ricketts, director of statistics and agriculture in Mysore-Bangalore, with a report on sheep and wool in India furnished by Mr. Merrill; samples of Indian wool, collected by Mr. Merrill and Mr. T. N. Mukharji, assistant curator of the Indian Museum; woollen fabrics contributed by Mr. L. Ricketts, of Mysore-Bangalore; and specimens of Indian wools, woollen yarns and fabrics, transmitted through Mr. Merrill.

From Lieut. G. B. Harber, U. S. Navy, transmitted articles of fur clothing worn by him while connected with the Jeannette Relief Expedition, made by the Yokuti of northern Siberia.

From the U. S. Treasury Department was received the skin of a female walrus (Odobenus rosmarus), captured in Holy Cross Bay, Siberia, and transmitted by Capt. M. A. Healy, U. S. R. M. steamer Bear, through Lieut. D. H. Jarvis, of the same steamer.

From Mr. Romyn Hitchcock, U. S. National Museum, was obtained by purchase a walrus's head and tusks from Anadir Bay.

From the Royal Swedish Academy of Sciences, Stockholm, Sweden, were received, in exchange, 140 species of Siberian phanerogams.

Messrs. Tiffany & Co., New York City, transmitted, in exchange, 3 ornamental stones.

From Dr. John P. Peters, Philadelphia, was received through Dr. Cyrus Adler, a Turkish baker's tally from Bronssa, in Asia Minor, the
ancient capital of Turkey. From Dr. Peters were also received a weaving-loom, card, and shuttle.

ISLANDS IN THE INDIAN OCEAN.

Mr. Hugh Fulton, London, England, sent, in exchange, a specimen of Voluta aulica L.

Mr. Isaiah Greegor, Jacksonville, Florida, presented interesting marine shells.

EUROPE.

DENMARK.

From Mr. N. C. Gram, Dyrejford, Iceland, were received two ladies' side-saddles, one marked 1789 and the other reported to be 250 years old.

From the Icelandic Natural History Society, through Mr. Benjamin Gröndal, president, were received, in exchange, portions of a woman's costume, carved vessels for food, and other ethnological objects from Reykjavik, Iceland.

Dr. D. S. Martin, New York, transmitted two specimens of lignite from Disco Island, Greenland.

Messrs. Wyckoff, Seaman & Benedict, New York City, transmitted a Mallig-Hansen typewriter from Copenhagen.

FRANCE.

From Mr. Henry Balfour, Oxford, England, were received, in exchange, archaeological objects.


Miss Katherine Parsons, Washington, D. C., deposited a sedan chair formerly owned by the family of Louis XIV.

From the Royal Zoological Museum, Florence, Italy, through Prof. Henry Giglioli, director, were received archaeological objects from France.

GERMANY.

From Dr. William Eichhoff, Strasbourg, were received in exchange type specimens representing 100 species of Scolytidae, all new to the collection.

Prof. Dr. A. Nehring, Berlin, transmitted, in exchange, seeds of Cratopleura helvetica Nehringi, C. Weber, found in peat at Klingi.

From Prof. A. Streng, Giessen, were received minerals, in exchange.

GREAT BRITAIN.

From Prof. George S. Brady, Sunderland, were received in exchange specimens of British fresh-water Cyclopidae.
From Messrs. Elkington & Company, London, was received an electrotype reproduction of Tycho-Bache's quadrant.

Mr. A. E. Foote, Philadelphia, transmitted in exchange specimens of anglesite and matlockite from Cromford, Derbyshire.

From Mr. C. D. Walcott, U. S. Geological Survey, were received echinoids, specimens of flint, and the tooth of a shark from the cretaceous chalk of Croydon.

From C. H. Pennypacker, West Chester, Pa., were obtained, by purchase, specimens of adamite and smithsonite.

North Holland.

Mr. Edward Lovett, Croydon, England, transmitted a curious old flint.

Italy.

From the Royal Zoological Museum, Florence, Italy, through Prof. Henry Giglioli, director, were received archaeological objects and sponges.

Dr. G. Brown Goode, Assistant Secretary, National Museum, collected for the Museum twenty-three pieces of Savony faience. The potteries have been discontinued for nearly two centuries, and the pieces are principally of the 14th and 15th centuries, most of them being druggist's vessels of a highly ornate character.

From the National Museum of Anthropology, Florence, through Dr. Paolo Mantegazza, director, were received archaeological objects.

Russia.

Mr. Charles de Struve, envoy extraordinary and minister plenipotentiary, Russian legation, presented thirty-nine sheets of portraits of Russians.

Lieut. George F. Emmons, U. S. Navy, Sitka, Alaska, transmitted a fish-knife obtained from a native Russian woman. The knife was made in Siberia, and is a relic of ancient Russia.

Mr. George F. Kunz, Hoboken, N. J., transmitted through Consul-General J. M. Crawford, St. Petersburg, a collection of castings of figures, set of Russian weights, samples of ores, and specimens of sand from which the castings are made.

Spain.

From Hon. R. W. Turner, U. S. consul, was obtained a small cast of a Phoenician tomb.

Sweden.

The geological survey of Sweden, Stockholm, transmitted, in exchange, specimens of Cambrian fossils.
Prof. H. de Saussure, Museum of Natural History, Geneva, sent specimens of orthoptera.

OCEANICA.

AUSTRALASIA.

AUSTRALIA.

New South Wales.—From the Australian Museum, through Dr. E. P. Ramsay, curator, was received a collection of birds’ skins, mammals, echinoderms, graptolites, and specimens of crustaceans and asteroida.

Dr. C. C. Cox, through Mr. Charles Headley, Australian Museum, Sydney, New South Wales, transmitted alcoholic specimens of Ephippodonta Macdonallii Tate, a very remarkable bivalve mollusk, recently described, from Australia.

NEW CALEDONIA.

From Rev. H. B. Tristram, The College, Durham, England, were received birds’ skins in exchange.

NEW GUINEA.

From Dr. James Rodman, Hickman, Ky., was obtained by purchase a superb bird of paradise (Lophorhina superba).

The Royal Zoological Museum, Florence, Italy, through Prof. Henry Giglioli, director, transmitted archaeological objects in exchange.


QUEENSLAND.

Mr. S. F. Denton, U.S. Fish Commission, presented a skin of white-bellied sea eagle (Haliaeetus leucogaster) or allied species.

From Mr. E. E. Howell, Washington, D. C., were received, in exchange, specimens of cut and rough opals.

VICTORIA.

From the Department of Agriculture, through Prof. C. V. Riley, entomologist, were received specimens of Australian hemiptera, collected by Mr. J. G. O. Tepper, of Adelaide.

From Mr. W. T. Bednall, of the South Australian Museum, was received a specimen of Antherea eucalypti.

NEW ZEALAND.

From the Department of Agriculture, through Prof. Riley, were received specimens of New Zealand Cocinellidae, collected by Mr. D. W. Coquillett.
From the Auckland Museum, through Prof. T. F. Cheeseman, curator, were received in exchange botanical specimens, insects, birds' skins and skeletons.

The Otago Museum, Dunedin, through Dr. T. Jeffrey Parker, director, transmitted specimens of crustaceans in exchange.


**MALAYSIA.**

From Mr. Victor A. Jenny, consular agent at Macassar, Celebes, were received specimens of shells, ethnological objects, and three musical instruments, collected by him for the National Museum.

Hon. Alexander Webb, United States consul, Manila, Philippine Islands, transmitted to the Museum musical instruments collected by him for the National Museum.

Hon. Rousevelle Wildman, United States consul, Singapore, Straits Settlements, transmitted Malayan musical instruments and ethnological objects collected by him for the National Museum.

**POLYNESIA.**

**HAWAIIAN ISLANDS.**

Lieut. T. G. Fillette, U. S. Navy, deposited a cane of palm wood with handle made of a wild boar's tusk, gold-mounted, presented to him by King Kalakaua.

From Mr. Scott B. Wilson, Heatherbank, Weybridge, Surrey, England, was obtained, by purchase, a skin of Baillon's grosbeak (*Loxioides bailloui*).

**SAMOAISLANDS.**

From Hon. Harold M. Sewall, United States consul, was received a collection of Samoan musical instruments.

From Ward's Natural Science Establishment, Rochester, N. Y., was received the type of the flying fox, *Pteropus lanigera*.


The National Museum during the past year has been the recipient of numerous contributions from the different bureaus of the Government, as will be seen from the following statements:

**DEPARTMENT OF STATE.**

From the Department were received specimens of Indian wool, woollen yarns and fabrics; also samples of Indian wool, collected by Consul-General Samuel Merrill, Calcutta, India, assisted by Mr. T. N. Muk-
harji, assistant curator of the Indian Museum, and a report by Mr. Samuel Merrill relating to sheep and wool in India; wool and woolen fabrics from Chitteldroog and Davengire Tuluks in the Chitteldroog district. Mysore Province, contributed by Mr. L. Ricketts, director of statistics and agriculture in the Mysore Bungalow, also transmitted by Mr. Merrill to the Department of State and transferred to the National Museum.

From Mr. R. M. Bartleman, of the United States legation at Caracas, Venezuela, were received photographs of native scenery and other objects of interest in Venezuela, also of the shores of the lagoon of Lake Sinamaica, Goajira Lake dwellings, and a group of Goajira Indians.

Hon. Truxton Beale, United States consul, Teheran, Persia, transmitted to the Department of State, three molds of sculptures from Persepolis, which were transferred to the Museum.

Consul-general John M. Crawford, St. Petersburg, Russia, kindly forwarded, through the State Department, a collection of castings of figures, ethnological objects, iron ores, and sample of the sand from which the castings are made, obtained by Mr. George F. Kunz, of Hoboken, N. J., for the National Museum.

Mr. Charles de Struve, envoy extraordinary and minister plenipotentiary, Russian legation, Washington, D. C., presented 39 sheets of ethnological portraits of the inhabitants of Russia.

Mr. Victor A. Jenny, consular agent at Macassar, Celebes, transmitted three musical instruments, specimens of shells, and ethnological objects.

Mr. William P. Pierce, United States consul at Trinidad, West Indies, forwarded through the Department of State, in behalf of Dr. J. F. Chittenden of the Victoria Institute, specimens of sole (Achirus lineatus and Azeria n. sp.).

From Mr. Harold M. Sewall, United States consul, Apia, Samoa, were received a number of native musical instruments.

Mr. R. W. Turner, United States consul, Cadiz, Spain, transmitted a door formerly used in the convent of La Rabida at Palos, and a small cast of a Phoenician tomb.

From Mr. Alexander R. Webb, United States consul, Manila, Philippine Islands, were received ethnological objects and musical instruments used by the natives.

Mr. Rouseveille Wildmann, United States consul, Singapore, Straits Settlements, transmitted a collection of Dyak and Malayan ethnological objects, shells, corals, and musical instruments.

TREASURY DEPARTMENT.

The requests for free entry which have heretofore been extended by the Treasury Department to the National Museum in connection with collections from foreign countries, have as usual been complied with. The bureaus named below have shown much interest in the work of
the Museum, and have rendered valuable assistance in procuring contributions:

**U. S. Coast and Geodetic Survey.**—Through Dr. T. C. Mendenhall, Superintendent, was received a collection of insects, mammals, birds' skins, fishes, geological material, birds' eggs and a nest, collected by Assistant J. E. McGrath during his expedition to Alaska.

**U. S. Life-Saving Service.**—From this Bureau were received specimens of quartz pebbles, 2 sea-horses (*Hippocampus hudsonius*), and a fossil crab, collected at Ocean City life-saving station by Capt. J. J. Dunton, keeper, and also a skeleton of *Physeter macrocephalus* juv. from Green Run Inlet, collected by Capt. Dunton.

**U. S. Revenue-Marine Service.**—From Capt. M. A. Healy, through Lieut. D. H. Jarvis, both of the steamer *Bear*, was received the skin of a female walrus (*Odobenus rosacea*), captured in Holy Cross Bay, Siberia.

**WAR DEPARTMENT AND THE ARMY.**

Several officers of the Army have contributed material to the Museum collections, and very valuable assistance has been rendered by the Quartermaster's Department in connection with the transportation of heavy material to Washington.

Gen. M. C. Meigs, Quartermaster-General (retired), presented a revolving rifle (in a mahogany case) of early pattern, invented about 1835, and made in Rochester, N. Y.

A large collection of bronze medals, intaglios, antique stones, and other objects of a similar nature were deposited in the Museum by the executors of Gen. Meigs's estate, as a bequest from him to the National Museum.

Col. R. I. Dodge (retired), Sacketts Harbor, N. Y., transmitted 4 specimens of horse-fly (*Gathophilus equi* Fab.) and a Wasp (*Pelecinus polyverator*).

From Maj. William H. Powell, Fort Keogh, Mont., was received, through Dr. D. P. Wolhaupter, of Washington, D. C., a pipe belonging to Washakie, an Arapahoe chief, presented to Maj. Powell by him during the campaign of 1876.

Capt. Charles E. Bendire, curator of birds' eggs in the National Museum, presented the skin of an American pipit (*Anthus pensylvanicus*) from Lockport, N. Y., a set of eggs of *Tantalus loculator* from Yucatan, and deposited a buffalo robe, lance-holder (rawhide beaded), and a beaded quiver made of otter skin.

Capt. John G. Bourke, Fort Ringgold, Tex., presented a collection of Guadalajara pottery, specimens of materia medica obtained from a Mexican woman, samples of folk-medicine from Lower Rio Grande Valley, and salt crystals from the El Sal del Rey Lake in southern Texas. Capt. Bourke deposited three votive offerings, soles of the "guarachi," or sandals used by the Mexican foot troops along the Rio Grande, a throwing-stick, and a bird-spear from Mexico.
Lieut. Harry C. Benson, Fort Walla Walla, Wash., transmitted nests and eggs of *Trochilus alexandri* with skins of the same, sets of eggs of *Buteo swainsoni* and *Accipiter cooperi* from St. Louis ranch, San Joaquin Valley, California, and Santa Lucia Valley.

From Dr. Edgar A. Mearns, Fort Snelling, Minn., were received birds' eggs and skins, mammal skins, turtle, and forty-eight species of shells. In connection with his work on the International Boundary Commission, Dr. Mearns obtained for the Museum a collection of birds' skins and eggs, turtles, and mammal skins, birds' eggs, birds' nests, rocks, shells, fossils, mammal skulls, cocoon of bag worm, and fishes.


From Dr. R. W. Shufeldt, Takoma Park, D. C., were received birds' nests and skins: model of a fossil bird, *Archaeopteryx laevis*, from Solenhofen, Bavaria; nest of prairie warbler (*Dendroica discolor*) from Takoma Park; a skin of Wilson's snipe (*Gallinago delicata*) from Fort Wingate, N. Mex.; specimen of *Carinifex Newberi*, from the Equus beds, Fossil Lake, Oregon, and a specimen of iguana.

Dr. Timothy E. Wilcox, Fort Huachuca, Ariz., presented a collection of mammals, insects, reptiles, fishes, and birds,* and a living horned toad.

From Dr. Charles E. Woodruff, Fort Missoula, Mont., through Mr. Garrick Mallery, of the Bureau of Ethnology, were deposited thirty-seven photographs pertaining to the Hoopa Valley Indians of California, and presented a stone baking-dish obtained from the same tribe of Indians.

From Rev. J. H. Potter, Fort Clark, Tex., was received a large specimen of fresh-water shrimp.

Mr. Frank X. Holzner, Fort Snelling, Minn., presented specimens of mammals and birds' skins.

Mr. Charles R. Fosdick, of the War Department, transmitted a starfish with nine rays.

**NAVY DEPARTMENT AND THE NAVY.**

Admiral Jouett and Mrs. Jouett deposited a dish and ewer of "precious metals," presented to the Admiral for services rendered in saving from shipwreck the British steamship *Historian* in the Caribbean Sea in 1885.

From Lieut. George F. Emmons, Sitka, Alaska, was received a fish-knife made in Siberia, and preserved as a relic of the old Russian days.

From Lieut. T. G. Fillette were received seven pictures illustrating the Chinese idea of the war in Tonkin, and a show bill. *Chiarinis show*

* Dr. Wilcox was assisted in obtaining this collection by Miss Florence Wilcox, Lieuts. J. A. Emery and Simpson, Dr. R. G. Ebert, Master Harry Ebert, Master Fred Fowler, Master Glover Wilcox, and Mr. Leah, hospital steward.
in China.” Mr. Fillette deposited a cane made of palao-wood, with a handle carved from the head of a wild boar, presented to him by King Kalakaua, of the Hawaiian Islands.

Lient. G. H. Harber transmitted portions of a fur costume, made by the Yokuti of North Siberia, and worn by him on the Lena Delta, during his connection with the *Jeannette* relief expedition.

Lient. Charles F. Pond, Mare Island Navy-Yard, California, transmitted a specimen of sphinx moth (*Smerinthus ophthalmicus* Bd.).

From Lient. F. E. Sawyer were received specimens of crustaceans collected in Brazil.

Ensign Roger Wells, jr., obtained a specimen of cayman (juven.) from Trinidad, West Indies, which he transmitted to the National Zoological Park. The specimen was transferred to the National Museum by Dr. Baker, acting manager.

Dr. Howard E. Ames transmitted a bird skin, reptiles, fishes, crustaceans, ophiurans, and insects from the West Indies and South America.

From Dr. W. H. Rush were received shells from the eastern coast of South America.

From Dr. C. H. White was received a miscellaneous collection of insects made at Acapulco, Mexico, and Payta, Peru. Dr. White also presented a specimen of crude nitrate of soda from Iquique, Chile.

From the United States Naval Eclipse Expedition were received seven birds’ skins, representing two species, from Ascension and St. Helena islands.

Dr. James M. Flint, under whose efficient supervision, as honorary curator, the collection of materia medica has been developed, was recalled in November, 1891, by the Secretary of the Navy. He was succeeded by Dr. J. C. Boyd, who, in April, 1892, was succeeded by Dr. William S. Dixon.

DEPARTMENT OF THE INTERIOR.

*Indian Office.*—From Mr. George A. Allen, United States Indian agent, Colorado River Agency, Parker, Ariz., were received specimens of *Pepsis formosa* Say and *Spharophthalma crenusa* Cress., skins of two rare bats, *Macrotus californicus* and *Molossus californicus*, and specimens of *Trombidium*, n. sp., near *giganteum* Riley.

Dr. Z. T. Daniel transmitted several contributions from Cheyenne River Agency, S. Dak., and Blackfeet Indian Agency, Mont., among which were archaeological objects from an ancient Indian village site near Fort Bennett; ethnological objects found in a camp of “Big Foot’s” people; lock of hair cut from the head of “Yellow Thigh and Red Star,” a Yankton Sioux Indian and a participant in the Custer battle; scraper from the ruins of a Ree village; moccasin-shaped stone from Montana; plum seeds, “kansu,” used by the Sioux Indians for gambling purposes, and a ration ticket of “Banged-in-the-Eye;”
wooden spoon obtained from an Indian of the Piegan tribe, Montana; archaeological objects, chaledonic concretions, and specimens of water-worn chaledony; pipe made by "Afraid-of-Nothing," a Sioux Indian, and a pipe pouch made by an Indian of the same tribe; specimen of hawk moth (*Hemaris diffinis* Bd).

**Pension Office.**—From Mr. W. W. Cheshire was received a photograph of the breastbone of a wild goose, perforated by an Eskimo arrow.

From Merritt Lewis, esq., was received a carved stone pipe from Clinton County, Mich.

**U. S. Geological Survey.**—The following statement will show the extent of the accessions transmitted by the Survey during the year:

Through Maj. J. W. Powell, director, was received a collection of vertebrate fossils obtained from the estate of the late Dr. Joseph Leidy; specimen of pyrolusite from 1 mile west of Walnut Grove, in Murphyses Valley, Etowah County, Ala.; 2 specimens of bornite from Gillis Company’s mine, Guilford County, N. C.; a large collection of cretaceous invertebrate fossils, gathered in Alabama, Mississippi, Texas, Oregon, Washington, California, Dakota, Colorado, Wyoming, Utah and Montana; chaledony from Frankfort, Ky.; specimens of minerals from various localities, consisting of agate, selenite, satin spar, calcite, fluorite, quartz, phlogopite, chaledony, massive apatite, stalactite, dolomite and calcite, and kaolin in quartz geodes; 2 specimens of sphalerite, 11 specimens of calamine, a specimen of galena, and 4 specimens of calcite from Aurora, Mo.; minerals, consisting of pink grossularite, tridymite, orthoclase, sylvanite, emplectite, fluorite, mimetite, Jamesonite, adularia, smoky quartz, tourmaline, wernerite and strontianite; 40 specimens of galena and 15 of sphalerite from Joplin, Mo.; collection of fossil insects, constituting the group mentioned, described and figured by Prof. S. H. Scudder, of the Geological Survey, Vol. XIII, Hayden Reports; specimen of wavellite from Steamboat Springs, Chester County, Pa.

Collected by Dr. T. M. Chatard, 46 specimens of minerals from North Carolina, 10 specimens from Georgia, and a specimen from Pennsylvania, consisting of lucasite, asbestos, corundum, vermiculite, enstatite, talc, garnet, sunstone, andesite, diaspore, chrysolite, margarite, amphibole and spinel.

Collected by Mr. David A. Harrah, Burehard, Nebr., tooth of *Petalocephalus destructor*, a carboniferous selachian.

Collected by Dr. W. P. Jenney, 4 specimens of galena, 12 specimens of calcite on galena from Joplin., Mo.; 19 specimens of pyrite, sphalerite, cerussite and smithsonite from Galena, Kans.

Collected by Mr. W. Lindgren, 34 specimens of radiated brown tourmaline from Colfax, Nevada County, Cal.

Collected by Prof. O. C. Marsh, specimens of invertebrate fossils transferred from the Survey to the Museum.

Collected by Dr. W. H. Melville, minerals from Dillon, Mont.: 29
specimens of minerals, consisting of barite, galena, plattnerite, garnet and cerussite from Mullan, Idaho.

Collected by Dr. J. S. Newberry, Columbia College, New York City, specimens of fossil plants transmitted to the Survey and transferred to the Museum.

Collected by Prof. S. L. Penfield, 59 specimens of minerals from Colorado, consisting of aragonite, cerussite, pyrite, native gold, rhodochrosite, galena, orthoclase crystals, embolite, hyalite, and calcite, specimen of hubnerite from North Star mine, and 2 of guitermanite and zunyite from Zuni mine near Silverton, Colo. (deposit), specimen of rock showing slickensides from central Colorado.

Collected by Mr. I. C. Russell, 2 pairs of snow-shoes from Charley's Village, Yukon River.

Collected by Mr. H. W. Turner, 5 specimens of garnet and 4 specimens of epidote.

From Mr. Frank Burns was received an iron tomahawk from Blount County, Ala.

Dr. T. M. Chatard deposited a scarf pin made of cassiterite from Chesterfield County, S. C.

From Miss May Clark was received a fetish (mole) from New Mexico (exchange).

Mr. William H. Dall transmitted 10 specimens of mollusks from Baddeck, Cape Breton Island, Nova Scotia; 6 albums containing photographs of ethnological objects and celebrated men, and a daguerrotype of Rev. C. H. A. Dall, of Harvard College.

From Mr. L. G. Eakins was received a specimen of gadolinite from Llano County, Tex., and a specimen of native gold in quartz from the Potomac mine, Montgomery County, Md.

Dr. W. P. Jenney transmitted ores from Arkansas, 2 specimens of cadmiumiferous smithsonite from Morning Star mine, Marion County, Ark., a specimen of rubellite from San Diego, Cal., and one of kyanite from Windham, Me.

From Mr. L. C. Johnson were received fresh-water shells from Waddell's mill pond, near Marianna, Fla.

From Mr. W. Lindgren were received rocks and ores from Lake Valley, New Mexico.

From Mr. S. Ward Loper were received 6 specimens of banded jasper from Crown City, Colo.; 2 slabs, of shale with rain-prints from Durham, Conn., and a specimen of augite rock from East Rock, New Haven, Conn.

Mr. W. J. McGee transmitted silver ores from Mexico.

From Mr. R. H. Payne was received an enamel picture on glass, transferred from stone.

Mr. I. C. Russell transmitted a collection of Eskimo ivory carvings, dishes, spoons, pipes, daggers, and ethnological objects of various kinds from the Upper Yukon River, Alaska.
From Dr. R. E. C. Stearns were received 1 specimens of shrimp from the western coast of North America, and a garter-snake from Berkeley, Cal.

Mr. H. W. Turner transmitted an alcoholic specimen of shrew (*Sorex vagrans*).

From Mr. C. D. Walcott was received contorted slate from near Wells, Rutland County, Vt.; 5 echinoids, 5 specimens of flint, and tooth of a shark from the cretaceous chalk of Croydon, England, and 4 specimens of calcite from Smith's Basin, Washington County, N. Y.

Several of the honorary curators in the National Museum are officers of the Geological Survey, and the Museum is much indebted to them for their valuable cooperation with the work of the Museum. These are Mr. C. D. Walcott, in charge of paleozoic fossils; Dr. C. A. White, in charge of mesozoic fossils; Mr. William H. Dall, in charge of mollusks and cenozoic fossils; Prof. Lester F. Ward, in charge of fossil plants; Prof. F. W. Clarke, in charge of minerals, and Prof. O. C. Marsh, in charge of vertebrate fossils.

DEPARTMENT OF AGRICULTURE.

From the Department of Agriculture, through the Secretary, have been received the following objects:

Collection of land and fresh-water shells from various localities in Arizona and in the vicinity of Death Valley.

Three Gray seals from Labrador.

From the Division of Forestry were received 37 photographs representing species of woods, 18 photomicrographs of woods of the United States (deposited), and 12 distribution charts of trees of the United States, prepared by Mr. C. S. Sargent, special agent of the Tenth Census.

Through the Division of Economic Ornithology, were received specimens of land and fresh-water shells from Brownsville, Tex., collected by Mr. William Lloyd: 3 portions of *Elephas* bones, 323 birds' eggs, and 55 birds' nests from California, Nevada, Utah and Texas.

Through Prof. C. V. Riley, entomologist: specimens of North American coleoptera, representing 24 species, new to the collection; collection of insects of all orders, made in the Northwestern States, British Columbia and Alaska; 55 specimens of Californian orthoptera, representing 21 species; 78 specimens, representing 25 species of insects, mostly lepidoptera; large series of hymenoptera and homoptera from southern California; 43 specimens, representing 17 species of neurop- tera; 31 specimens, representing 7 species of orthoptera; 130 specimens, representing 43 species of hemiptera, from Los Angeles; 28 specimens, representing 4 species of Australian Coccinellidae; 245 specimens, representing 51 species of Californian coleoptera; 81 specimens, representing 31 species of Californian lepidoptera; 200 specimens, rep-
resenting 59 species of Californian hymenoptera; 246 specimens, representing 64 species of Californian hemiptera; 182 specimens, representing 18 species of diptera (Bombilydæ), including types of new species; 236 specimens, representing 35 species of North American coleoptera and 25 specimens of New Zealand Coccinellida; 5 new species of Bombilydæ, consisting of Lordotus juncæus Coq., Lordotus diversus Coq., Taxophora casta Coq., Paracosmus insolens Coq., Amphicosmus elegans Coq., 8 species of rare coleoptera, and 7 species of rare orthoptera; 170 specimens, representing 11 species of rare coleoptera, new to the collection, from San Diego and Los Angeles counties, collected by Mr. D. W. Coquillett; 3,173 specimens, representing 636 species of insects obtained by Mr. A. Koebel during his connection with the Death Valley Expedition; 200 specimens, representing insects of various orders, collected by Mr. C. G. Schaupp, in Burnet County, Tex.; and a miscellaneous collection of insects, including biologic material also collected by Mr. Schaupp at Cypress Mills, Tex.; specimens of Australian hemiptera, representing 8 species, collected by Mr. J. G. O. Tepper, of Adelaide.

Through Dr. George Vasey, botanist: specimen of "Travellers Tree," from Mexico.

From Mr. Frank H. Hitchcock were received 3 meadow larks, 3 sparrow hawks, a blue jay, a red-tailed hawk from Maryland, and a tortoise collected by Mr. E. A. Preble from the Potomac Flats.

From Mr. S. B. Johnson, through Mr. F. W. Malley, assistant entomologist, was received the upper jaw bone of a paddle fish (Polyodon fossilis) from a stratum of rock at Rocky Point, La.

From Mr. Charles W. Richmond were received 3,000 specimens of birds' skins from the District of Columbia; 152 specimens of reptiles and batrachians from various localities; 12 birds (chiefly owls), representing 6 species, from Sandy Spring, Md., red-tailed hawk, sparrow-hawk, broad-winged hawk, sharp-shinned hawk, Cooper's hawk, long-eared owl, from Maryland; 35 specimens, representing 6 species of birds' skins, from the District of Columbia.

From Dr. A. Charles True were received 6 specimens of cretaceous fossils from Uniontown, Ala., teeth of Corax prisloidontus and Lamna elegans, tooth of Lamna cuspidata, and vertebra of Lestosaurus from the same locality.

From Mr. H. E. Van Deman was received a specimen of black skimmer.

Mr. Harry G. White transmitted a specimen of red-tailed hawk and a short-eared owl in flesh from Arlington, Va.

The very valuable services rendered by Prof. Riley, honorary curator of insects; Dr. B. E. Fernow, honorary curator of the section of forestry; and Dr. George Vasey, honorary curator of the department of botany, have been continued and are hereby acknowledged.
The following collections and contributions have been transmitted to the National Museum through Col. Marshall McDonald, U. S. Commissioner of Fisheries:

Four photographs of Alaskan Indians and their houses; frog from Grenadier Island, New York; specimens of _Acian cutozoa_ from Yellowstone Park, described by Prof. Edward Linton; 953 specimens of fishes, representing 15 species, including _Leciscus gilli_, a new species, collected in Montana and Wyoming during the summer of 1891 by a Fish Commission party under the direction of Prof. B. W. Evermann; collection of reptiles and batrachians made by Prof. Evermann in Montana and Wyoming, in 1891; specimens of fishes representing the following species: _Lutjanus blackfordi, Haploidoonotus grummius, Pomadasys virginiensis, Epinephelus morio, Ietiobus bubalus, Stoaodon marinari, Serrauna atraria, Monticirrus nebulosus, Cyprion cypionate, Clupea harengus, Merluvius bilinearis, Phycis chuss, Lophoptycha mackiella, Esor lucius, Cotta octodecimspinosa, Pomoxys, Pleuronectes americanus, Roccus chrysops, Roncador stevari, Pleuronectes stellatus, Ophiodon elongatus, Microrhynchus dolomieu, Lampris luna, Phycis, Brosminus brosmus, Pleuronectes americanus, Pollachius carbonarius, Cotta octodecimspinosa, Citharichthys sordidus, Paralichthys californicus, Pleuronectes stellatus, _PsEIetichthys melanostictus, Sebastichthys auriculatus, Ophiodon elongatus, Raja ocellata, Batrachus tau, Cyprinus carpio, Alutera schoepfi, Liostomus ranthurus, Pomadasys fulcomaculatus, Onchorhynchus chonieha and _Poocttus temminckii_; specimen of turtle, _Aspidonectes spinifer_; specimen of tarpon and Logger-head turtle; plants obtained in Alaska during the cruise of the steamer _Albatross_ in 1889 and 1890; plants from the Galapagos Islands, obtained during the cruise of the steamer _Albatross_, under the direction of Prof. Alexander Agassiz; alcoholic specimens of birds, reptiles, insects, rocks, birds' nests, and skeletons; collection of crustaceans, chiefly from the North Pacific Ocean, made by the _Albatross_ during the past three or four years; alcoholic specimens of lizards and shells from Cozumel Island, off the coast of Central America, collected in 1885; skin of coast fox, _Urocyon virginianus littoralis_ from Santa Rosa Island, California; collection of birds' skins from the Galapagos Islands and Alaska, and birds' eggs from Alaska, collected by Mr. C. H. Townsend, of the steamer _Albatross_; 117 birds' skins from the Galapagos Islands, collected in March and April of 1891 by the steamer _Albatross_, under the direction of Mr. Townsend, and the skin and skull of a brown bear, shot by Mr. Townsend at Port Moller.

Through Mr. Richard Rathbun, acting commissioner: Small collections of crustaceans, chiefly from the dredgings of the steamer _Albatross_ in the Pacific Ocean, but including a few specimens from the Atlantic.
From Mr. W. H. Abbott were received specimens of Corydalus cornutus and Orthosoma brunneum.

Dr. Tarleton H. Bean presented the skin of a red phalarope and a turtle.

From Mr. S. F. Denton was received the skin of a white-bellied sea eel (Haliæetus leucogaster) or an allied species, from Queensland, Australia, and a bat, Vesperugo serotinus, in flesh.

Mr. Vinal N. Edwards transmitted a specimen of American scoter (Oidemia Americana) from Wood's Holl, Mass.

Specimens of reptiles and batrachians collected by Prof. B. W. Evermann during the fall of 1891 in Missouri and Texas were deposited by him.

From Mr. R. R. Gurley were received specimens of seeds and shells from Texas.

Mr. Richard Rathbun transmitted a small collection of Panopeus from Brazil, collected in 1875-76.

From William P. Seal were received 3 specimens of American pipit (Anthus pusillusianus) from Alexandria, Va.

Dr. Hugh M. Smith transmitted 7 specimens of Acris gryllus, a series of 8 human hyoids, a set of human ear bones, and 5 mud puppies (Necturus lateralis).

From Mr. Charles H. Townsend were received 5 skins of Eumetopias stelleri and 2 skins of Phoca vitulina, collected near Monterey, Cal.

The valuable services of Mr. Richard Rathbun as honorary curator of marine invertebrates; Dr. Tarleton H. Bean as honorary curator of fishes, and Capt. J. W. Collins as honorary curator of fisheries and naval architecture have, through the courtesy of Col. McDonald, U. S. Commissioner of Fisheries, been continued.

DEPARTMENT OF JUSTICE.

From Col. Cecil Clay, were obtained five specimens of woodland caribou from Newfoundland.

BUREAU OF ETHNOLOGY.

The following contributions have been received from the bureau and its officers:

Through Maj. J. W. Powell, director; collection of archaeological objects and specimens of pottery obtained from a mound near Linville, Rockingham County, Va.; 370 ethnological objects collected by Mr. James Mooney from the Kiowa Indians of Oklahoma Territory; collection of scrolls of birch-bark and mnemonic songs, collected by Dr. W. J. Hoffman in Minnesota during the years 1887, 1888, 1889, and 1890, relating to the ritual of the Society of Shamans.

From Dr. A. S. Gatschet was received a winnowing basket made in 1877 by an Indian belonging to the Klamath tribe, southwest Oregon, and specimens of Indian food obtained from the same tribe.
From Mr. H. W. Henshaw was received a valuable set of mounted herbarium plants, representing the families Quercus, Aster and Solidago from the District of Columbia, and a collection of fishes, reptiles, and batrachians from Virginia and the District of Columbia.

Mr. W. H. Holmes transmitted 3 rude implements made from novaculite, obtained from an ancient Indian quarry in Indian Territory.

From Mr. Cosanos Mindeleff was received a specimen of calcite pseudomorph after glauberite from Rio Verde, Arizona.

Mr. James Mooney transmitted ethnological objects obtained from the Piute Indians.

Mrs. M. E. Stevenson presented 2 fetiches (bear) from New Mexico, and deposited 4 feather-plumes and a stone object obtained from the Zuni Indians.

I.—EXPLORATIONS.

The collections of the Museum have been very materially increased during the year through the cooperation of various collectors, commissioned by the Smithsonian Institution or the Museum, as well as through the interest and courtesy of friends of the Museum who have voluntarily offered their services in procuring material for the Museum. The collections which have resulted from the assistance of these persons are here referred to.

Dr. W. L. Abbott, whose contributions to the Museum have for many years been so generous and acceptable, has added a very interesting and valuable collection chiefly from Kashmir and Baltistan, comprising ethnological objects, birds' skins, mammal skins and skulls, and including specimens of the Himalayan ibex and Vigne's sheep.

From the Department of Agriculture, through Prof. C. V. Riley, entomologist, were received 3,473 specimens, representing 636 species of insects, collected by Mr. A. Koebele, during his connection with the Death Valley expedition in March and April of 1889. These specimens were transferred from the Department of Agriculture to the National Museum.

The Museum has also been the recipient of land and fresh-water shells from the same locality, obtained during the same expedition.

Mr. James E. Benedict, of the National Museum, was engaged in an exploring trip in the vicinity of Point Lookout for the purpose of obtaining marine invertebrates for the Museum. He was successful in his undertaking and added several very interesting specimens to the collection.

Mr. R. M. Bartleman, of the United States legation, Caracas, Venezuela, expressed his willingness to obtain views for the National Museum, and he was accordingly furnished with a photographic outfit for that purpose. An interesting series of photographs, representing native
scenery and other objects connected with Venezuelan life and the surrounding country, has been received from him.

In the chapter on explorations, contained in the Report of the National Museum for 1890, mention was made of an exploring expedition which had been sent into the unexplored lands of Africa by the British South African Exploring Society. This expedition was joined by Mr. William Harvey Brown, who was sent out under the auspices of the Smithsonian Institution in connection with the Naval Eclipse Expedition, and who had made during the previous year large and valuable additions to the collections of the National Museum. In a letter recently received from him he states that he has secured for the Museum natural history specimens, including several head of large game from the Unsweti River. These specimens have not yet been received. The only material received from him during the present year are six birds’ skins, representing four species from Angola.

Mr. J. H. Camp, Leopoldville, Congo district, Africa, in a letter dated December 29, 1891, offered to collect natural history specimens for the National Museum. A collection of African butterflies, photographs of natives, and botanical specimens has been received from him.

Mr. William Astor Chanler, of New York City, visited the Smithsonian Institution in September, 1891, and kindly offered during his proposed travels in Africa to make collections for the Smithsonian Institution. His offer was gladly accepted, and the result of his exploration in connection with the Institution will be given in a later report.

The U. S. Fish Commission has transferred several large and interesting collections to the National Museum during the year. Among them are valuable collections of plants from the Galapagos Islands and Alaska, collected by the Albatross, under the direction of Prof. Alexander Agassiz; a collection of birds, rocks, insects, batrachians, birds’ skeletons and nests, also collected by the steamer Albatross: specimens of crustaceans collected by the Albatross in the North Pacific Ocean, and birds from the Galapagos Islands obtained by the same steamer, under the direction of Mr. Charles H. Townsend.

The U. S. Geological Survey, has, through its director, Maj. J. W. Powell, added largely to the mineral collections of the National Museum, as well as by the contributions made by individuals connected with the Survey while engaged in field-work in different parts of the country.

On September 15, 1891, letters of introduction to James P. Turnbull, United States consular agent, San Luis Potosi; Hon. Thomas Ryan, Minister to Mexico; Rev. George B. Winton, and Dr. Pagenstecher were given to Mr. P. L. Jony, of the National Museum, who visited Mexico for the purpose of making collections of natural history specimens for the National Museum. The results of his expedition will be recorded in the next Report.

Dr. Edgar A. Mearns, U. S. Army, while engaged in his work with the International Boundary Commission, kindly offered to collect natural
history specimens for the National Museum. There have already been received from him several very interesting collections, and a full report of those not mentioned in the accession list accompanying the present Report, will be given in the Report for 1893.

Mr. George P. Merrill, of the National Museum, engaged in an exploring expedition through Arizona and New Mexico, and secured for the Museum some beautiful specimens of onyx marble and other acceptable geological material. In Virginia and adjoining States he also obtained interesting ores and marbles.

Mr. Newhall, of the National Museum, while engaged in field work for the Museum, obtained rocks, ores, and conglomerates from Virginia and New Jersey.

Mr. Charles W. Richmond, Department of Agriculture, in a recent trip through Guatemala and Nicaragua, by an agreement made with the National Museum, secured several large collections of natural history specimens. A detailed report of these collections will be found by reference to the accession list (Section V), and the material received after the close of the present fiscal year will be recorded in the next Report.

In addition to the collections which have heretofore been received from Mr. J. C. Russell, of the U. S. Geological Survey, in connection with his explorations in Alaska, he has generously contributed a number of ethnological objects, consisting of Eskimo ivory carvings, dishes, spoons, pipes, daggers, dolls, trinkets, etc., from the Upper Yukon River.

Dr. Timothy E. Wilcox, U. S. Army, Fort Huachuca, Ariz., has continued to transmit specimens for the National Museum from the vicinity of Fort Huachuca. Some very rare specimens of reptiles have been received from him.

Mr. Thomas Wilson, curator of Prehistoric Anthropology in the National Museum, was present at the opening of the Hopewell mound in Chillicothe, Ohio. The objects exhumed consisted of copper spoons, copper pieces, bones, mica cut into stencils, a broken effigy, boat-shaped objects of stone, beads made of bone, and a large number of pearls bored or drilled, etc.

Mr. William S. Yeates, assistant curator of minerals in the National Museum, collected specimens in North Carolina, and secured some very acceptable minerals and Miocene fossils.

COLLECTORS' OUTFITS.

During the fiscal year ending June, 1892, the following collecting outfits have been furnished by the Museum:

1891.

July 3.—To Dr. J. T. Scoville, Terre Haute, Ind. Copper tanks, tank-box, alcohol, etc., to be used in collecting and preserving natural
history specimens for the National Museum. A list of the specimens received from him will be found in the accession list (Section v).


July 21.—To Mr. W. W. Rockhill, Berkeley Springs, W. Va., in connection with his expedition to the Chinese Empire. Collecting implements and other apparatus to be used in obtaining specimens for the National Museum.

August 15.—To Mr. James E. Benedict, of the U. S. National Museum, in connection with his collecting trip in the vicinity of Point Lookout. Necessary outfit for collecting and preserving specimens. The collections received from him are referred to in the accession list (Section v).

August 25.—To Mr. R. M. Bartleman, U. S. Legation, Caracas, Venezuela. A photographic outfit, to be used in obtaining views for the Museum collection. The photographs received from him are referred to in the accession list (Section v).

To Dr. R. R. Gurley, U. S. Fish Commission. Two copper tanks for the preservation of natural history specimens for the National Museum. Reference to the collections received from him is made in the accession list (Section v).

To Dr. Timothy E. Wilcox, U. S. Army, Fort Huachuca, Ariz. Apparatus and material for preserving and collecting natural history specimens. Several collections have been received from him, reference to them being made in the accession list (Section v). Other collections received from him will be referred to in the accession list of the Museum Report for 1893.

October 1.—To Mr. P. L. Jouy, U. S. National Museum. A very extensive collecting outfit, to be used in obtaining and preserving natural history specimens during his travels in Mexico. A list of the specimens obtained by him will appear in the accession list of the Museum Report for 1893.

October 6.—To Mr. Héli Chatelain, consular agent, Loanda, Africa. An outfit to be used in collecting and preserving natural history specimens and other objects for the National Museum.

November 19.—To Mr. R. M. Bartleman, U. S. Legation, Caracas, Venezuela. Photographic outfit, to be used in obtaining views for the National Museum.

December 1 and 15.—To Mr. Charles W. Richmond, Department of Agriculture. Copper tanks, tank-boxes, alcohol, etc., to be used in collecting and preserving natural history specimens for the Museum. A very large and interesting collection has been received from Mr. Richmond, obtained from the vicinity of Guatemala, and is referred to in the accession list (Section v).

December 10.—To Mr. Charles T. Simpson, U. S. National Museum,
Mason jars, alcohol, net, canvas, etc., to be used in collecting and preserving natural history specimens.

1892.

February 9.—To Dr. Edgar A. Mearns, U. S. Army, International Boundary Commission, El Paso, Tex. A collecting outfit to be used in collecting and preserving natural history specimens for the National Museum. Reference to a portion of the collections received from him will be found in the accession list (section v). Other collections which have been received from him will be referred to in the Museum Report for 1893.

March 9.—To Mr. Louis Dexter, United States consul, Azores. Tank-box, copper tank, alcohol, etc., to be used in collecting and preserving natural history specimens for the National Museum.

March 21.—To Dr. Timothy E. Wilcox, U. S. Army, Fort Huachuca, Ariz. Tank-box, copper tank, alcohol, etc., to be used in collecting and preserving natural history specimens for the National Museum.

March 29.—To Mr. J. H. Camp, Leopoldville, Congo District, Africa. Outfit to be used in obtaining and preserving natural history specimens for the National Museum.

May 16.—To Mr. George P. Merrill, U. S. National Museum. Copper tank, tank-box, and other material necessary to be used in collecting and preserving natural history and other specimens for the National Museum during his explorations in Arizona and adjoining States.

June 2.—To Dr. Edgar A. Mearns, U. S. Army, International Boundary Commission, Deming, N. Mex. Ammunition, cotton and hemp-twine, and other articles for use in collecting and preserving natural history and other specimens for the National Museum.

June 11.—To Rev. J. A. Potter, Fort Clark, Tex. Two tank-boxes, alcohol, paper labels, and other material, required in collecting and preserving natural history specimens for the National Museum.