

total contributions of members of the board of trustees, under special funds and gifts, amount to \$2,895,241.82. The total gifts of members and friends other than trustees during the same period amount to \$8,260,476.23. Thus, during the past fifteen years, the grand total of additions to permanent equipment, to building, to exhibition and to the endowment of the museum is \$14,206,243.59, an average of a little less than \$1,000,000 a year.

INCREASE IN MUSEUM COLLECTIONS DURING 1923

The year 1923 has been exceptional in the rapid increase of collections from all parts of the world. Either an emergency gift of \$300,000 for preparation and exhibition or the annual interest on a new endowment fund of \$3,000,000 is needed to keep up with this astonishing growth through the museum's expeditions and through the liberality of the city in the erection of new buildings.

First in order of importance, during the year 1923, is the Faunthorpe-Vernay collection from India, including gifts by the Maharajahs of Nepal and Mysore and the Viceroy of India—a superb collection of mammals and birds valued at not less than \$100,000. The gifts of trustees and friends of the museum and the Asiatic Society to the third Asiatic expedition total \$43,432 for the year, resulting in the great discoveries in Mongolia and in superb collections from China and Mongolia. The museum is also indebted to Mrs. Henry Clay Frick for the gift of a unique collection of fossils from the Siwalik Hills of India and from Burma, of a total value of \$15,000. To this Mr. Childs Frick has added during the year \$16,300, making a total contribution of \$31,250 towards collections, chiefly of Pliocene age, from California and other western states. Mr. Harry Payne Whitney has continued for the third year his annual gift of \$20,000 towards a total of \$100,000 to secure a representative collection of the birds of the oceanic islands of Polynesia. An indirect gift for the support of the Martin Johnson Second African Expedition by the Martin Johnson African Expedition Corporation, for five years, constitutes an annual expenditure of \$100,000.

SCHOOL SERVICE AND ATTENDANCE DURING FIFTEEN YEARS

The corresponding growth of public interest in the museum during the fifteen year period is shown by the increase in attendance from 537,984 in 1907 to 1,440,726 in 1923, an increase of more than 167 per cent. The school service attendance in the museum, included in the above figures, increased from 30,000 in 1907 to 123,756 in 1923, while the total number reached by the museum's extension service to the schools has increased from 778,510 in 1907 to 5,630,-

811 in 1923, an increase of 623 per cent. The annual membership income has arisen from \$15,300 in 1907 to \$38,395 in 1923, and the total membership is now 7,350.

SIX NEW EXHIBITION HALLS

An emergency subscription of \$300,000 for preparation and exhibition is needed now because the minimum budget of 1924 does not provide for the very important emergency requirement of filling the six new exhibition halls now being constructed by the city, with their respective exhibitions from various parts of the world, namely, the Oceanic Hall, the Gallery of the Oceanic Hall devoted to the smaller marine life, the Hall of Fishes devoted to the fishes of the world, the Asiatic Hall devoted to the splendid new Asiatic collections presented through Colonel J. C. Faunthorpe and Mr. Arthur Vernay, as well as the rich collections of the third Asiatic expedition, the Hall of Amphibians and Reptiles occupying the third floor, the Hall of Giant Ceratopsians occupying the fourth floor.

These six new exhibition halls now being added to the museum by the taxpayers of the city have been constructed at a cost of \$1,500,000 after plans gradually maturing since the year 1911, when the present arrangement was decided upon, and promise to be at once the most beautiful and the most impressive museum exhibition halls in the world. They embody all the latest ideas and ideals of museum construction and are receiving the scientific supervision of leading experts like Honorary Director Lucas, Assistant Director James Clark, in charge of preparation; the noted animal sculptor, Carl E. Akeley; the ichthyologist, Bashford Dean (also on the Metropolitan Museum staff); Roy C. Andrews, explorer and mammalogist; Roy W. Miner, specialist in invertebrate zoology; the herpetologist, G. Kingsley Noble, graduate of Harvard, and the paleontologists, Henry Fairfield Osborn and William D. Matthew.

MARY A. DAY

MISS MARY ANNA DAY, for thirty-one years librarian at the Gray Herbarium of Harvard University, died in Cambridge, Mass., on January 27, 1924, in her seventy-second year. She was born in Nelson, N. H., on October 12, 1852. Educated in the Academy of Lancaster, Mass., she was from 1871 to 1880 a teacher in the Massachusetts public schools. Later she became librarian in the Public Library of Clinton, Mass. She accepted appointment at the Gray Herbarium January 1, 1893, succeeding as librarian of that establishment Miss Josephine A. Clark, who had been called in similar capacity to the United States Department of Agriculture at Washington.

Without previous training in botany, but with exceptional ability and great industry, Miss Day rapidly perfected herself in the technical details of her work, becoming within a few years a person of recognized skill in all matters relating to botanical bibliography. Precise and methodical in all her records, a critical reader of difficult proof, and familiar in extraordinary degree with botanical literature, she rendered invaluable aid to many writers dealing with the classification of plants. She assisted in seeing through press the posthumous portions of Dr. Asa Gray's "Synoptical Flora of North America," the seventh edition of Gray's "Manual of Botany," and most of the contributions from the Gray Herbarium which have appeared during the last three decades. For about twenty years she edited, and herself largely compiled, the *Card Index of New Genera and Species of American Plants*, a quarterly publication of importance in American botany. This was an undertaking of no small magnitude. It involved the indexing, page by page, of upward of 130 scientific serials from all parts of the world, and of numerous monographs in a great variety of languages. Last November, when failing health obliged her to give up further work, this index contained about 170,000 cards. It is in constant use at the larger botanical establishments throughout the country, and Miss Day had the gratification of receiving many appreciative comments upon its accuracy and reference value.

In the early years of the New England Botanical Club, she prepared and published for that organization a "List of local floras of New England," and a similar paper on the "Herbariums of New England," both of them exceedingly helpful to the work of the club. She became a widely known expert in her field and from all parts of the country, and even from foreign lands, her judgment was solicited on difficult points relating to the literature of botany—exact dates of publication, ambiguous citations, obscure editions, valuation of rare works, etc. Generous with her time and aid she won the gratitude and high regard of scores of investigators in the science of botany, and will be greatly missed from the post she has long held with distinguished ability.

B. L. ROBINSON

GRAY HERBARIUM

SCIENTIFIC EVENTS

THE INTERNATIONAL CONFERENCE ON APPLIED MECHANICS IN HOLLAND

THE undersigned have organized an international conference on Applied Mechanics (embracing rational mechanics, the theory of elasticity and hydro- and aerodynamics) at Delft (Holland), seat of the Dutch Technical High School.

During the past years in all countries many important results have been obtained in these branches of science; owing to the political circumstances, however, the exchange of ideas and the mutual contact have remained less than desirable. For these reasons the first four signers have considered the possibility of convoking a general meeting, so much the more as they were aware of the success of a conference of scientists of various countries which gathered at Innsbruck (Tirol) in September 1922 to discuss questions of hydrodynamics and aerodynamics. They directed themselves to a number of scientists who are working on the domain of applied mechanics, in order to demand them to support their project, and to their great pleasure they received an affirmative answer of the greater part of these scientists, whose names are mentioned in the list below.

In view of this the success of an international conference could be considered to be certain, and so it has definitively been fixed that a meeting will be organized from April 22 to April 26, 1924. Of these days two will be appointed for general sessions, and two for separate sessions of the three sections for:

Rational mechanics;
The theory of elasticity;
Hydro- and aerodynamics (including aeronautics).

In accordance with the purpose of the conference it has been planned for the general meetings to make provision for summarizing reviews of those questions, in which great successes have been obtained during the last years, *e.g.*:

Graphical and numerical methods of solving differential equations;
Experimental methods of solving stress problems;
Stress problems in plastic media;
The theory of rupture;
The physical aspects of non elastic deformations;
Friction and lubrication;
Motions in rotating fluids;
Stability of fluid motions;
Wave motion;
The motion of a fluid in the boundary layer along the surface of solids;
The turbulence in the oceans and in the atmosphere;
The dynamics of the atmosphere.

PROFESSOR C. B. BIEZENO, Delft,
PROFESSOR J. M. BURGERS, Delft,
PROFESSOR J. A. SCHOUTEN, Delft,
DR. E. B. WOLFF, Amsterdam,

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