endowment funds, as well as a reduction in income from endowments, contributions and memberships.

The budget adopted was very much reduced, and economies were put in force throughout the year, with the result that expenses were kept well below the appropriations, in spite of increased expense incurred through the necessity of handling record attendance during a period of several months. There were no expeditions except those financed by funds especially contributed for that purpose.

Notwithstanding forced economies, service to the public was maintained in full, and never before have so many persons been reached by the educational influences of this institution.

Visitors to the museum during the year numbered 3,269,390, an attendance exceeding that ever attained in a single year by any museum in the United States, and probably a high record for the entire world. The increase over 1932 attendance is 1,455,188, or 79 per cent. Extra-mural activities conducted by the museum benefited approximately 661,000 persons, mostly children, making a total of more than 3,930,000 for whom the institution functioned as a source of information. Of the 3,269,390 visitors to the museum, only 212,298, or $6\frac{1}{2}$ per cent., paid admission. All the rest, numbering 3,057,092, either came on free days, or belonged to classifications such as children, teachers, students and museum members, who are granted free admissions on pay days. The highest attendance for any single day occurred on August 24, when there were 65,966 visitors.

Lecturers from the museum, sent to the schools by the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures, spoke before 160,750 children in their classrooms and assemblies, the talks being illustrated with stereopticon slides. Daily, throughout the school year, approximately 500,000 children had available for study in their schools (and also in various community centers and other institutions) the traveling natural history exhibits circulated by the N. W. Harris Public School Extension of Field Museum.

Mr. Simms reports a decrease in contributions compared with the benefactions received in recent years. The total of such gifts was \$47,320, received in various amounts to be devoted to specific uses.

The book contains detailed accounts of the installation of new exhibits, most important of which were the two new halls—Chauncey Keep Memorial Hall, containing the races of mankind bronzes by the sculptor Malvina Hoffman, and the Hall of the Stone Age of the Old World, containing group restorations of various types of prehistoric man. Other activities reported upon include the research and field work conducted by the four scientific departments—anthropology, botany, geology and zoology; accessions of exhibition and study material received from various sources; the year's progress in the museum library, and the work of all other divisions of the museum organization.

CHARTER MEMBERS OF THE AMERICAN ACADEMY OF TROPICAL MEDICINE

THE following have been elected to charter-membership in The American Academy of Tropical Medicine by the Council of the Academy, in accordance with instructions given the council at the recent Conference on Tropical Diseases held in Washington, D. C., on February 5 and 6, under the auspices of the National Research Council:

Bailey K. Ashford, Geo. W. Bachman, M. A. Barber, Chas. C. Bass, M. F. Boyd, Chas. S. Butler, Geo. R. Callender, Roland C. Connor, Carroll E. Faust, Frederick P. Gay, Lewis W. Hackett, Maurice C. Hall, Henry Hanson, Robt. Hegner, Victor G. Heiser, Wm. M. James, Jas. W. Jobling, Chas. A. Kofoid, Robt. A. Lambert, Thos. T. Mackie, Wm. G. MacCallum, George W. McCoy, Karl F. Meyer, Frederick G. Novy, F. W. O'Connor, F. M. Root, Frederick F. Russell, Wilbur A. Sawyer, A. W. Sellards, Geo. C. Shattuck, Joseph F. Siler, M. H. Soule, C. W. Stiles, E. R. Stitt, James S. Simmons, Wm. H. Taliaferro, E. E. Tyzzer, Edward B. Vedder, Henry B. Ward, E. L. Walker, H. Windsor Wade.

These with the officers of the academy constitute the total number of fifty charter members authorized by the conference. The officers elected at Washington are:

President, Theobald Smith, Rockefeller Institute, Princeton, N. J.

Vice-president, Chas. F. Craig, Tulane University.

Secretary, Earl B. McKinley, George Washington University.

Treasurer, W. W. Cort, the Johns Hopkins University. Members of the Council, Stanhope Bayne-Jones, Herbert C. Clark, Richard P. Strong, Alfred C. Reed, Henry E. Meleney.

GRANTS-IN-AID OF THE AMERICAN ACAD-EMY OF ARTS AND SCIENCES

AT the April meeting of the American Academy of Arts and Sciences announcement was made of grantsin-aid from the permanent science fund of the academy, as follows:

To Dr. Joseph C. Boyce, of the Massachusetts Institute of Technology, for aid in investigating the extreme ultra-violet spark spectra of krypton and xenon.

To Dr. T. T. Chen, of the University of Pennsylvania, \$90 to aid in the preparation of a monograph on the cytology of Opalinid Ciliate Protozoa.

To Dr. W. W. Coblentz, of the U. S. Bureau of Standards, \$400 for use in connection with an evaluation of ultra-violet in sunlight at Flagstaff, Arizona.

To Professor E. A. Culler, of the University of Illinois, \$350 for aid in an investigation of the effect upon hearing of protracted exposure to sound frequencies of high intensity. To Professor James William McBain, of Stanford University, \$400 for aid in determining adsorption in the air-water interface.

To Professor Charles Palache, of Harvard University, \$250 for assistance in a study of the chemical composition of the mineral, samarskite, especially with respect to its content of uranium, thorium and lead as a basis for the determination of geological age.

To Professor Gayle Scott, of Texas Christian University, \$500 for expenses in connection with a study of the stratigraphy and paleontology of the Trinity group in Texas.

To Professor A. Franklin Shull, of the University of Michigan, \$500 for use in connection with an investigation of the internal and external factors which influence wing production in aphids.

The American Academy of Arts and Sciences ordinarily makes grants from the Permanent Science Fund twice each year. The next meeting of the committee will be held on October 2, and applications for grants should be in its hands before September 10. These should be addressed to Professor E. M. East, Chairman of the Committee on the Permanent Science Fund, American Academy of Arts and Sciences, 28 Newbury Street, Boston, Massachusetts.

SCIENTIFIC NOTES AND NEWS

A DINNER in honor of Dr. Karl Pearson, to commemorate his retirement from the professorship of eugenics at the University of London, which he has held for forty-nine years, was given at University College on April 23. The Vice-Chancellor, Professor L. N. G. Filon, presided, and presented Professor Pearson with a bronze portrait plaque "in grateful commemoration of his research, teaching and inspiration," with a book containing the signatures of 267 subscribers, a Brunsviga calculating machine and a check for £440. In addition to Professor Filon, the speakers included Professor Harald Westergaard, G. Udny Yule and Professor M. Greenwood.

DR. GASTON LEON RAMON, chief of the veterinary service of the Pasteur Institute at Garches, has been appointed director of the institute at Paris in succession to the late Dr. Emile Roux.

THE honorary doctorate of the faculty of mathematics and natural science has been conferred by the University of Göttingen on Dr. Kôtarô Honda, professor of physics at Sendai, Japan.

THE honorary degree of doctor of engineering will be conferred by the Michigan College of Mining and (Technology at commencement in June on Professor James Fisher, head of the department of mathematics and physics, in recognition of his many years of distinguished service in the field of engineering. Professor Fisher will deliver the commencement address.

HONORARY memberships in the Columbia University Engineering Schools Alumni Association were conferred upon Professor Thomas Henry Harrington, for forty years a member of the faculty of engineering, and on Dr. Daniel Edward Moran, consulting engineer, New York City, at the annual dinner of the association on April 28. Dr. Moran was honored on the occasion of his seventieth birthday and the fiftieth anniversary of his graduation from Columbia. President Nicholas Murray Butler and President Karl T. Compton, of the Massachusetts Institute of Technology, were the principal speakers. A portrait of Professor Harrington, by Michael De Santis, was presented to the university.

PROFESSOR ERNEST MERRITT will retire from administrative work as head of the department of physics at Cornell University at the close of the present academic year. Professor R. C. Gibbs has been appointed chairman for the year 1934–35.

PROFESSOR W. A. SETCHELL, chairman of the department of botany of the University of California, and Dr. N. L. Gardner, associate professor of botany and curator of the herbarium, who joined the university in 1900 as assistant in botany, will retire at the end of the academic year. Dr. Setchell has been a member of the faculty for thirty-nine years.

DR. OSCAR M. SCHLOSS has resigned as professor of pediatrics at the Cornell University Medical School and as pediatrician-in-chief of New York Hospital, to resume private practise. He is to remain with the medical school as professor of clinical pediatrics and with the hospital as attending pediatrician. He also will continue his research work at the hospital. Dr. Samuel Z. Levine, now associate professor and attending pediatrician, has been appointed acting pediatrician-in-chief and acting professor of pediatrics.

DR. HARRY S. VANDIVER, associate professor of mathematics at the University of Texas, has been appointed a temporary lecturer at the Institute for Advanced Study at Princeton, while on leave from the university.

AT its twenty-first annual meeting held in New York City under the auspices of Columbia University from March 28 to 31, the American Society for Experimental Pathology elected the following officers for the year 1934–35: *President*, Dr. S. Burt Wolbach, Shattuck professor of pathological anatomy, Harvard Medical School; *Vice-president*, Dr. Oskar Klotz, pro-