Hon. T. H. Newberry, of Michigan.
Mr. L. L. Nunn, of Provo, Utah.
Mr. H. C. Perkins, of Washington, D. C.
Mr. George W. Perkins, of New York City.
Mr. Henry Phipps, of New York City.
Mrs. Whitelaw Reid, of New York City.
Hon. Elihu Root, of Washington, D. C.
Mr. J. C. Rosengarten, of Philadelphia, Pa.
Mr. Jacob H. Schiff, of New York City.
Mr. Isaac N. Seligman, of New York City.
Mr. O. M. Stafford, of Cleveland, Ohio.
Hon. Oscar S. Straus, of New York City.
Mr. Isidor Straus, of New York.

From the contributions, the Smithsonian's three fifths share of all the expenses were paid; the other two fifths were paid by Colonel Roosevelt, which covered all his personal expenses and those of his son, and their proportionate two fifths share of the total expenses of the expedition.

The following is the complete list of the collections made by the expedition that have been received by the institution:

Si	oecimens
Mammals	5,013
Birds	4,453
Birds' eggs and nests	131
Reptiles and batrachians	2,322
Fish	447
Plants	5,153 sheets
Insects	3,500
Shells	1,500
Miscellaneous invertebrates	650
Total	23,169

As the result of this expedition, the biological collections now in the National Museum from East Africa are probably the most complete and systematic of any in the world.

## THE INSTITUTE OF ARTS AND SCIENCES OF COLUMBIA UNIVERSITY

New York is to have an Institute of Arts and Sciences, which has been organized by Columbia University, to begin operation next fall. The object of the university is to offer its educational advantages to a wider constituency, including professional business men and women, and people of leisure, and to bring the general public into closer relation with its work and purposes. To this end it

has been decided to offer, in the late afternoons and evenings, approximately from October to May, short series of lectures, of the university extension type, on history, literature, art, music, drama, ethics, etc., addresses by distinguished statesmen and educators from home and abroad, illustrated lectures on travel, lecture recitals on forthcoming opera, orchestral programs, the history of music, etc., dramatic readings and recitals, and occasional dramas, authors' readings, concerts and recitals by orchestras, operatic singers, and other artists, and oratorios and chorus concerts by the Columbia University Festival Chorus.

The work of the institute will be distinct from the regular academic work of the university and will not receive academic credit in any way, its aim being mainly to furnish a platform for the free and unbiased discussion of current social and economic questions, and to afford a thorough program for general culture, in other words, to provide a system of adult education and rational recreation of an educational nature for busy people. The university offers at present many miscellaneous public lectures which are provided for by special endowment or by exchange professorships, and at times the attendance has been so large that thousands have been turned away. All these lectures will be incorporated in the program of the institute. While many of these lectures and events will be held in the auditoriums on the university campus it is likely that a part of the program will be offered at a Harlem center and also at a down town center, and, as the work grows, other centers will be established. It is expected that about 300 lectures and entertainments will be offered during the season by the best lecturers and artists.

While no definite program for the first season can be announced now the institute has assurances of the cooperation of the Philharmonic Society Orchestra, the New York Symphony Society Orchestra under Walter Damrosch, the Kneisel quartet, and many other organizations, while well known soloists will probably be included in the list of entertain-

The entire control of the Institute ments. will be in the hands of Professor James C. Egbert, the Director of Extension Teaching, who will be assisted by Milton J. Davies, who was secretary to President George E. Vincent, of the Chautauguan Institution, and later was supervisor of lectures and concerts for the Brooklyn Institute of Arts and Sciences. leaves the position of educational director of the Brooklyn Central branch of the Y. M. C. A. The fee for membership in the institute is \$10 annually and the first thousand members will not have to pay a registration fee. After that the registration fee of \$5 will have to be paid, once only, however. A membership ticket will admit one person to the day lectures during the entire season, and two to the night For certain of the more costly lectures. events on the program, such as special concerts, membership will be given a reduced rate of admission.

## SCIENTIFIC NOTES AND NEWS

The National Academy of Sciences will hold on April 22, 23 and 24, an adjourned meeting to celebrate the semi-centennial anniversary of its foundation. The academy held its first meeting in New York on April 22, 1863. In addition to the American speakers there will be three speakers from Europe, Professor J. C. Kapteyn, of the Astronomical Laboratory of Groningen, Holland, on "The Structure of the Universe"; Professor Arthur Schuster, secretary of the Royal Society of London, on "International Cooperation in Research"; and Professor Theodor Boveri, of Würzburg, on "The Material Basis of Heredity."

THE Oxford University convocation has voted to confer the degree of doctor of science on Dr. Josiah Royce, professor of the history of philosophy at Harvard University, who has been giving a course of lectures at Manchester College, Oxford.

THE University of Calcutta has conferred the degree of doctor of science on Dr. A. R. Forsyth, F.R.S., who has given a course of mathematical lectures at the university. THE Helmholtz medal of the Berlin Academy of Sciences has been awarded to Professor S. Schwendener, of the Berlin University, for his researches in plant physiology.

At the annual meeting of the Royal Astronomical Society on February 14, the gold medal of the society was presented to M. Henri Delandre, of the Meudon Solar Observatory. Officers were elected as follows: President, Major E. H. Hills, C.M.G., F.R.S.; Vicepresidents, Sir W. H. M. Christie (late astronomer royal), Dr. F. W. Dyson, Mr. A. R. Hinks and Professor H. F. Newall. Mr. Knobel was reelected as treasurer. Mr. A. S. Eddington and Mr. A. Fowler were elected secretaries, and Sir David Gill was reelected to the office of foreign secretary.

At the anniversary meeting of the Geological Society of London officers for the ensuing year were appointed as follows: President, Dr. A. Strahan, F.R.S.; Vice-presidents, Professor E. J. Garwood, M.A., Mr. R. D. Oldham, F.R.S. Mr. Clement Reid, F.R.S. and Professor W. W. Watts, F.R.S.; Secretaries, Dr. A. Smith Woodward, F.R.S. and Mr. H. H. Thomas; Foreign Secretary, Sir Archibald Geikie, President R.S.; Treasurer, Mr. Bedford McNeill.

THE Franklin Institute, Philadelphia, acting through its committee on science and the arts, recently awarded the Elliott Cresson gold medal, the highest in the gift of the institute, to the following gentlemen:

Charles Proteus Steinmetz, A.M., Ph.D., of Schenectady, New York, in recognition of successful application of analytical method to the solution of numerous problems of first practical importance in the field of electrical engineering.

Emile Berliner, of Washington, D. C., in recognition of important contributions to telephony and to the science and art of sound-reproduction.

Isham Randolph, D.Eng., of Chicago, Ill., in recognition of distinguished achievement in the field of civil engineering.

John William Strutt, Baron Rayleigh, P.C., J.P., D.C.L., LL.D., F.R.S., Hon.C.E., Sc.D., of Witham, Essex, England, in recognition of extended researches of signal importance in physical science.