the outset for the equipment of the laboratory and \$25,000 a year for five years for a program of pure research. The gift of the Buhl Foundation is made with the stipulation that certain additional amounts shall be secured from other sources. This condition has now been met through the cooperation of six great American firms. These are the United States Steel Corporation, the General Electric Company, the Koppers Company, the New York Edison Company, the Standard Oil Company of New Jersey and the Westinghouse Electric and Manufacturing Company. These six corporations will contribute a total amount of \$50,000 a year for five years for the maintenance of the laboratory.

The laboratory will be located on the north side of Engineering Hall of the Carnegie Institute of Technology in a new wing constructed last summer. The plan for the new laboratory will go into effect July 1, 1930. The names of the director and members of the scientific staff will be announced soon.

The laboratory will be a part of the Carnegie Institute of Technology, and will undertake fundamental research in coal and the products which may be obtained from it. Graduate courses will be offered for the training of students in fuel technology in connection with the research laboratory, with the research staff giving instruction.

An advisory board, consisting of prominent men of affairs interested in coal research, will be appointed, to advise as to the general policies to be followed by the laboratory. A technical committee, including representatives of the companies that have contributed towards the support of the project, has been appointed to assist in selecting the staff and arranging the research program. This committee is composed of Dr. John Johnston, U. S. Steel Corporation, New York City; Mr. F. P. Wilson, Jr., General Electric Company, Schenectady, N. Y.; Dr. F. W. Sperr, Koppers Company, Pittsburgh; Mr. M. S. Sloan, New York Edison Company, New York City; Dr. Robert T. Haslam, Standard Oil Company of New Jersey, New York City; Mr. S. M. Kintner, Westinghouse Electric and Manufacturing Company, Pittsburgh, and Mr. Howard N. Eavenson, Eavenson, Alford and Hicks, Pittsburgh.

THE ADVISORY BOARD OF THE GUGGEN-HEIM MEMORIAL FOUNDATION

THE trustees of the John Simon Guggenheim Memorial Foundation announce that the followingnamed persons have been appointed members of the foundation's advisory board: Dr. Isaiah Bowman, director of the American Geographical Society; Dr. Wilbur L. Cross, editor of the Yale Review and

dean of the Graduate School of Yale University; James Earle Fraser, sculptor, and Dr. Marjorie Nicolson, professor of English and dean of Smith College. Miss Nicolson, a former fellow of the foundation, is the second fellow to be appointed a member of the advisory board. The first was Professor Arthur H. Compton, of the University of Chicago, who won the Nobel prize in physics in 1928.

The advisory board consists of the following persons in addition to those mentioned above:

- Dr. Frank Aydelotte, president, Swarthmore College, chairman.
- Dr. Tucker Brooke, professor of English, Yale University.
- Dr. Henry Seidel Canby, editor, Saturday Review of Literature.
- Dr. Edward Capps, professor of classics, Princeton University.
- Dr. Ada Louise Comstock, president, Radcliffe College.
- Professor William Emerson, head of the department of architecture, Massachusetts Institute of Technology.
- Dr. Frederick Carlos Ferry, president, Hamilton College.
- Dr. Guy Stanton Ford, dean of the graduate school, University of Minnesota.
- Dr. Charles Homer Haskins, professor of history, Harvard University.
- Dr. Vernon Kellogg, permanent secretary, National Résearch Council.
- Dr. Fiske Kimball, director of the Pennsylvania Museum.
- Dr. Charles B. Lipman, dean of the graduate division, University of California.
- Dr. Lafayette B. Mendel, professor of physiological chemistry, Yale University.
- Dr. John C. Merriam, president, Carnegie Institution of Washington.
- Dr. James F. Norris, professor of organic chemistry, Massachusetts Institute of Technology.
- Dr. Louise Pound, professor of English, University of Nebraska.
- Mr. Thomas Whitney Surette, lecturer in music, Harvard University Graduate School of Education.
- Dr. Edwin B. Wilson, professor of vital statistics, Harvard University School of Public Health.
- Dr. F. J. E. Woodbridge, professor of philosophy, Columbia University.

Since the establishment of the foundation by former United States Senator and Mrs. Guggenheim five years ago, 295 fellowships have been awarded. The foundation is a memorial to a son of the founders and its purpose in the words of Senator Guggenheim's letter of gift is to "advance human achievement by aiding students to push forward the boundaries of understanding and enrich human life by aiding them in the cultivation of beauty and taste." In accordance with these purposes the foundation offers fellowships, normally of the value of \$2,500 a year, tenable abroad under the freest possible conditions for research in any field of knowledge and for

SCIENTIFIC NOTES AND NEWS

AT the annual garden party of the New York Zoological Park on May 22 a bronze elephant, executed by the late Carl Akeley, was presented by Mr. Madison Grant on behalf of the executive committee to Professor Henry Fairfield Osborn as a token of his thirty-five years of service to the Zoological Society.

Ar the annual commencement of the University of California on May 14 Mr. F. H. Seares, astronomer and assistant director of the Mount Wilson Observatory, was awarded the honorary degree of doctor of laws.

AT the forty-sixth commencement of the Case School of Applied Science on May 29 the doctorate of science was conferred on Dr. W. W. Coblentz, physicist, of the Bureau of Standards, and the doctorate of engineering on Mr. John Lyle Harrington, consulting bridge engineer, of Kansas City, Missouri. On Wednesday evening Dr. Coblentz addressed the Case chapter of the Society of Sigma Xi.

THE Museums of the Peaceful Arts, the American Institute and the New York Electrical Society gave a luncheon at the Hotel Astor on May 27 in honor of Sir William Henry Bragg, Fullerian professor of chemistry and director of the Royal Institution, London, and of the Davy Faraday Research Laboratory.

At the recent annual general meeting of the British Chemical Society the prize and plaque to perpetuate the memory of Edward Frank Harrison, director of chemical warfare during the war, was presented to Dr. Reginald Patrick Linstead. This prize is awarded every three years to the chemist, not over 30 years of age, who is judged by a committee consisting of the presidents of the Chemical Society, the Society of Chemical Industry, the Pharmaceutical Society and the Institute of Chemistry to have made the most meritorious original contributions to chemical science during the previous five years. Professor J. F. Thorpe, president of the society, made the presentation.

DR. CARL LEAVITT HUBBS, curator of fishes in the museum of the University of Michigan and assistant professor in the department of zoology, has received the faculty award for a member of the teaching staff, founders, are Francis H. Brownell, Carroll A. Wilson, Charles D. Hilles, Roger W. Straus and Charles Earl.

The trustees of the foundation, in addition to the

creative work in any of the fine arts. The fellow-

ships are open to men and women, whether married or unmarried, of every race and creed, on equal terms.

The foundation has a capital fund of \$4,500,000.

not above the rank of assistant professor, who, in the opinion of a special committee of the university senate, has won special distinction in his field.

DR. HARRY N. EATON, of Elmira College, was elected to succeed Professor Edward S. C. Smith, of Union College, as president of the New York State Geological Association at the recent Schenectady meeting. Professor O. D. von Engeln, of Cornell University, was elected secretary to succeed Professor Harold L. Alling, of Rochester University.

THE Society for Experimental Biology and Medicine, New York City, has elected the following officers for the coming year: *President*, Peyton Rous; *vicepresident*, D. J. Edwards; *secretary-treasurer*, A. J. Goldforb; *councillors*, Alfred E. Cohn, Leon J. Cole, C. F. Cori, A. B. D. Fortuyn, F. P. Gay, J. T. Halsey, A. C. Ivy, W. Ophüls, W. J. V. Osterhout, W. W. Palmer, F. H. Scott, H. D. Senior, P. A. Shaffer, F. M. Smith and G. B. Wallace.

Mr. G. A. ORTH, executive of the American Car and Foundry Company and a member of the executive committee of the National Society of Safety Engineers, has been elected president of the New York chapter.

It is announced in *Nature* that Sir Ernest Rutherford, president of the Royal Society, has been appointed chairman of the Advisory Council of the Department of Scientific and Industrial Research in succession to Sir William McCormick as from October 1. Professor V. H. Blackman will serve as chairman until October.

DR. R. G. AITKEN, who has been in charge of the active administration of Lick Observatory since July 1, 1923, with the title of associate director, has been named director, the appointment to date from July 1.

DR. W. A. RILEY, at present head of the department of zoology at the University of Minnesota, will become chief of the division of entomology in the same institution on July 1, when R. N. Chapman leaves to become director of the Experiment Station at the University of Hawaii.

PROFESSOR FRANZ SCHRADER, of Bryn Mawr Col-