the services of Mr. T. G. Harbison, of Highlands, N. C. He was for years a collector for the Biltmore Herbarium, a collector for Sargent for over a quarter of a century, is the author of a number of papers on systematic botany, and as a friend and fellow collector of Mr. Ashe he is familiar with Mr. Ashe's signs and symbols. With Mr. Harbison's assistance the herbarium should be ready for the use of visiting botanists by summer.

Through the generosity of Mrs. W. W. Ashe the university is also the recipient of a large number of Mr. Ashe's reprints of botanical and forestry interest and a number of botanical journals and books.

H. R. TOTTEN

HECKSCHER GRANTS AT CORNELL UNIVERSITY

THE Heckscher Research Council of Cornell University has announced that supplementary grants amounting to about $11,000 have been made for the continuance of eighteen scientific researches.

The allocation of grants followed a gift of $10,000 from the Carnegie Corporation made last autumn. A special gift of $1,000 made by Mrs. Harry Snyder, of Minneapolis, for the promotion of research in biochemistry and allied fields at Cornell was also allocated at this time to the continuance of researches assisted by an earlier gift from Mrs. Snyder.

The Heckscher Foundation for the promotion of research at Cornell was established by Mr. August Heckscher, a trustee of the university, in 1920 by a gift of $500,000. During the twelve years it has been in existence the fund has provided an income of $445,000 for the support of 200 separate projects.

The following supplementary grants were made for the academic year, ending June 30, 1933:

Professor Wilder D. Bancroft: For researches in photochemistry.

Professor Samuel L. Boothroyd, '04–5, G: To continue work on meteors.

Professor T. Roland Briggs, '09, and Carleton C. Murdock, '12: For a study of the size and shape of colloidal particles with special reference to catalytic agents.

Professor L. M. Dennis: For investigation of rare elements.

Professor R. Clifton Gibbs, '07: For a study of line spectra in the extreme ultra-violet.

Professor Edwin F. Hopkins, '15: For a study of the physiological effect of iron and certain other elements in the ionized state.

Professor Earle H. Kennard, '13, Ph.D.: For research in theoretical physics.

Professor Robert Matheson, 06–7: For a study of culicid ecology.

George Maughan: To continue study of the effects of ultra-violet light on animal physiology.

Professor Leonard A. Maynard, '15, Ph.D., and C. M. McCay: To continue investigations on physiological effects of purified diets in herbivora, and to continue investigations on biochemical changes that accompany aging in the animal body.

Professor Ernest Merritt, '86: For study of the influence of the conditions of the upper atmosphere on the transmission of electric waves.

Professor Murdock: For work in x-rays.

Professors Edward L. Nichols and Ernest Merritt: For studies in luminescence.

Professor Jacob Papish, '21, Ph.D.: For a study of the occurrence, distribution and association of the rarer chemical elements.

Professor Otto Rahn: For studies of radiation from living matter.

Professor Hugh D. Reed, '99, Alan C. Fraser, '13, and George C. Embody, '10: For the purpose of undertaking genetical studies and related problems in fishes.

Professor Floyd K. Richtmyer, '04: For investigations in the laws of absorption of x-rays.

THE AMERICAN JOURNAL OF SCIENCE

DR. RICHARD S. LULL, Sterling professor of paleontology and director of the Peabody Museum of Natural History at Yale University, has been appointed editor of *The American Journal of Science,* succeeding Dr. Ernest Howe, who died in December.

The American Journal of Science and Arts was established by Benjamin Silliman in 1818, and is an integral part of the educational activities of Yale University. This was the first serial scientific periodical in this country as Silliman was the first professor of science. At that time the scientist had only the irregular publications of a few scientific societies or academies in which to bring out with some promptness the results of his work.

As planned by Silliman *The American Journal* was to embrace all branches of science, "more especially mineralogy and geology"; including also "the ornamental as well as the useful arts." Papers on these last subjects appeared occasionally in early volumes, but more and more infrequently and finally, in 1880, "the Arts" was dropped from the title. The wide range of subjects was gradually somewhat restricted and after the 1890's articles outside of the geological field were more and more infrequent. The other subjects (as chemistry, physics, botany, etc.) still find a place in the abstracts of papers published elsewhere, or in the reviews of books in all lines of science.

The elder Silliman carried all the work of the *Journal* for some twenty years till his son, Benjamin Silliman, Jr., came in to assist him in 1838. A little later (1846), his son-in-law, James Dwight Dana, was also included in the editorial board. The last soon took upon himself the entire work and carried this on until within a few years of his death in 1895. For years previous to this he had had the assistance of his