making new knowledge available in the protection of the public health and in the improved treatment of disease and injury.

By this increase in the endowment, new lines of research will be sustained in biology, chemistry and physics, upon which medical science so largely rests, as well as in medicine itself, as will the study of many practical problems directly relating to diseases in men and animals which are already under way.

The local activities of the Rockefeller Institute in New York are chiefly carried on in the great laboratories and the hospital, which stand high on the bluff facing the East River, between East 64th and 67th Streets, a part of the old Schermerhorn Farm of an earlier day.

Near Princeton, N. J., the institute has a large farm, where it maintains a department of animal pathology. The laboratories and various accessory buildings here are devoted to research on the diseases of animals and effective methods for their prevention and cure, as well as to the study of the bearing of animal diseases upon the health and economic interests of man.

The scientific staff of the Rockefeller Institute numbers sixty-five, most of them highly trained and of large experience in the subjects to which they are exclusively devoted. The institute further employs 310 persons in its technical and general service. It is to the perpetual maintenance of such a group of men and women, with adequate facilities and suitable conditions for their successful work, for the general welfare, that the gifts of Mr. Rockefeller to the institute are devoted.

The scientific staff consists of members, associate members, associates and assistants. The members are:

- Simon Flexner, pathology and bacteriology; director of the Laboratories.
- Rufus Cole, medicine; director of the Hospital; physician to the Hospital.
- Theobald Smith, director of the department of animal pathology.
- Alexis Carrel, experimental surgery.
- P. A. Levene, chemistry.
- Jacques Loeb, experimental biology.

S. J. Meltzer, physiology and pharmacology.

Hideyo Noguchi, pathology and bacteriology.

SCIENTIFIC NOTES AND NEWS

CHARLES HENRY HITCHCOCK, for forty years professor of geology at Dartmouth College, died on November 6, at Honolulu, aged eighty-three years.

MR. RICHARD B. MOORE, until recently stationed at the Bureau of Mines' experiment station at Golden, Colorado, has been appointed chief chemist of the bureau, to succeed Dr. C. L. Parsons.

THE degree of doctor of philosophy has been conferred upon Dr. Bohumil Shimek, professor of physiological botany in the State University of Iowa, by the University of Prague in appreciation of his scientific work. Dr. Shimek lectured in Prague in 1914.

VILHJALMUR STEFANSSON has been awarded the La Roquette Gold Medal of the Geographical Society of Paris, in recognition of the discoveries made by the Canadian Arctic Expedition under his command during the years 1913-18.

THE Royal Institute of Venice has awarded the Querini-Stampalia prize to Professor G. D. Birkhoff, of Harvard University, for his papers on "The restricted problem of three bodies," and "Dynamical systems with two degrees of freedom."

PROFESSORS P. BOUTROUX and J. H. M. Wedderburn returned from military service to Princeton University at the opening of the present academic year.

WE learn from *Nature* that Mr. Francis Jeffrey Bell, who has just retired from the Natural History Museum under the age-limit, entered the service of the trustees in 1878, when the zoological department was still at Bloomsbury and Professor Owen the superintendent. Mr. Bell is emeritus professor of comparative anatomy in King's College, London, and he served for many years as one of the secretaries of the Royal Microscopical Society, the *Journal* of which he also edited. In 1898 he acted as general secretary of the International Congress of Zoology.

PROESSOR S. H. VINES proposes to retire from the Sherardian professorship of botany in the University of Oxford at the end of the current year.

MR. F. J. KATZ has been granted leave of absence from the Mineral Resources division of the U. S. Geological Survey in order to accept an appointment as expert special agent in charge of Mines and Quaries for the Bureau of Census. This arrangement is to insure close and effective cooperation between the two bureaus in the Fourteenth Census.

MR. O. J. R. HOWARTH, assistant secretary of the British Association for the Advancement of Science, is making a collection of materials for a history of the association.

MR. JOHN B. FERGUSON has presented his resignation from the Geophysical Laboratory, Carnegie Institution of Washington, to be in effect November 1, and has accepted a research position with the Western Electric Company in New York City.

CHARLES BARTO BROWN has resigned as professor of civil engineering at the University of Maine and is now associated with The Frederick M. Ward Company in New Haven, Conn.

DR. F. W. SKIRROW, for the past four years assistant professor of chemistry at McGill University, has resigned this position to become chief chemist to the Shawinigan Laboratory, Ltd., the newly founded research organization of the Shawinigan Water and Power Co., Shawinigan Falls, Que.

DR. W. W. ROBBINS has resigned as professor of botany and botanist at the Colorado Agricultural College and Experiment Station to accept a position in the experimental department of the Great Western Sugar Company, with headquarters at Longmont, Colorado.

MR. BERRY V. BUSH, formerly head of the chemistry department at Friends Central School, Philadelphia, has been appointed research chemist in the organic research laboratories of the Eastman Kodak Co., Rochester, N. Y.

DR. L. A. BAUER, after returning to England from his eclipse expedition to Cape Palmas, Liberia, represented the United States Weather Bureau at a preliminary conference of directors of government weather bureaus of allied and neutral countries, called by Sir Napier Shaw at the British Meteorological Office, July 3-9. Later, as one of the United States delegates, he attended the meetings of the International Research Council and of the International Geodetic and Geophysical Union at Brussels from July 18 to 30. Since his return to the United States at the end of August, he has presented papers before various societies on the eclipse of May 29, 1919, and his experiences in Liberia. On December 2 he will deliver an illustrated lecture before the Royal Astronomical Society of Canada and the University of Toronto on the eclipse of May 29, 1919 and the researches of the Department of Terrestrial Magnetism. Besides photographs secured at his own station at Cape Palmas, he has received copies of photographs from the various expeditions along the belt of totality, from Bolivia to the French Congo.

JAMES R. CRAWFORD, of New York, one of the two members of the Stefansson Arctic expedition who were left on Banks Island two years ago, has arrived from the far north on the auxiliary schooner *Herman*. Mr. Crawford told of the hardships he endured during his forced stay of two years on Banks Island. His one attempt to reach the mainland in a small launch left by Mr. Stefansson met with failure in the ice floes.

DR. O. OLSEN proposes to conduct a small Norwegian anthropological and botanical expedition to Siberia next spring. His plan is to go to the Yenisei valley north of Krasnoyarsk, and to push thence into the less known regions immediately to the east.

THE tenth course of lectures on the Herter Foundation is being given at the Johns Hopkins University by Henry Hallett Dale, F.R.S., director of the department of biochemistry and pharmacology, Medical Research Committee on National Health Insurance, London. The subjects of the three lectures are: November 13, "Capillary poisons and shock"; November 15, "Anaphylaxis"; November 15, "Chemical structure and physiological action." PROFESSOR I. NEWTON KUGELMASS, head of the department of chemistry in Howard College, addressed on November 1 some of the southern chapters of the American Association of Engineers at the general meeting under the auspices of the Birmingham chapter on "Associationometry."

A MONUMENT erected in memory of Surgeon-General George Miller Sternberg, at the National Cemetery, was unveiled on November 5, and remarks were made by Surgeon-General Merritte W. Ireland, U. S. Army, Brigadier-General Walter D. McCaw, Colonel Edward L. Munson and Colonel Frederick F. Russell, Army Medical Corps, and Dr. George M. Kober, of the George Washington University.

THE WEIR MITCHELL oration was delivered by Dr. Charles W. Burr, at the College of Physicians of Philadelphia, on November 1. The subject was "Dr. S. Weir Mitchell as a physician, a man of science, a man of affairs, and a man of letters."

UNIVERSITY AND EDUCATIONAL NEWS

Two industrial fellowships in the department of botany have just been established by the Gypsum Industries Association at 'the University of Chicago. Each fellowship provides a stipend of \$750 and also \$300 for the purchase of special material and apparatus. The Fleischmann Company has renewed the fellowship in the department of physiological chemistry which was established in 1917. The income of the fellowship provides \$750 a year for two years.

DR. WALTER L. NILES, of New York, has been appointed dean of the Cornell Medical School in New York City, to fill the place left vacant by the death of Dr. William M. Polk.

THOMAS SMITH, lately professor of physics and head of the department of physics in the division of industries of the Carnegie Institute of Technology, has accepted the position of assistant professor in the department of mechanical engineering of the Massachusetts Institute of Technology. Professor John David, formerly assistant professor of physics in the division of industries of the Carnegie Institute of Technology, has been appointed professor of physics in Adelphi College, Brooklyn, N. Y.

DR. R. R. RENSHAW, formerly associate professor of organic chemistry at Iowa State College, has accepted an assistant professorship of chemical research in pharmacology at the Harvard Medical School, Boston.

DR. HAROLD HIBBERT, of Mount Vernon, New York, has accepted an appointment of assistant professor of chemistry in Yale University. Dr. Hibbert's work will be chiefly in the graduate school, where he will assist Professor T. B. Johnson in the teaching of organic chemistry and directing advanced research in this subject.

It is announced in *Nature* that a new chair of physical chemistry has been established in the University of Bristol on the endowment of Lord Leverhulme. Captain J. W. McBain, lecturer in physical chemistry in the university since its foundation, has been appointed to the chair.

DISCUSSION AND CORRESPONDENCE SUBSTITUTES FOR THE WORDS HOMOZYGOUS AND HETEROZYGOUS

TO THE EDITOR OF SCIENCE: Those who have attempted to explain the fundamentals of genetics to live-stock breeders and to others with a natural distaste for terminological refinements are aware how ineffective some of the available nomenclature is for this purpose. A technical word to be successfully applied to a new idea in a non-technical discussion must suggest its meaning readily, must be free from misleading connotations and should be sufficiently novel so that the point will not be missed by the audience owing to a spurious aspect of familiarity. That the words homozygous and heterozygous are admittedly defective on the first count is shown by the number of evasions to be found in the literature, but it has not been generally recognized that all their substitutes in common use fail in the other two particulars. To prove this statement requires little more than a list