

every way. Clinical and laboratory work will be carried on under experienced direction, with the aim of enlisting the interest of physicians and others in the solution of many problems awaiting study.

The facilities for research are as follows:

1. The Trudeau Sanatorium Medical Department (150 beds), including the Infirmary.
 - (a) The Clinical Laboratory.
 - (b) The Research Laboratory.
 - (c) The X-Ray Laboratory.
 - (d) The Statistical Department.
2. The Saranac Laboratory. (In the village of Saranac Lake.)
3. By cooperation with the various tuberculosis sanatoria and hospitals in the vicinity, clinical and laboratory facilities are available in the following institutions:
 - (a) The State Sanatorium, Ray Brook, 350 beds.
 - (b) The Stony Wold Sanatorium, 150 beds.
 - (c) The Gabriels Sanatorium, 70 beds.
 - (d) The Reception Hospital, 20 beds.
 - (e) The Saint Mary's Hospital, 20 beds.

AWARDS AND PRIZES OF THE PARIS ACADEMY OF SCIENCES

THE committee, as we learn from *Nature*, has had to examine thirteen requests for grants from the Bonaparte Fund. The following grants are recommended: (1) Charles Alluard (4,000 francs), for continuing the publication, in conjunction with R. Jeannel, of the scientific results of three expeditions in eastern Africa (1903 to 1912). (2) M. Bondroit (2,000 francs), for collecting the material in France necessary for the constitution of a fauna of French ants. (3) Pierre Lesage (2,500 francs), for the continuation of his experiments on the plants of the coast zone, and in particular his researches on the transmissibility of the characters acquired by plants watered with salt water. (4) The Touring Club de France (3,000 francs), to contribute to the establishment of the new botanic garden at Lautarel (Hautes-Alpes). (5) Camille Sauvageau (3,000 francs), for extending to the species of *Laminaria* of the Mediterranean and the Channel the remarkable discoveries of the author on the development of a single species which grows in the Bay of Biscay. (6)

Em. Vigoroux (2,000 francs), to contribute to the purchase of apparatus useful for the continuation of his interesting researches on the state of silicon dissolved in metals. (7) Raoul Bayeux (2,000 francs), to aid him in continuing his researches on the physiological effects and the therapeutics of hypodermic injections of gaseous oxygen. The author proposes to study experimentally the action of hypodermic oxygenation on the defensive reactions of the organism against asphyxia and against infections. (8) Joseph Laïs as a contribution to the expense of photogravures relating to the photographic chart of the heavens, the copper-plates to become the property of the Paris Observatory.

The committee has in reserve, after payment of these grants, 55,000 francs.

Among prizes awarded by the academy were the following:

The Jean Reynaud prize to the late Henri Amagat, for the whole of his work; the Baron de Joest prize to Ernest Esclançon, for his researches on the sound phenomena produced by cannon and projectiles; the Houlevigüe prize to Edmond Bordage, for his studies on the fauna and flora of Réunion; the Henri de Parville prize to Auguste Barbey (1,000 francs), Louis Raveneau (500 francs), Daniel Bellet (500 francs), and E. Montoriol (500 francs); the Lonchampt prize to Mlle. Thérèse Robert (2,500 francs), for her researches on the function of calcium salts on the growth of plants, and H. Busquet (1,500 francs), for his physiological and pharmaco-dynamical researches; the Wilde prize to M. Mansuy (2,000 francs) and F. Garrigou (2,000 francs), for the whole of their work; the Camère prize to M. Freyssinet, for his novel applications of reinforced concrete; the Gustave Roux prize to (the late) Michel Longchambon (2,000 francs), for his geological and petrographical work; the Thorlet prize to Adolphe Richard; the Lannelongue foundation between Mmes. Cusco and Rück; the Laplace and Rivot prize is not awarded; the Trémont foundation (1,000 francs) to Charles Frément, for his work on the deformations of metals submitted to stresses: the Gegner foundation to A. Claude

(2,000 francs) and Mlle. I. Iotvko (2,000 francs); the Jérôme Ponti foundation to MM. Battandier and Trabut, for their botanical work in northern Africa.

SCIENTIFIC NOTES AND NEWS

THE French Association for the Advancement of Science, in order to fulfil the provisions of its constitution, held a general assembly at Paris on October 28, when the president, M. Emile Picard, made an address, in which he discussed German and French contributions to science.

SIR ROBERT HADFIELD has been elected president of the Faraday Society, London.

DR. ELLSWORTH HUNTINGTON, of Milton, Mass., has been elected president, and Professor John W. Harshberger, of the University of Pennsylvania, vice-president of the Ecological Society of America.

At the meeting of the Society of Directors of Physical Education and Colleges, held in New York on December 29, Dr. Joseph E. Raycroft, Princeton, N. J., was elected president.

THE New York State Science Teachers' Association, in convention at Syracuse, chose Professor R. C. Gibbs, of the department of physics of Cornell University, as its president.

DR. BARTON WARREN EVERMANN, director of the Museum of the California Academy of Sciences, has been elected president of the Cooper Ornithological Club.

PROFESSOR ROLLA CLINTON CARPENTER, of Sibley College, Cornell University, has resigned, his resignation to take effect at the end of this academic year. Professor Carpenter will reach the age of sixty-five on June 26, 1917, the day before commencement.

THE National Institute of Social Sciences has awarded medals of the society to Professor M. I. Pupin, of Columbia University, for his work in mathematical physics and electrical engineering; to Surgeon General William C. Gorgas, for his work in stamping out yellow fever in Cuba and Panama, and to Dr. George W. Crile, of Cleveland, for his contributions to surgery and allied sciences.

THE C. M. Warren Committee of the American Academy of Arts and Sciences has made an additional grant of \$150 to Professor R. F. Brunel, of Bryn Mawr College, for the continuation of his research on the relation between the constitution of aliphatic radicals and their chemical affinities.

HENRY N. OGDEN, professor of sanitary engineering in the college of civil engineering of Cornell University, has been reappointed a member of the State Public Health Council by Governor Whitman. Professor Ogden was made a member of this council when it was created in 1913. Before that he had been for seven years engineer to the state board of health.

THE Bureau of Fisheries has engaged the services of Dr. N. L. Gardner, of the University of California, for comprehensive investigations of the marine algæ of the Pacific coast, with reference to their more adequate utilization and their relation to fisheries.

PROFESSOR HENRI A. HUS, of the department of biology of the University of Michigan, who was granted a three years' leave of absence for the purpose of doing some experimental work for the United States Rubber Company at their plantation in Sumatra and in the botanical garden at Buitenzorg on the island of Java, has returned to the United States owing to lack of laboratory equipment due to the present war, and will continue his work in the New York Botanical Garden.

WE learn from *Nature* that Mr. F. A. Stockdale, director of agriculture, Mauritius, has been appointed by the British Secretary of State for the Colonies director of agriculture, Ceylon, and Dr. H. A. Tempany, government chemist and superintendent of agriculture for the Leeward Islands, has been appointed to succeed Mr. F. A. Stockdale as director of agriculture, Mauritius.

ON December 25, Dr. Charles L. Parsons, chief chemist of the Bureau of Mines, returned from a ten-weeks' trip in Europe. As a representative of the War Department, Dr. Parsons visited Norway, Sweden, England, France and Italy, to make a study of nitrogen