

the coordinated forces of various phases of science could be carried on from year to year; while at the same time; by means of such grants of assistance as had been offered during the initial year, it should continue to make available the resources of special workers all over the country, as well as in Europe.

In view of the above considerations relating to its future, in June, 1902, Mr. Rockefeller gave to the institute the sum of one million dollars for the purchase of suitable land, the erection of buildings, and the organization of a working force along the broader lines which had been projected. It is the purpose of the directors to proceed at once to the erection of a laboratory building which will provide for the present requirements and will be capable of enlargement as the character and extent of the work of the institute may develop. Negotiations for a suitable plot are now under way.

A small hospital will also be built in the immediate future, which will be maintained in close association with the experimental work of the institute.

Provision will be made in the laboratory building for research in physiological chemistry, pharmacology and therapeutics; in normal and pathological physiology; and in various phases of morphology; and for the study of bacteria and other microorganisms. It is hoped that the laboratory buildings may be completed and ready for the commencement of work in the autumn of 1904.

Dr. Simon Flexner, professor of pathology in the University of Pennsylvania, will direct the scientific work when the building is completed. His colleagues deem it of the highest importance that the institute has been able to secure so eminent an investigator as Dr. Flexner to shape the work of its early years. Dr. Flexner will spend several months abroad while the new buildings are in course of erection.

It is proposed to organize the various sections and departments into which the work of the institute will naturally fall so that each of them, though in a measure autonomous, will still be so closely associated as to favor the conjoint investigation of comprehensive

problems. Associated with the head of each of these departments it is proposed to have a staff of trained assistants.

Provision will also be made for research work by a group of trained men, to be designated fellows, scholars, etc., of the institute, under pecuniary grants of varying amounts.

Finally, opportunity will be afforded to suitable investigators, not members of the regular staff of the institute, to pursue special lines of research.

The directors of the institute are:

Dr. William H. Welch, Baltimore; Dr. T. Mitchell Prudden, New York; Dr. Theobald Smith, Boston; Dr. Simon Flexner, Philadelphia; Dr. Hermann M. Biggs, New York; Dr. C. A. Herter, New York; Dr. L. Emmett Holt, New York.

The officers are:

*President*—Dr. William H. Welch.  
*Vice-President*—Dr. T. Mitchell Prudden.  
*Secretary*—Dr. L. Emmett Holt.  
*Treasurer*—Dr. C. A. Herter.

---

#### SCIENTIFIC NOTES AND NEWS.

DR. J. H. VAN'T HOFF, professor of chemistry at the University of Berlin, has been elected a corresponding member of the Academy of Sciences at Munich, and an honorary member of the Philosophical Society of Cambridge.

M. E. MASCART has been elected a member of the International Committee on Weights and Measures.

THE Lucy Wharton Drexel medal of the University of Pennsylvania was presented to Professor F. W. Putnam at the Founder's Day celebration on February 21. The medal was established four years ago, but no awards were made until this year, when four were awarded at one time. The other three to receive the medal are: Professor Petrie for his work at Abydos; Professor Evans for his excavations at Crete; and Professor Hilprecht for work in Babylonia. Hereafter one medal will be awarded each year 'for the best excavations in archeology or for the best publication, based on archeology, by an English-speaking scholar.' Next year the medal will

be awarded by the first four recipients to one whom they deem the most worthy.

DR. J. WALTER FEWKES, of the Bureau of American Ethnology, who has been in Porto Rico since last November, has sent a large number of valuable specimens to Washington.

MESSRS. WILLIAM K. WRIGHT and W. K. Palmer, of the Lick Observatory, left San Francisco on February 28 for Santiago, Chili, where astronomical observations will be made in accordance with the plan we have already announced. The expenses, it will be remembered, are defrayed by Mr. D. O. Mills.

LIEUT. BOYD ALEXANDER has returned from an expedition to the Island of Fernando Po in continuation of his survey of the birds of western Africa and the adjacent islands. His collection represents sixty-eight species, of which no fewer than thirty-two are new to science.

MR. STEWART CULIN, recently curator of the Museum of Science and Art of the University of Pennsylvania, has become curator of ethnology to the Museum of the Brooklyn Institute of Arts and Sciences.

DR. A. S. GRÜNBAUM, F.R.C.P., has accepted the post of director of cancer research at the invitation of the committee appointed to administer the fund initiated for that purpose by a gift of £10,000 from Mr. Sutton Timmis of Liverpool. The work will be carried on at the University College and Royal Infirmary in Liverpool.

DR. W. H. C. REDEKE has been appointed director of the Zoological Station at Helger, Holland, in place of Dr. P. C. C. Hoek, who has become general secretary of the International Bureau of Oceanography at Copenhagen.

DR. EDUARD ZELLER, emeritus professor of philosophy at Berlin, has recently celebrated his eighty-ninth birthday.

DR. J. BISHOP TINGLE, professor of chemistry at Illinois College, Jacksonville, Ill., has received a grant of \$500 from the Carnegie Institution to enable him to continue his investigations of derivatives of camphor and allied compounds.

THE Academy of Sciences at Berlin has made appropriations of 2,000 Marks to Professor Landolt and of 1,500 Marks to Dr. Marekwald, both of Berlin, for work in chemistry; of 1,000 Marks to Dr. Danneberg, of Aachen, for work in mineralogy, and of 800 Marks to Professor Kobert, of Rostock, for work in pharmacology.

DR. H. W. WILEY, chief of the Bureau of Chemistry of the Department of Agriculture gave a lecture before the American Philosophical Society in Philadelphia, on February 6, on 'The Composition and Adulteration of Foods'; before the Society of Medical Jurisprudence at New York, on February 9, on 'The Adulteration of Drugs and Laws Relating Thereto'; before the National Canners' Association at Washington, on February 12, on 'Chemical Problems relating to the Canning Industry'; and before the National Geographic Society at Washington, on February 18, on 'The United States: its Soils and their Products.'

MRS. ROWLAND has given to the Johns Hopkins University the library of the late Professor Rowland relating to spectroscopy, and a former student has given a fund of over \$5,000 to purchase books on this subject. With these gifts, there will be established a 'Henry A. Rowland memorial library' to contain publications in the field of radiation and spectroscopy. To make the collection complete, and to maintain its usefulness, the co-operation of observatories, laboratories and investigators is necessary. It is requested that sets of official publications, books, reprints of papers on spectroscopy or allied subjects, and photographs of spectra and of apparatus will be contributed to the library, both now and in the future. They may be addressed to the care of Professor Joseph S. Ames, director of the Physical Laboratory, Johns Hopkins University, Baltimore, Md.

PROFESSOR CZERNY, son-in-law of the late Professor Kussmaul, has had the house at Kandern, where Kussmaul lived in his early years, marked with a tablet with the following inscription: 'Adolf Kussmaul, later Professor

at Erlangen, Heidelberg, Freiburg, and Strassburg, practised here, 1850-1853.'

REAR-ADMIRAL WILLIAM HARKNESS, U.S.N. (retired), the eminent astronomer, president of the American Association for the Advancement of Science in 1893, died on February 28 of typhoid fever, in his sixty-sixth year.

RICHARD JORDAN GATLING, inventor of the gun that bears his name and of various agricultural implements, died on February 26, in his eighty-fourth year.

MRS. M. L. D. PUTNAM, of Davenport, Iowa, died on February 20. Mrs. Putnam was president of the Davenport Academy of Sciences and a fellow of the American Association for the Advancement of Science.

WE regret also to record the death of Dr. Charles Dufour, professor of astronomy at the University of Lausanne, and of Dr. René Thomas Mamert, professor of chemistry at the University of Freiburg, in Switzerland.

MR. HENRY PHIPPS, of New York, has given a further sum of \$50,000, making \$60,000 in all, for the promotion of scientific work in India. It is said that the money will be used for a Pasteur Institute in southern India and for an agricultural laboratory in Cashmere.

THERE will be a civil service examination on March 24 to fill the position of assistant curator in the division of physical anthropology in the National Museum at a salary of \$1,800. On the same day there will be an examination for the position of laboratory assistant in the Bureau of Soils, Department of Agriculture, at a salary ranging from \$840 to \$1,200.

A BOSTON chapter of the American Institute of Electrical Engineers was established at the Massachusetts Institute of Technology on February 13, Professor Elihu Thomson presiding.

THE United States has been invited to take part in an agricultural congress, which will be held at Rome from April 19 to 23.

THE Davenport Academy of Science is having a loan exhibit of objects illustrating weaving. Among over 250 specimens on exhibition are some rare Aleutian, together with fine Alaskan and Californian baskets. In

connection with the basketry exhibit is shown a collection of Navajo blankets, Mexican mats and ethnological specimens from the South Sea Islands and Manila.

THE *Geographical Journal* states that the Swedish expedition which went last summer to Spitzbergen to complete the operations for the measurement of an arc of the meridian, left unfinished the preceding year owing to unfavorable weather conditions, returned during the autumn after successfully accomplishing its task, a junction being effected with the Russian net of triangles in the more southern parts of the group. The operations were begun in 1898, and had, therefore, occupied in all no less than five summers.

WE learn from the London *Times* that in order to encourage investigations into the increase of fertility in soils by the action of bacteria and other micro-organisms, under the influence of mineral manures, with special reference to manuring with basic slag, Verein der Thomasphosphatfabriken has instituted a competition, with prizes amounting to a total of £1,950. Scientific essays and experiments conducted by practical farmers will be admissible in the competition. The method of treatment of the subject is left to the discretion of each competitor. The competition is to be open to all, without regard to nationality. The following five gentlemen have consented to act as judges, any of whom will be pleased to give particular information to intending competitors: Government-Adviser Dr. L. Hiltner, principal of the Royal Agricultural and Bacteriological Institution, Munich; Professor Dr. Alfred Koch, principal of the Royal Agricultural and Bacteriological Institution, the University, Göttingen; Professor Dr. Remy, principal of the Institute for Researches and Bacteriology, the Royal Agricultural University, Berlin; Professor Dr. A. Stutzer, principal of the Royal Agricultural Chemical Institute, the University, Königsberg; and Professor Dr. H. Wilfarth, principal of the Ducal Agricultural Experimental Station, Bernburg. Competitors are requested to send in their essays, written in German, to the association, not later than February 1, 1906, by registered post.