

any trust or legal obligation for their fulfilment.

In conclusion, I should like to record my firm conviction that a patriotic citizen can not give money, or leave it at his death, to better advantage than towards the development of science, upon which the industrial success of the country so largely depends.

#### THE ENDOWMENT OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY

MR. ARTHUR H. FLEMING, of Pasadena, for many years president of the board of trustees of the California Institute of Technology and its chief financial supporter, has recently given to the institute his fortune of \$4,200,000 as a permanent endowment fund. This gift, with Mr. Fleming's previous donations to the institute, make a total of over \$5,000,000. In the trust agreement entered into upon the turning over of this fund, Mr. Fleming has made the following statement of his own ideals for the institute:

The donor is convinced that the institute can best serve the purposes of its existence if its trustees adhere to certain fixed policies and principles, and he therefore earnestly advises and recommends:

That the institute limit its enrollment to not more than two thousand (2,000) students;

That it continue the work it is now doing in the several branches of engineering;

That it specialize in research in chemistry and physics, under the direction of the most competent men obtainable, with the most liberal provision, in the way of salaries and equipment, for the prosecution of such work;

That it seek and invite the superior student;

That it help and encourage those who are disposed to research, but that the utmost care be exercised in the manner of giving such help and encouragement, keeping always in mind that ill-advised or too free-handed assistance begets weakness rather than strength, and that a man should be helped to help himself;

That it use every proper effort to obtain generous endowment funds, to the end that it may be able to make adequate provision for the effective prosecution of research work, pay good salaries to its faculty and obtain the services of educators of the first order; and, lastly,

That it keep its standards of the highest.

The donor is also convinced that the institute should always remain a privately endowed institution.

#### SCIENTIFIC NOTES AND NEWS

THE executive committee of the American Association for the Advancement of Science recently elected the following vice-presidents of the association for the year 1923, these elections not having been made at the recent Boston meeting: For section L, Dr. Florian Cajori, professor of the history of mathematics, University of California. For section N, Dr. Richard P. Strong, chief, department of tropical medicine, Harvard University Medical School. For section Q, Dr. Henry W. Holmes, dean of graduate school of education, Harvard University.

PROFESSOR LEON J. COLE, of the University of Wisconsin, has been appointed chief of the division of animal husbandry of the U. S. Department of Agriculture.

THE Boylston medical prize of \$300, offered every other year by the Harvard Medical School in public competition for the best essay on a subject in medical science, has been won by Professor A. N. Richards and Dr. Joseph T. Wearn, both of the University of Pennsylvania.

THE University of Pennsylvania conferred the degree of LL.D. on Dr. Chevalier Jackson, professor of bronchoscopy and esophagoscopy in the graduate school of medicine of the university, at the ninety-eighth annual observance of Washington's birthday on February 22.

A DINNER in honor of Dr. G. Edmund de Schweinitz, Philadelphia, president of the American Medical Association, was given by the Chicago Ophthalmological Society on March 6.

DR. SWALE VINCENT, professor of physiology in the University of London, has been elected a member of the Paris Academy of Sciences in place of the late Professor Laveran.

THE Weldon memorial prize, which was founded at the University of Oxford in 1907 by friends of the late Professor Weldon, to perpetuate his memory and to encourage biometric science, has been awarded to Dr. Johannes Schmidt, director of the Carlsberg Laboratory, Copenhagen.

PROFESSOR BORDET, of Brussels, director of the Pasteur Institute of Brabant, has been

made a commander of the French Legion of Honor.

DR. CHARLES H. TOWNSEND, director of the New York Aquarium, formerly connected with the deep-sea investigations of the steamship *Albatross*, has been elected a member of the council of the Oceanographic Institute, founded by the late Prince of Monaco.

At the recent meeting of the American Institute of Mining and Metallurgical Engineers, E. P. Mathewson was made president; T. T. Brewster, of St. Louis, vice-president, and Frank H. Smith, of Spokane, second vice-president. The directors elected are W. H. Aldridge, of New York City; G. H. Clevenger, of Brookline, Mass.; A. N. Diehl, of Pittsburgh; Reno H. Sales, of Butte, Mont., and Seeley W. Mudd, of Los Angeles.

THE following officers of the Royal Astronomical Society were elected at the meeting on February 9: *President*, Dr. J. L. E. Dreyer; *vice-presidents*, Professor A. S. Eddington, Sir F. W. Dyson, Mr. E. B. Knobel and Professor H. F. Newall; *treasurer*, Lieutenant Colonel F. J. M. Stratton; *secretaries*, Mr. H. Spencer Jones and Rev. T. E. R. Phillips; *foreign secretary*, Professor H. H. Turner.

JOHN MORRIS WEISS, consulting chemical engineer, New York, has been selected by the Manufacturing Chemists' Association to serve as their representative on the recently formed sub-committee on benzol poisoning of the chemical section of the National Safety Council.

DR. VICTOR YNGVE has resigned his position with the Hydrol Company, Niagara Falls, N. Y., to accept a research fellowship in cryogenic engineering at Harvard University.

E. L. RIMBAULT, formerly reclamation manager of the National Aniline and Chemical Company, Inc., at the Buffalo plant, has been appointed manager of the intermediates and certified food color divisions.

DR. SIMEON B. WOLBACH, of the Harvard Medical School, Boston, and Dr. Hideyo Noguchi, of the Rockefeller Institute for Medical Research, New York, are conducting at Hamilton, Montana, research work on Rocky Mountain spotted fever. Their work will continue for several months.

PROFESSOR REID HUNT, of the Harvard Medical School, has been appointed visiting professor at the Peking-Union Medical College.

DR. HANAU W. LOEB, dean of the St. Louis University School of Medicine, sailed from San Francisco on February 22 for a tour of the Orient. During his trip Dr. Loeb will visit the medical schools of Japan, China and the Philippines.

PROFESSOR WILLIAM H. HOBBS, of the University of Michigan, will attend the Pan-Pacific scientific congress to be convened at Sidney and Melbourne, Australia, from August 13 to September 4, by special invitation of the Australian government. He will deliver several papers on the topic of Pacific geology. In his absence Dr. Jesse P. Rowe, professor of geology at the University of Montana, will serve as the head of the department during the summer session.

PROFESSOR THE. SVEDBERG, University of Upsala, Sweden, who is conducting classes in colloid chemistry in the University of Wisconsin chemistry department during the second semester this year, has been invited to attend the dedication ceremonies of the Sterling chemical laboratory at Yale University on April 4.

THE new research laboratories of the General Electric Company, Ltd., Wembley, England, were opened on February 27, when Lord Robert Cecil and Sir Joseph Thomson delivered inaugural addresses.

A JOINT meeting of the Washington Academy of Sciences and the Philosophical Society of Washington was held on March 10, at which Professor A. Sommerfeld, of Munich, delivered an address on "Evidence for the theory of relativity afforded by atomic physics."

DR. LEON ASHER, professor of physiology at the University of Berne, Switzerland, delivered a series of lectures on "The physiology of the lymphatics" at the St. Louis University School of Medicine from March 5 to 9.

PROFESSOR ROSS G. HARRISON, of Yale University, recently gave two lectures on "The life of the tissues outside the body" before the University of North Carolina chapter of the Sigma Xi.

MR. FRANCOIS E. MATTHES, of the United

States Geological Survey, gave an illustrated lecture before the New York Academy of Sciences at its general meeting of March 5 on the "Evolution of the Yosemite Valley." He also spent a day at the American Museum of Natural History inspecting the new large relief model of the Yosemite Valley that is being prepared under the direction of Dr. E. O. Hovey.

PROFESSOR C. J. CHAMBERLAIN, of the University of Chicago, delivered on March 3 an address at Toronto to the Royal Canadian Institute on the subject "Ancient plants."

PROFESSOR F. S. HAMMETT, of the Wistar Institute of Philadelphia, delivered a lecture before the Royal Canadian Institute at Toronto on February 24 on "The glands of internal secretion and their functions."

DR. CHRISTINE LADD-FRANKLIN, of Columbia University, gave an illustrated lecture on January 23 at Harvard University under the auspices of the department of psychology, on "Theories of color sensation."

DR. HARRY HARKNESS STOEK, since 1909 professor of mining engineering, University of Illinois, died suddenly on March 1, aged fifty-seven years.

PROFESSOR JOHANNES DIDERIK VAN DER WAALS, of the University of Amsterdam, died on March 8. Dr. Van der Waals received the Nobel prize for physics in 1910.

WALTER WILLIAM BRYANT, senior assistant in charge of the magnetic and meteorological department of the Greenwich Observatory, died on January 9, at the age of fifty-eight years.

ALFRED HENRY FISON, lecturer on physics at Guy's Hospital, was killed while installing wireless apparatus at the hospital on February 4.

BERNARD BOSANQUET, a distinguished English writer on philosophy and logic, died on February 8, at the age of seventy-five years.

THE death is announced of Gaston Bonnier, professor of botany at the Sorbonne, Paris.

It has recently been brought to the attention of the council of the Harvard Travellers' Club that the rifle presented by the club to Mr. V. Stefansson in May, 1913, was stolen some time in October, 1914, probably from a wharf in

Esquimalt, B. C. The rifle was a .256 bore Gibbs Magnum Mannlicher-Schoneaur, No. B 6029. Any information as to the present whereabouts of this rifle will be gratefully received and a suitable reward will be paid to the informant. Communications may be addressed to the president of the club, Professor Theodore Lyman, Jefferson Physical Laboratory, Cambridge, Mass.

THE United Civil Service Commission announces an examination for assistant in fisheries investigations in the service of the U. S. Bureau of Fisheries, to be held on April 4, 1923. Applicants will be rated chiefly upon general biology and zoology in relation to the fisheries. There are to be filled from this examination one position of field assistant in the Fisheries Service at large, at \$1,200 per year; two positions of scientific assistant at \$1,200, one at Fairport, Iowa, and one at the Washington, D. C., office; one in the position of fishery expert, in the steamer *Albatross*, at \$1,400 per year, and vacancies in positions requiring similar qualifications at higher or lower salaries. All of these positions carry the present bonus of \$20 per month. Applicants should apply to the Civil Service Commission, Washington, D. C., for form 1312, stating the title of the examination desired.

THE French Société de biologie will celebrate its seventy-fifth anniversary on May 26. Delegates are expected from its affiliated societies, seven in France and one at Petrograd, Buenos Aires, Lisbon, Athens, Copenhagen, Bucharest, Cluj and Jassy, Stockholm and Lithuania and from the Société belge de biologie. Three questions have been selected for discussion: "Generation and fecundation," "Physiological action of potassium and calcium," and "Immunity in invertebrates."

THE thirty-fifth German Medical Congress will be held in Vienna from April 9 to 12, under the presidency of Professor K. F. Wenckebach, when there will be discussions on encephalitis lethargica, introduced by von Economo of Vienna and Nonne of Hamburg, and on high arterial blood pressure, introduced by A. Durig, of Vienna, and Volhard, of Halle. One afternoon will be devoted to demonstration of patients with endocrine disturbances.

THE Aztec ruin, near the town of Aztec, N. M., donated to the government by the American Museum of Natural History, is established as a national monument under a proclamation issued by President Harding. The prehistoric ruin which is thus placed under the jurisdiction of the National Park Service of the Interior Department, is the best preserved of all the ruins in that vicinity, and its designation as a national monument will assure its preservation to posterity. The ruin, one of the well-known Pueblo type, is a large E-shaped structure of approximately 500 rooms with the entire first story standing and many of the second floor rooms intact. The ceilings are supported by large beams, cut and dressed with stone tools, while the walls are of sandstone with dressed faces, and as examples of prehistoric masonry are said to take high rank. Excavation of the ruins has been carried out during the last five years by the American Museum.

THE *Journal* of the American Medical Association states that it is announced by Dr. Henry Hanson, director of public health for the Republic of Peru and of the Peruvian yellow fever campaign carried out by the Rockefeller Foundation and the government, that Peru is free from yellow fever for the first time in history. There have been no cases reported since August, 1921, so that practically the whole western coast of the Western Hemisphere may be said to be cleared of the disease.

THE British Industrial Fatigue Research Board has issued a report containing two documents, one, on the influence of temperature and other conditions on the frequency of industrial accidents, by Miss Ethel E. Osborne and Dr. H. M. Vernon, and the other, on the relation of fatigue and accuracy to speed and duration of work, by Mr. B. Muscio.

THE first of the William Beaumont Foundation lectures, given under the auspices of the Wayne County Medical Society, Detroit, has been issued in book form. Dr. W. G. MacCallum, professor of pathology in the Johns Hopkins University, delivered the first lecture. This series of lectures is the outgrowth of a patriotic fund created during the war for the purpose of assisting needy families of the

medical society who were in war service. After the fund had served its purpose, the contributors redonated the substantial surplus to the progress of scientific medicine.

DR. CHAS. F. SHAW, professor of soil technology at the University of California, is taking a six months' sabbatical leave from February to August, and will visit the Hawaiian Islands for six weeks, proceeding to Australia with a brief stop at the Fiji Islands, returning through New Zealand, Raratonga and Tahiti. He is planning to observe soil condition in the Hawaiian Islands, particularly on the Islands of Hawaii, Oahu and Kauai, representing three very distinct stages in soil formation. In Australia he will study the character of the soils, particularly those of the new regions that may be opened up for settlement through the development of the Darwin and Murray rivers, and will also try to determine whether or not the soil zones that have been observed in Europe and on the American continent are developed on the Australian continent. Two weeks will be spent on the north island of New Zealand mainly in sightseeing. Dr. Shaw will bring back representative samples of soils from Australia both for the University of California and for the laboratory of the Bureau of Soils at Washington.

At a recent meeting of the Board of Regents at the University of Michigan the president of the university filed a statement from Professor A. G. Ruthven with regard to the anthropological expedition to the Philippines. Dr. Guthe, the director of the expedition, wrote: "The collection already at hand is far beyond my wildest dreams. The unbroken pieces alone number well over one hundred. There are undoubted specimens of T'ang, Sung, and Ming ware. The possibility for comparisons and study in these wares alone overwhelms me. In addition to Chinese ceramics there are unglazed pieces, and a goodly amount of beads, implements, skeletal material, wooden objects, etc. Gold and iron is not uncommon. We know at present of at least thirty caves and ten burial grounds which are more than likely to yield results. The islands seem to be full of the stuff."

THE *Journal* of the American Association reports that the Academy of Medicine at Paris

has fifty-nine endowed prizes to award in 1922, and 133 articles were received in competition. This year again the secretary commented on the handicap resulting from too specific directions in regard to the awarding of a prize, as conditions change rapidly from year to year. During the year, two new prizes were endowed: one pertaining to questions of general hygiene and the other to the medical treatment of facial neuralgia. The Herpin prize, for the "Abortive treatment of poliomyelitis," was awarded to Dr. A. Pettit of the Pasteur Institute, for his results with his antipoliomyelitis serum. He takes for the antigen the virulent medulla of monkeys. This year again the Audiffred prize "for a sovereign remedy for tuberculosis," consisting of a 3 per cent. government bond and representing an income of 24,000 francs, was not awarded, although six competing works were received. Nineteen of the prizes were not awarded; no competing articles were received for four of them. The recipients of the prizes were all physicians in France or the French colonies, with the exception of Professor C. Pezzi, of Milan, who shared with Laubry of Paris a prize for their "Manual on congenital heart disease." All but ten of the prizes are open to international competition.

THE Kaiser Wilhelm Institute for medicosocial education, which was formerly the Kaiser Wilhelm Academy for the advancement of military medicine, is to be transformed into a government institute for medical research. This institute, which was completed a few years before the war, is to turn over its excellent laboratories and its library, which is probably the largest medical library in Germany, to the service of scientific medical investigation.

R. B. MARSTON, editor of *The Publishers' Circular and Booksellers' Record*, London, writes to the *London Times* as follows: "With reference to the letter from Miss Charlotte Mansfield stating that a number of German publishers refuse to sell their chemical books to non-Germans, I am informed by authorities in the German book trade in Leipzig and Berlin that Miss Mansfield has been misinformed. There is no ban on the export of German works on chemistry or any other subject. Every German publisher is very glad to sell

his books—chemical or other—to non-Germans; but what may have given rise to the idea of refusal to export is that, owing to the great fall in the exchange value of the mark, German publishers are compelled to put a surcharge of 200 per cent., more in some cases, on copies exported to England and other countries. The German government supports the efforts of the book trade to protect itself in this respect, and customs officials at the frontiers are instructed to see that the surcharge is made. German publishers of expensive scientific works insist on a declaration in writing that purchasers in Germany will not export the works unless this surcharge is made—even then the cost to the English or other importer is still very low. During the war suggestions were made that some restraint should be put after the war on the world-wide dissemination of German science, but beyond this surcharge, which applies to books of all kinds, nothing has been done in this direction. I have experienced no difficulty in getting German military and technical works and find them, in spite of the surcharge, cheaper than before the war in most cases."

#### UNIVERSITY AND EDUCATIONAL NOTES

THE site at Woodland Avenue and Forty-second Street, Philadelphia, for the new buildings of the Philadelphia College of Pharmacy and Science, was dedicated February 23. Rear Admiral Braisted, former surgeon general of the navy and president of the college, delivered the dedicatory address. It was announced that more than \$1,000,000 had been collected since last November in the campaign for \$2,000,000 for the erection of buildings. The college was founded by Benjamin Franklin.

THE department of bacteriology of the University of Chicago will occupy this month its new laboratory, to be known as "Ricketts Laboratory South." Ricketts Laboratory South is a fireproof building, one story in height, situated a few yards to the south of Ricketts Laboratory, and has been erected at a cost of \$50,000. Like Ricketts Laboratory, it bears the name of Howard Taylor Ricketts, assistant professor in the university, whose researches in typhus fever led to the discovery of the