plained the new plans of the school. What these men said concerning the work of the school is now doing and its recognition throughout the medical world greatly impressed the trustees. The following resolutions concerning the school were unanimously adopted:

Resolved, That in the judgment of the board of trustees the maintenance and development of the graduate school of medicine is essential alike to the cause of medical education in this commonwealth and to the leadership of the university in this field.

Resolved, That the budget of the graduate school of medicine for the year 1920-21, involving an estimated deficit of \$158,079.37, be approved.

Resolved, That a committee consisting of all the members of this board and such others as may be appointed by the provost be empowered to cooperate with the managers of the hospitals of the graduate school of medicine in raising the necessary funds for the support of that school.

Resolved, That pending the receipt of the necessary contributions for the support of the graduate school of medicine the credit of the university be pledged and the treasurer be authorized to pay out of unrestricted funds not otherwise appropriated such sums as may be necessary, not exceeding the amount of the estimated deficit, \$157,079.37.

## OFFICERS OF THE NATIONAL RESEARCH COUNCIL

THE National Research Council has elected the following officers for the year beginning July 1, 1920: Chairman, H. A. Bumstead, professor of physics and director of the Sloane physical laboratory, Yale University; First Vice-Chairman, C. D. Walcott, president of the National Academy of Sciences and Secretary of the Smithsonian Institution; Second Vice-Chairman, Gano Dunn, president of the J. G. White Engineering Corporation, New York; Third Vice-Chairman, R. A. Millikan, professor of physics, University of Chicago; Permanent Secretary, Vernon Kellogg, professor of entomology, Stanford University; Treasurer, F. L. Ransome, treasurer of the National Academy of Sciences. The chairman of the various Divisions of the Council have not yet been all selected but will be announced later. As the general officers and the division chairmen of the council are elected annually, with the consequent possibility of an almost complete change of administrative officers at the end of any annual period, the council instituted the office of permanent secretary for the sake of effecting some degree of administrative continuity. Professor Kellogg, who has for the past year been serving as secretary of the council and chairman of its division of educational relations, will fill this office, and will resign from Stanford University on July 1 of this year.

## SCIENTIFIC NOTES AND NEWS

ON the recommendation of the National Academy of Sciences the Barnard medal for meritorious service to science has been conferred by Columbia University on Professor Albert Einstein, of Berlin, in recognition "of his highly original and fruitful development of the fundamental concepts of physics through application of mathematics."

DR. ERNEST SOLVAY, Belgium, has been elected to honorary membership in the American Chemical Society.

THE honorary degree of doctor of science was conferred on Edward William Nelson, chief of the U. S. Biological Survey, at the recent commencement exercises of George Washington University.

On the evening of May 22, a dinner was given at New Haven to Professor Russell H. Chittenden in honor of the fortieth anniversary of his receiving the degree of doctor of philosophy from Yale University. Sixty-five former graduate students and friends were present. The dinner followed the one hundred and eighth meeting of the Society for Experimental Biology and Medicine.

DR. EDGAR FAHS SMITH, retiring provost of the University of Pennsylvania, was a guest of honor at a dinner given by nearly 500 members of the faculty of the University of Pennsylvania at Weightman Hall, May 26.

DR. SIMON FLEXNER, of the Rockefeller Institute for Medical Research, has been appointed to represent the United States at the first formal meeting of the Medical Advisory Board of the League of Red Cross Societies that will open at Geneva on July 5. The representatives of other nations at the conference will be Professor Brodet, Belgium; Professor Madsen, Denmark; Professors Roux, Albert and Calmette, France; General Lyle Cummins, Sir Walter Fletcher and Sir George Newman, Great Britain; Professor, Bastianello and Dr. Castellani, Italy; Dr. Kinnostke Miura, Japan, and Dr. Chagas, South America.

DR. GEORGE B. FRANKFORTER, who has been during the war examiner of explosives, chemicals and loading in the Ordnance Claims Board and later technical adviser to the board, has returned to the University of Minnesota as professor of organic and industrial organic chemistry.

DR. AUSTIN H. CLARK, assistant curator in the division of marine invertebrates of the Nation Museum, has been appointed curator of the division of echinoderms.

DR. FRANK E. LUTZ, of the American Museum of Natural History, is in Wyoming continuing the museum's work on the ecological distribution of western insects.

THE California Academy of Sciences has granted temporary leave of absence to Dr. G. Dallas Hanna, curator of invertebrate paleontology to enable him to comply with a request from the United States Bureau of Fisheries to take the annual census of fur seals on the Pribilof Islands, Alaska in 1920. Departure will be taken from Seattle about June first on the U. S. S. Saturn. Dr. Hanna was formerly attached to the staff of the Bureau and besides being associated with the census work since 1913 has made large collections of natural history material. It is expected these will be considerably augmented during the coming summer.

DR. L. E. GRIFFIN, professor of zoology at the University of Pittsburgh, formerly professor of zoology and dean of the arts college in the University of the Philippines, lectured before the West Virginia Scientific Society on May 27 upon "The Development of Science in the Philippines." DR. CARL O. JOHNS, of the Color Investigation Laboratory, Washington, D. C., recently lectured before the graduate students in chemistry of Yale University on "The application of organic chemistry in government work."

M. PIERRE JANET, professor of psychology in the Collège de France gave recently three lectures at the University of London on "La tension psychologique, ses degrés et ses oscillations."

CLARENCE EHNIE BROEKER, who, in collaboration with Dr. W. D. Harkins at the University of Chicago, according to their preliminary results, had successfully fractionated hydrogen chloride into what appear to be acids of isotopic forms of chlorine (SCIENCE, LI., 289, 1920), died on May 9, after a brief illness. In recognition of his skillful work and ability Mr. Broeker had been appointed to the Swift fellowship in chemistry, the highest honor in the gift of the chemistry department of the University of Chicago.

THE Civil Service Commission announces examinations on July 6, for the positions of radio engineer (aeronautics) at \$3,600 to \$5,000 a year and of assistant radio engineer (aeronautics) at \$2,500 to \$3,600 a year. On July 15 an examination is announced for a position in metallurgical engineering at the Naval Ordnance Plant, South Charleston, W. Va., at \$5,000 a year.

DR. BENJAMIN WHITE has been appointed director of the division of biologic laboratories of the Massachusetts State Department of Public Health to succeed Dr. Milton J. Rosenau, resigned. Dr. White has also been appointed lecturer on immunology in the Massachusetts College of Pharmacy and assistant in the department of preventive medicine and hygiene of the Harvard Medical School.

MR. A. M. MUCKENFUSS, professor of organic and industrial chemistry and director of that subdepartment, Emory University, Atlanta, Ga., has resigned to accept the position of research chemist with the Roessler & Hasslacher Chemical Co., Perth Amboy, N. J. DR. CYRIL S. TAYLOR has resigned from the Bureau of Standards to accept a position in the research bureau of the Aluminum Company of America at New Kensington, Pennsylvania.

DR. JOHN S. BOYCE has been placed in charge of a branch of the office of Forest Pathology of the Bureau of Plant Industry, cooperating with District 6 of the Forest Service, which has been established at Portland, Oregon.

THE California Fruit Growers Exchange, an organization of 10,000 growers of citrus fruits, has established a research laboratory in Corona, California, in charge of Mr. C. P. Wilson, who was for thirteen years with the Bureau of Chemistry of the U. S. Department of Agriculture.

At the annual meeting of the Boston Society of Natural History, the following officers were elected: President, W. Cameron Forbes; Vicepresidents, Nathaniel T. Kidder, William F. Whitney, Theodore Lyman; Secretary, Glover M. Allen; Treasurer, William A. Jeffries, Councillors for eight years, Thomas Barbour, Henry B. Bigelow, Gorham Brooks, S. Prescott Fay, Robert T. Jackson, John L. Saltonstall, John E. Thayer, Charles W. Townsend. The following were elected honorary members of the society: G. A. Boulenger, Sidney F. Harmer, Aubrey Strahan, of London; Emmanuel de Margerie, of Paris; John Macoun, of Ottawa; Elmer D. Merrill, of Manila.

MR. GERARD FOWKE, a collaborator of the Bureau of American Ethnology, left St. Louis on April 1 for Honolulu. He will make an archeological reconnaissance of the Hawaiian Islands with a view to future intensive work by the bureau.

THE tenth annual summer field course in geology of the University of Missouri will be conducted by Professor E. B. Branson and Mr. R. B. Rutledge during July and August. About one week will be spent in the Black Hills and the rest of the time in the Big Horn. Mountains of Wyoming. The party will be limited to sixteen students. Messrs. Branson and Rutledge, who are now on leave

of absence from the University of Missouri engaged in geological investigations in Costa Rica, will return to the United States late in June.

At a recent meeting of the Iota (Kansas) Chapter of the Society of Sigma Xi a resolution of commendation and congratulation was ordered to be transmitted, over the signatures of the president and secretary of the society, to Dr. Solomon Lefschetz for his memoir entitled "Sur Certains Nombres Invariants des Variétés Algébriques avec Application aux Variétés Abéliennes," for which the Bordin prize of 3,000 francs was awarded in 1919. The following is the resolution: "The Iota Chapter of the Society of Sigma Xi (University of Kansas) congratulates Dr. Solomon Lefschetz on the receipt of the Bordin Prize of the Paris Academy of Sciences as an appropriate acknowledgment of his mathematical ability and productive scholarship. It furthermore commends Dr. Lefschetz in the highest terms for his indefatigable industry in scientific research, and will await with interest his future contributions to mathematical science."

At the annual general meeting of the Royal Astronomical Society on February 13, the president, Professor A. Fowler, gave an address on the foundation of the society just a century before. According to an abstract in Nature he said that the four men who were most influential in its formation were the Reverend William Pearson, Mr. Francis Baily, Sir John F. Herschel and Mr. Charles Babbage. The two latter both lived until 1871, and there are no fewer than fifteen surviving fellows whose fellowships overlapped with theirs. One of these, Mr. Inwards, said that he remembered speaking to Sir John Herschel at a meeting of the society. There was at first a good deal of opposition to the new society on the part of the Royal Society, and the Duke of Somerset, who was elected the first president, quickly resigned this office owing to the pressure brought to bear upon him. He was succeeded after an interval by Sir William Herschel, who was then eighty-two years of age, and died in 1822. Mr. Stephen Groombridge, well known for his Star Catalogue, was another of the original members. They were not called fellows until 1830, when the royal charter was granted, giving the society its present title; it was previously called the London Astronomical Society. The earliest publications of the society were in the form of memoirs; the Monthly Notices did not commence until several years later, and were at first only small pauphlets containing ephemerides of comets and other matters of transient interest.

## The British Medical Journal writes:

Owing to the war the zoological station at Naples has suffered in many ways, and it is highly necessary that this very important international scientific institution should receive the support necessary to enable it to carry on its work without restriction. But, although its importance for zoological and morphological research has always been recognized, its advantages for physiological and biochemical studies are by no means as widely known as they ought to be. The station is fully equipped with all necessary apparatus and materials, and the section for physiology and biochemistry, being under the very capable direction of Professor Bottazzi, the professor of physiology in the University of Naples, students are assured not only of the opportunities of carrying out independent and untrammelled research, but of the best advice and direction from the staff. There is an admirable library, with very complete sets of periodical publications. The rent of a table is 2,500 francs a year (payable in gold), and the director of the station will furnish all details to students who propose to carry out any research there. The study of comparative physiology has bearings upon immunology, upon the question of functional activities, upon biochemistry and physiology in general, the importance of which in their relation to medicine needs no emphasis. The effect on international relations of a free use of these scientific facilities being made by British students and of their intercourse with Italian men of science is but little less important.

THE American Fisheries Society will hold its fiftieth anniversary meeting at Ottawa, Canada, on September 20, 21 and 22, 1920. For this meeting the society will offer prizes of \$100 for papers in competition in each of the following classes. (1) For the contribution showing the greatest advance in practical fish cultural work; (2) For the best contribution to biological work connected with fish problems in general; (3) For that which offers the greatest promise of the solution of problems affecting commercial fisheries work. The papers should be in the hands of the secretary not later than August 20. Further information can be obtained from the executive secretary, Professor Raymond C. Osburn, Ohio State University, Columbus, Ohio.

## UNIVERSITY AND EDUCATIONAL NEWS

YALE UNIVERSITY has received \$1,000,000 from the General Education Board for the development of the New Haven General Hospital through the medical school of the university. The hospital will be made a fulltime institution, the staff many of whom are members of the Yale Medical School faculty, giving all their time to the hospital and foregoing outside practise. When the Yale Medical School became affiliated with the New Haven hospital a few years ago, a gift of \$500,000 from the General Education Board was received.

THE General Education Board has made a gift of \$500,000 each to the endowment funds of Smith College and Mount Holyoke College and \$400,000 to that of Wesleyan University. It has also made an appropriation of \$250,000 to Middlebury College on condition that an additional \$750,000 be raised by subscription.

MR. EDWARD WHITLEY has offered to Oxford University the sum of £10,000 towards the endowment of a professorship of biochemistry, and the British Dye-Stuffs Corporation has made a donation of £5,000 towards the cost of extending the laboratory of organic chemistry.

THE Convocation of Oxford University has passed without opposition the statute providing for the matriculation and admission of