Catalysts: Professor A. Mailhe, France; Professor Hugh S. Taylor, United States.

Rubber from Coal: Professor Fritz Hoffmann, Germany.

Addresses not yet classified under these headings will be given, it is expected, by F. S. Sinnatt, England; Raymond Berr, France; P. E. Raaschou, Denmark; John Hays Hammond, Howard N. Eavenson, E. E. Slosson, Arthur D. Little, A. C. Fieldner and Dr. H. C. Parmelee, United States,

SCIENTIFIC NOTES AND NEWS

Dr. Arthur D. Little, president of Arthur D. Little, Inc., and of the Petroleum Chemical Corporation, was elected president of the Society of Chemical Industry at the recent New York meeting. The meeting of the society in 1929 will be in Manchester, England.

The government of France has conferred upon Dr. L. O. Howard, of the Bureau of Entomology, the rank of officier de la Légion d'Honneur, as a promotion from the rank of chevalier of the legion. Dr. Howard has recently received honors from Hungary, having been made honorary member of the Hungarian Royal Society of Natural Sciences and of the Entomological Society of Hungary.

Dr. CLEMENS PIRQUET, specialist in the diseases of children, was on August 29 nominated for the presidency of Austria, to succeed President Michael Hainisch, whose term expires at the end of November. Dr. Richard Wettstein, professor of systematic botany in the University of Vienna, was the only other candidate.

THE British National Institute of Agricultural Botany has awarded the Snell memorial medal for 1927 to Professor Paul A. Murphy. The medal is given annually to mark eminent work in the sphere of potato husbandry.

Dr. K. K. Chen, associate in pharmacology of the Johns Hopkins University, has been awarded a prize of \$2,000 Mex. for his researches on ephedrine and other Chinese drugs by the China Foundation for the Promotion of Education and Culture. During the recent Congress of the International Anesthesia Research Society in Madison and Minneapolis, Dr. Chen's name, together with that of Professor Walter J. Meek, was listed in the Scroll of Recognition for their "laboratory studies leading to the clinical use of ephedrine in occidental medicine, surgery and anesthesia."

¹ For the organization of this foundation, see E. V. Cowdry, Science, 1927, LXV, 150.

Dr. CLIFFORD S. LEONARD has resigned as assistant director in the department of pharmacology and toxicology in the Yale School of Medicine, to become director of the Burroughs Wellcome Experimental Research Laboratories, Tuckahoe, New York, now in process of organization. Pure and applied research on medical and pharmaceutical lines will be conducted.

Dr. J. S. De Lury, professor of geology in the University of Saskatchewan, has resigned his position there to return to Winnipeg in the dual capacity of commissioner of mines for the Province of Manitoba and head of the department of geology in the University of Manitoba.

AFTER a year in Germany working under Professor J. Franck and later under Professor A. Sommerfeld, Dr. A. C. G. Mitchell has become a fellow at the Barthol Research Foundation of the Franklin Institute.

Dr. Paul R. Rider, associate professor of mathematics in Washington University, has been given a year's leave of absence to enable him to accept a Sterling Research Fellowship in mathematics at Yale University.

ANDREY A. POTTER, dean of engineering of Purdue University, and Arthur N. Johnson, dean of engineering of the University of Maryland, have been designated as members of the land-grant college survey staff of the U. S. Bureau of Education.

Professor Nelson C. Brown, of the College of Forestry of Syracuse University, has been named a member of the New York State Reforestation Commission. Investigation of the possibilities of reforestation of New York State and the preparation of a survey of the location, value and area of all land available for reforestation constitute the purpose of the commission.

Dr. A. E. Kennelly, professor of electrical engineering at Harvard University, and Professor F. L. Stevens, professor of plant pathology in the University of Illinois, represented the American Association at the recent Glasgow meeting of the British Association for the Advancement of Science. Mr. Watson Davis represented Science Service.

Dr. Franklin H. Martin, president-elect of the American College of Surgeons, has returned to Chicago from a visit to the Canal Zone in the interest of the Gorgas Memorial Institute, for which at the last session of the Congress an annual appropriation of \$50,000 for the next five years was made.

Dr. W. D. Matthew, chairman of the department of paleontology of the University of California, has

returned to Berkeley from a summer spent on study at the American Museum of Natural History in New York, where he is completing an illustrated reference book on the prehistoric animals of the paleogene epoch which he started thirty-one years ago.

Dr. J. M. D. Olmsted, professor of physiology and chairman of the department at the University of California, has returned to Berkeley after having spent the summer in Belgium and England. He spent six weeks at the Physiological Institute of Liége, Belgium, where he delivered two lectures on the history of insulin.

A NUMBER of visiting scientific men will work in the research department of biochemistry of the University of California during the coming academic year. These include Dr. Werner Schmidt, one of the seven men sent from Germany to America each year by the International Educational Board; Professor W. M. Hoskins, associate professor of chemistry at the University of Nevada; C. V. Smythe, who for the past two years has been connected with the Institute for Animal Nutrition at Pennsylvania State College, and O. H. Emerson, from Hawaii, who has been awarded a university fellowship in biochemistry to work under Dr. L. R. Cerecedo.

Dr. A. S. HITCHCOCK, principal botanist in charge of systematic agrostology in the Bureau of Plant Industry, has returned to Washington from Newfoundland and Labrador, where he spent the summer in collecting and studying grasses.

MRS. MARY L. JOBE AKELEY, widow of the African explorer, has sailed for Europe. She will go to Brussels to collaborate with Dr. Jean M. Derscheid, zoologist of the Congo Museum of Turvueren, in the preparation of a final report on the Akeley-Derscheid mission to the Parc National Albert in the Belgian Congo.

THE schooner *Bowdoin*, bearing the party of scientific men and explorers headed by Commander Donald B. MacMillan, arrived at Wiscasset, Maine, on September 8, after a year in Labrador.

Professor Thomas J. Barr, head of the department of mining engineering at the University of Kentucky and formerly connected with the Chicago and Alton Railroad Company, died at Lexington, Kentucky, on August 31, at the age of forty-eight years.

Fernand Ducretet, Carnegie medalist and a member of the French Legion of Honor, who since 1893 has been engaged in radiography and who assisted in the research work of Branly Arsonval and General Ferrie, died on September 4, as a result of continuous work with X-rays.

THE United States Civil Service Commission states that the position of principal horticulturist of the Bureau of Plant Industry, at a salary of \$5,600, is vacant and that applications should be received before October 1. Instead of the usual form of civil-service examination, the qualifications of candidates will be passed upon by a special board of examiners composed of Dr. A. F. Woods, director of scientific work, U. S. Department of Agriculture; Dr. E. J. Kraus, professor of botany, University of Chicago, and Frederick W. Brown, assistant chief of the examining division of the United States Civil Service Commission. Applications must be on file not later than October 3 for the position of principal agronomist. This examination is to fill a vacancy in the Bureau of Plant Industry at Albany, Georgia, and vacancies occurring in positions requiring similar qualifications in Washington, D. C., or elsewhere. The entrance salary is between \$5,600 and \$6,400 a year. The duties of the position are to plan and conduct research on cotton production, independently or in consultation with other workers in the department.

The fifty-seventh annual meeting of the American Public Health Association will be held in Chicago from October 15 to 19, under the presidency of Dr. Herman H. Bundesen, with headquarters at the Stevens Hotel. There will be forty-two sessions, thirty-one of which will be meetings of sections of the association. Dr. Bundesen will deliver the presidential address at the first general session. Meeting jointly with the American Public Health Association will be two other national organizations—the American Child Health Association and the American Social Science Association.

The Mexican Agrological Society was organized at a meeting in Meoqui, Mexico, on July 12, with W. E. Packard, president; C. F. Shaw, honorary vice-president, and A. Brambila, secretary. These officers, with Dr. L. Fourton, M. Y. Solorzano and A. E. Kocher, form the executive committee. The purpose of the society is to promote research in soils, agronomy and related fields, to maintain closer contacts between the various research workers and to give them an opportunity for exchange of views and discussion at the annual meetings. The headquarters will be in Mexico City, the office of the president being in Casa del Lago, Chapultepec, D. F., Mexico.

A GIFT of \$100,000 for the purchase of a gram of radium and accessories for use in the treatment of cancer has been received from Colonel Louis J. Kolb by the Graduate Hospital of the University of Pennsylvania and the department of radiology of the University's Graduate School of Medicine.

The Chicago Geographical Society expedition to the Mountains of the Moon in Equatorial Africa planted the American, British and Explorer's Club flag on the summit of Mount Baker on August 26. The party, under Carveth Wells, ascended the mountain from Mobuku Valley. After crossing the mountain they descended into Bujuku Valley. The climb and descent was attended by great hardship, the party having to contend with snowstorms practically all the way. They overcame all difficulties, however, and report that all is well.

THE members of the Oxford University Expedition to Greenland, which had for its object the continuation of the biological work begun in the Oxford Arctic Expeditions of 1921, 1923 and 1924, arrived at Stornoway on August 1 on the completion of their work.

The Medical Research Council announces that on behalf of the Rockefeller Foundation it has awarded five fellowships provided by the foundation and tenable in the United States of America during the academic year 1928-29. The recipients are Mr. L. E. Bayliss, Ph.D. Cantab., Sharpey scholar, University College, London; Dr. A. V. Neale, resident medical officer, Children's Hospital, Birmingham; Mr. F. J. Worsley Roughton, Ph.D. Cantab., lecturer in physicochemical aspects of physiology, University of Cambridge; Dr. Dorothy S. Russell, research worker in the Baron Institute of Pathology, London Hospital, and Mr. A. Wormall, M.Sc. Leeds, lecturer in biochemistry, University of Leeds.

THE trustees of the Beit fellowships for scientific research have made the following elections to fellowships tenable at the Imperial College of Science and Technology, for two years 1928-29 and 1929-30, of the value of £250 per annum: Dr. R. H. Purcell, subject of research—"Change of properties of pure substances on intensive drying; problems in catalysis with special reference to the unique influence of water." Mr. A. A. Fitch, subject of research—"(a) The metamorphic aureole of the Dartmoor granite; (b) Investigation of a part of the Central Weald." Mr. J. M. Frankland, subject of research—"Effect of constitution and treatment on the mechanical properties of steel." Dr. Purcell having declined the award owing to his acceptance of a Ramsay Memorial Fellowship, the Beit trustees have awarded the vacant fellowship to Mr. E. C. S. Megaw, of Belfast, for research under Professor Fortescue on "Properties and behavior of the thermionic valve."

The following have been appointed by the Bureau of Plant Industry as agents in connection with the agronomic corn-borer research program of the bureau's office of cereal crops and diseases: John S.

Cutler, Wooster and Bono, Ohio: Joseph F. Haskins, Wooster and Bono: Louis R. Jorgenson. Columbus: Robert W. Jugenheimer, Ames, Iowa: T. A. Kiesselbach, Lincoln, Nebr.: Vincent H. Morris, Wooster and Bono; Marion T. Mevers, Columbus: Jasper D. Savre, Wooster and Bono, and L. J. Stadler, Columbia, Mo. Most of the Ohio experiments are conducted under conditions of heavy infestation at the Ohio Corn-Borer Experiment Station at Bono, in cooperation with the Bureau of Entomology of this department, the Ohio Agricultural Experiment Station and Ohio State University. Certain phases of the experiments also will be carried on at Wooster and Columbus, Ohio, and on some of the outlying experimental farms. The program includes corn-breeding experiments, experiments on rate and date of planting different varieties, and on cultural methods as affecting the rate of development and vield of corn, and intensive investigation of the physiology and biochemistry of the corn plant-all in relation to infestation and damage by the European corn borer. In addition to the experiments in Ohio, cooperative experiments on the effect of rate, date and manner of planting different varieties of corn upon the plant life history and development, and upon yield and quality, have been undertaken in cooperation with the agricultural experiment stations of Iowa, Kansas, Missouri and Nebraska.

The Experiment Station Record reports that following the conference of American States, held in Havana on January 16 to February 20, a new division of agricultural cooperation has been established in the Pan-American Union. The function of this division will be to advance cooperation and research in agriculture, animal husbandry and forestry in the member countries of the Union. A study will be made of the organizations for agricultural advancement which are maintained by the various countries, including the projects of departments of agriculture, agricultural experiment stations, educational institutions, scientific and agricultural publications and leaders in agricultural industry. Steps will also be taken to promote the exchange of seeds and plants and the organization of surveys of soils, forests, vegetable crops and related problems and to conduct an information service or clearing house. Technical cooperating committees are to be organized in the several countries to formulate programs for conferences on inter-American agricultural cooperation and problems of plant and animal sanitary control. Alberto Adriani, of Venezuela, will be in immediate charge of the new division, with Dr. W. A. Orton, scientific director and general manager of the Tropical Plant Research Foundation, as technical adviser.

THE Journal of the American Medical Association states that in the report of the recent meeting of the building committee of the "University City." the secretary. Don Florestan Aguilar, announced that the bull fight held lately in Madrid for the benefit of the "University City" had cleared 47.500 pesetas. He announced, also, that it had been agreed to include the veterinary school among the buildings of the city. It was agreed that a committee composed of a professor of the veterinary school and an architect should visit the veterinary schools of Leipzig and Munich to collect fundamental principles to be used in the school of Madrid. Those German veterinary schools are considered by the committee to be the best in the world. Señor Aguilar presented the plans for a dormitory in the "University City" for the Spanish-American students. The funds for the building are the gift of Dr. Del Amo. The project is entrusted to Señor Nebot. director of the School of Architecture of Barcelona. It was agreed that the work should begin immediately. Dr. Del Amo D. Gerardo is a physician, formerly of Madrid, who emigrated to Los Angeles. It is estimated that the cost of the work will be 130 million pesetas. The mayor of Madrid ordered that the municipal hospital, which is to be built with three million pesetas left by the Count of Guaqui for this purpose, should be constructed on the land of the "University City" and in connection with the hospital of the medical faculty.

PROTECTING the sea front along the Scripps Institution of Oceanography, University of California, assembly bill 368 has been passed by both houses of the legislature and signed by Governor Young. This bill creates a biological reserve along the shore line of the institution, and prevents all fishing and collection of marine life to a mean low tide depth of six feet, which includes outlying rocky ledges. This action was taken because of the threatened extinction of many kinds of marine animals in these waters.

UNIVERSITY AND EDUCATIONAL NOTES

A GIFT of \$2,000,000 has been made by Mr. John D. Rockefeller, Jr., toward a building for American students in the "University City" at Paris.

THE first unit in the two and a half million building program at the University of Tennessee is now in process of erection. The building is for physics and geology, and, with its furnishings, will cost about \$200,000. Plans for a building for chemistry are

under way, and other buildings projected include a program calling for about \$500,000 annually for the next five years.

THE new building for animal biology at the University Farm of the University of California at Davis, built at a cost of \$300,000, is nearing completion. It is planned to occupy the building on October 1.

REAR ADMIRAL SAMUEL S. ROBINSON has assumed his new work as the superintendent of the United States Naval Academy at Annapolis, succeeding Rear Admiral Louis Nulton.

PROFESSOR ELMER S. SAVAGE has been named acting head of the department of animal husbandry at Cornell University, succeeding Professor Henry H. Wing, who retired at the close of the academic year.

According to the *Journal* of the American Medical Association, Dr. James E. Rush, head of the department and professor of hygiene and public health, University of Kentucky, Lexington, has resigned. Drs. W. Walter Zwick and D. Stanton Ross are also reported to have resigned from the department of hygiene.

Dr. ROBERT DONALDSON has been appointed to the Sir William Dunn chair of pathology in the University of London, tenable at Guy's Hospital Medical School.

DAVID REGINALD PIPER MURRAY, of Pembroke College, Cambridge, has been elected to the Benn W. Levy research studentship in biochemistry.

DISCUSSION

THE EARLIEST DYNAMO

I NOTICE that in the issue of SCIENCE of August 13, 1928, Dr. Frederick Bedell, of Cornell University, in alluding to the letter of Dr. H. W. Wiley in your issue of May 25, 1928, says that he quite correctly calls attention to the fact that the fiftieth anniversary of the dynamo should have been held some time ago, and alludes to two French dynamos exhibited at the Centennial Exhibition of 1876. He then goes on to say, "The earliest dynamo made in America, constructed before the importation of any machines from Europe, was operated and exhibited at the same exhibition." He describes the conditions.

Now I am not aware that anybody has ever claimed that the fiftieth anniversary of the dynamo was to be celebrated. At the Franklin Institute meeting of April 18, I took part with others in a celebration, but it had nothing to do with any fiftieth anniversary