

as the Bureau of Chemistry and Soils, of the research work in the United States Department of Agriculture on soils and fertilizers and certain of the chemical work on agricultural products at present conducted by the Bureaus of Chemistry, Soils and Plant Industry, and the placing of the regulatory work involved in the enforcement of the Federal Food and Drugs Act, the Tea Inspection Act, the Insecticide and Fungicide Act and the Naval Stores Act in another single administrative unit, to be known as the Food, Drug and Insecticide Administration. The reorganization recommended by the secretary is included in the budget for the fiscal year 1928 which has just been presented to the Congress.

The proposed reorganization is primarily for the purpose of separating work involving scientific research from the work of law enforcement and bringing together under one directing head the closely related research and other work of the department on soil science, fertilizers, etc., and in the general field of agricultural chemistry which is now scattered in three separate bureaus. The secretary states that it is highly desirable that the research work and the regulatory work be handled by separate administrative units because the growing pressure under which it is necessary to work in handling law enforcement is such as to interfere seriously with the attention that can be given to research work. Law enforcement must be handled promptly as cases arise and when both this work and scientific research are conducted by the same organization the natural tendency is to put aside the research project which is not of immediate urgent appeal but which is of far reaching importance considering the long-time future of American agriculture.

The new plan of administration is based upon the report of a group of leading agricultural scientists who, at the invitation of Secretary Jardine, submitted recommendations last summer concerning the organization of the chemical, soil and fertilizer work of the department. The secretary's advisers recommended specifically that a separation of certain of the regulatory and research work of the department be made and that the secretary "organize the research work of the present Bureau of Chemistry, the work of the offices of Soil Fertility and of Soil Bacteriology of the present Bureau of Plant Industry, and all the work of the Bureau of Soils and of the Fixed Nitrogen Research Laboratory into a single bureau."

SCIENTIFIC NOTES AND NEWS

DR. ADDISON EMERY VERRILL, for forty-two years, until he was made emeritus professor in 1907, professor of zoology at Yale University, has died, aged eighty-seven years.

PROFESSOR JACOB E. REIGHARD was tendered a banquet on December 3 in honor of his completion of forty years of teaching in the department of zoology of the University of Michigan. One hundred and thirty of his colleagues, former students and friends were in attendance.

DR. HUGH M. SMITH, formerly commissioner of the U. S. Bureau of Fisheries, has been appointed director of the newly created Bureau of Fisheries of the Siamese government.

THE medal of the American Society of Mechanical Engineers has been conferred on Professor R. A. Millikan, of the California Institute of Technology.

DR. ALBERT P. MATHEWS, Andrew Carnegie professor of biochemistry in the University of Cincinnati, has been elected a member in the Accademia dei Lincei of Rome.

PROFESSOR ANTON J. CARLSON, chairman of the department of physiology in the University of Chicago, has been elected a foreign member of the Royal Society of the Natural Sciences in Upsala.

DR. J. S. HALDANE, of Oxford University, has been presented with the gold medal of the Royal Society of Medicine. The medal was founded by a gift from the late Dr. Robert Murray Leslie, and previous recipients have been Sir Almroth Wright (in 1920) and Sir F. Gowland Hopkins (in 1923).

SIR ERNEST RUTHERFORD, Professor H. A. Lorentz and Dr. H. LeChatelier have been elected foreign members of the Polish Academy of Sciences.

THE silver medal of the Zoological Society of London has been awarded to Captain H. C. Brocklehurst, the game warden of the Sudan, in recognition of his services to the society, and for the active part which he has taken in the preservation of the wild fauna of that part of Africa.

PRESENTATION of the Helen Culver gold medal of the Geographical Society of Chicago was made to Commander Richard E. Byrd on November 15, preceding his lecture on the conquest of the North Pole by air. Dr. J. Paul Goode made the presentation.

LINCOLN ELLSWORTH, codirector with Roald Amundsen in the flight of the dirigible *Norge* from Spitzbergen across the North Pole to Alaska, has been decorated with the grand cross of the Royal Order of St. Olav by King Haakon.

KNUD RASMUSSEN, Danish Arctic explorer, has been made an honorary life member of the National Geographic Society.

THE Alvarenga prize of the College of Physicians of Philadelphia has been awarded this year to Drs.

P. S. Pelouze and Frederick S. Schofield for an essay entitled "The Gonophage."

PROFESSOR P. H. M. P. BRINTON, of the University of Minnesota, has announced that he plans to retire from university work at the end of the present academic year, in order to have all his time available for his own researches. He expects to move to Tucson, Arizona, where he will build a private laboratory for the further study of the chemistry of the rare earths.

JOHN L. CRAWFORD, Danvers, has been elected president of the Northeastern Section of the American Society of Chemical Engineers and Charles W. Conquest, Fairhaven, secretary.

DR. MARSTON T. BOGERT, professor of chemistry at Columbia University, has been appointed chairman of an advisory committee to the color laboratory of the Bureau of Chemistry, U. S. Department of Agriculture.

CHARLES E. SKINNER has been elected chairman and Charles Rufus Harte vice-chairman of the Engineering Standards Committee for 1927.

DR. C. B. JOLLIFFE, of the radio laboratory of the U. S. Bureau of Standards, has resigned to accept a position in the research department of the Buckeye Incubator Company, Springfield, Ohio.

DR. ERNEST LITTLE, professor of analytical chemistry in Rutgers University, has been granted a partial leave of absence to become dean of the New Jersey College of Pharmacy.

J. M. TRUEMAN, professor of animal husbandry, Truro Agricultural College, has been appointed director of agricultural extension in the Nova Scotia Department of Agriculture.

PROFESSOR VLADIMIR MORAVEK, who has been carrying on researches in permeability and the action of artificial cells with Dr. D. T. MacDougal, laboratory for plant physiology of the Carnegie Institution of Washington, for several months, returns to the University of Brno, of which he is a member, at the end of December.

DR. A. F. LEBEDEFF, professor of agriculture and director of the plant-breeding station at the University of Rostoff, south Russia, has been in the United States visiting agricultural experiment stations for the past few months.

DR. EMERSON MEGRAIL, assistant professor of hygiene and bacteriology at Western Reserve University, has been granted a seven months' leave of absence, effective on December 1, to work at the Lister Institute, London, under the direction of Sir J. C. G. Ledingham.

PROFESSOR S. A. MITCHELL, director of the Leander McCormick Observatory, will lead an expedition to observe the total eclipse of the sun in Norway on June 29, 1927. According to *Popular Astronomy* the rector and visitors of the University of Virginia have announced a gift from Mr. John Armstrong Chaloner, of Virginia, to finance the expedition.

THE school of chemistry and physics of the Pennsylvania State College announces a series of five lectures on colloid dynamics by Victor Cofman, of the Research Laboratory of Armour and Company. The lectures will be held in the lecture room of the physics building, daily, from January 10 to 14. They will be illustrated by lantern slides and by demonstration experiments.

DR. J. H. VAN VLECK, of the University of Minnesota, recently gave four lectures on the "New Quantum Mechanics" to the graduate students of the department of physics at the University of Iowa.

LIEUTENANT-COMMANDER EDWARD H. SMITH, U. S. Coast Guard, oceanographer of the International Ice Patrol, will give five lectures on physical oceanography at Clark University, from January 10 to 14.

DR. HARLAN T. STETSON, assistant professor of astronomy at Harvard University, lectured at the Brooklyn Institute of Arts and Sciences on November 13 on "Some Results of Recent Eclipses of the Sun."

DR. JAMES A. TOBEY, of New York, lectured on public health law at the Harvard University School of Public Health on December 7 and 9.

DR. W. MANSFIELD CLARK, chief of the division of chemistry, United States Public Health Service, delivered a lecture on "A New Approach to the Study of Oxidation-Reduction in the Living Cell," at the University of Wisconsin, on November 3.

DR. COLIN G. FINK, professor of electrochemistry in Columbia University, gave the Alfred Waters Procter lecture at the Brooklyn Institute of Arts and Sciences on the evening of November 20. Dr. Fink chose as his subject "The Electrochemical Restoration of Ancient Bronzes and other Ancient Metal Objects of Art." On December 1 Dr. Fink addressed the Alpha Chapter of the honorary engineering fraternity, Tau Beta Pi, on "Recent Advances in Electrochemistry." At the coming meeting of the North Jersey section of the American Chemical Society he will give an illustrated lecture on "Chromium, a Metal of many Uses." The following evening, December 14, he will address the Rhode Island section of the American Chemical Society on "Recent Advances in Electrochemistry."

On November 27 Professor A. Brooker Klugh, of

the department of biology, Queen's University, delivered an address to the Royal Canadian Institute on the subject "Nature Photography." On December 2, Dr. George E. Vincent, president of the Rockefeller Foundation, addressed the institute on "The Health of the World and the League of Nations."

DR. A. V. HILL, Foulerton research professor of the Royal Society, London, will give a series of eight lectures under the auspices of the Lowell Institute, Boston, on "Living Machinery," on Mondays and Thursdays, at five o'clock in the afternoons, beginning March 7.

A PORTRAIT of Michael Faraday, and a reproduction of the portrait of Lord Kelvin painted by Herkomer for the Institution of Civil Engineers, both by Mr. George Harcourt, were shown in the lecture theater of the Institution of Electrical Engineers in the positions allotted to them at the meeting on December 2. After introductory remarks by the president, Mr. Harcourt's portrait of Faraday was presented to the institution by Mr. Sydney Evershed.

A BUST of the late Carl E. Akeley, animal sculptor and explorer, will be offered to the American Museum of Natural History with which he was so long identified by his friend, Harold P. Erskine, American sculptor. Mr. Erskine made the bust two years ago.

DR. DANIEL CARHART, professor emeritus of civil engineering at the University of Pittsburgh, died on December 8, aged eighty-seven years.

DR. SAMUEL GILBERT WEBBER, formerly professor of neurology in Tufts Medical School, Boston, died on December 5, aged eighty-eight years.

PROFESSOR REGINALD SOMERS COCKS, of Tulane University of Louisiana, died on November 21. A correspondent writes that he was born in Worcester, England, August 31, 1863. In 1889 he received the degree of M.A. from Trinity College, Cambridge, with first honors in classics. He was professor of botany in the State University of Louisiana from 1906 to 1907. In February of that year he was called to Tulane University to fill the newly created Richardson chair of botany. For over twenty years he carried on investigations with the flora of Louisiana and the adjoining states. His special field of work, however, was with the trees of the South. He discovered nearly fifty trees hitherto unknown. A great deal of material was left unpublished at his death, and a large private collection of plants made by him is now in the botanical laboratories of Tulane University.

THE Nobel prizes for physics, chemistry and literature were presented by King Gustav of Sweden on December 10. Those who personally received their

medals and diplomas were Professor James Franck, University of Göttingen, and Professor Gustav Hertz, of the University of Halle, who shared the Nobel prize for physics for 1925; Professor Jean B. Perrin, of the University of Paris, the physics prize for 1926; Dr. Richard Zsigmondy, of the University of Göttingen, the chemistry prize for 1925, and Professor Theodore Svedberg, of the University of Upsala, the chemistry prize for 1926. After the ceremony the Nobel prize committee gave a banquet in honor of the recipients.

THE Fifth International Congress of Genetics is to be held in Berlin from September 11 to 18, 1927, immediately following the Zoological Congress in Budapest. According to *Eugenical News*, the mornings are to be kept for general sessions in which an eminent investigator will treat some outstanding theme in genetics. The rest of the morning program will be an invitational one, with discussions. In the afternoons there will be special sections in which comprehensive papers and lectures will be heard.

THERE has recently been founded in Chili the Sociedad Chilena de Historia Natural. This society includes the working naturalists in Chili and will be devoted to natural history in all its branches. The first directorate is composed as follows: *President*, Dr. Carlos E. Porter, director of the museum and laboratory of applied zoology; *vice-president*, Professor Francisco Fuentes, chief of Phanerogamia, National Museum; *secretary*, Sr. Gauderio Looser, in charge of anthropology, National Museum; *prosecretary*, Professor Gilberto Mantero, librarian and secretary of the National Museum; *directors*, Professor Marcial R. Espinosa, in charge of cryptogamic botany, National Museum; Professor Miguel R. Machado, chief of section of geology, National Museum; Fr. Flaminio Ruir, professor in College of San Pedro Nolaseo. The official organ of publication will be the *Revista Chilena de Historia Natural* under the editorship of Dr. Carlos E. Porter.

THE annual meeting of the West Virginia Academy of Science was held at Bethany College, November 26 and 27.

A CONFERENCE was held in Rochester on December 9 on the use of motion pictures for instruction in the science of medicine, surgery and public health. At the close of the conference, Dr. Franklin Martin, of Chicago, director general of the American College of Surgeons, announced that steps to be taken in preliminary experiments with surgical films had been left to himself and George Eastman, chairman of the board of the Eastman Kodak Company. Mr. Eastman, as spokesman for the company, offered to under-

take the expenditure of conducting the experiments in so far as they relate to equipping an operating room at the University of Rochester School of Medicine and furnishing the technical photographic service.

A SCIENTIFIC exhibition was recently held at Halifax, Nova Scotia, under the auspices of the Nova Scotia Institute of Science. More than a hundred working experiments, besides numerous exhibits, in the physical, biological and medical sciences were shown by the science departments of Dalhousie University, the N. S. Technical College and the Atlantic Experimental Station. The exhibition was in the nature of an experiment. Its success was demonstrated by the crowds that thronged the building during the two evenings and one afternoon that it was open. It was estimated that eight per cent. of the population of Halifax was in attendance and many were unable to gain admittance.

THE Rockefeller Foundation has offered to appropriate to the Bernice P. Bishop Museum of Honolulu for Polynesian anthropological research sums amounting to \$50,000 over a period of five years, providing that an equal amount be raised for the same purpose from other sources.

THE *Journal* of the American Medical Association states that one entire floor of the new St. Louis Maternity Hospital will be devoted to research laboratories for full-time workers, this being made possible by a gift of \$650,000 from the Rockefeller Foundation, provided the entire sum is used on research work in obstetrics. The new hospital building will be completed in June, 1927, and will cost \$750,000. The maternity hospital is now a unit of the Washington University group of hospitals.

J. F. LINCOLN, vice-president of the Lincoln Electric Company, Cleveland, has given the sum of \$17,500 to the American Society of Mechanical Engineers to be used next year in prizes for the best papers on arc welding, submitted in an international competition. The first prize will be \$10,000, the second \$5,000 and the third \$2,500.

At a meeting of the Research Committee of the Oyster Growers' and Dealers' Association of North America, held on December 5 at the offices of the Broadway Association, it was decided to raise \$10,000 for scientific research in the oyster industry. Howard W. Beach, of New Haven, is chairman of the committee.

M. FERDINAND CANU, of Versailles, France, has presented to the Smithsonian Institution his private collection of fossil invertebrates from France and particularly the Paris basin, which he has spent fifty

years in gathering. M. Canu made the gift through Dr. R. S. Bassler, paleontologist of the National Museum, with whom he has collaborated extensively since 1910 in working out geological horizons for the Atlantic and Gulf States. This work was undertaken by Dr. Bassler and M. Canu at the request of the U. S. Geological Survey.

HUNTER M. MERIWETHER recently made a gift of his 50-acre suburban estate "Meri-court," of Clarksville, Tenn., to the University of Tennessee, to be used as an agricultural experiment station, and immediate possession of the property has been given the university. The estate is valued at over \$50,000.

GENERAL adoption of the policies outlined for the rehabilitation of the museum in Letchworth State Park, New York, are expected soon, according to *Museum News*. Dr. Charles C. Adams, director of the New York State Museum, and Arthur C. Parker, director of the Rochester Municipal Museum, who were appointed a committee, have submitted a detailed series of plans to the American Scenic and Historic Preservation Society, which has the immediate supervision of the park. The plans, which are now before the society and which will probably be formally adopted soon, provide for field stations and shelter buildings to be scattered through the park. These will enclose suitable signs and outdoor exhibits placed in proximity to the outstanding natural features, for which the park is noted.

THE Department of the Interior has announced the setting aside of an area of about seven square miles in the High Sierra country of Yosemite National Park in California as a perpetual reservation in which the flora and fauna will always be left in their primitive state. The purpose in doing so, it is stated, is to afford an opportunity for the study of plants, animals and geologic and other natural features under primitive conditions.

LOUISIANA has recently added its fifth wild life sanctuary—a tract of 81,000 acres—through a contract between the state and the Singer Manufacturing Company. A huge tract of hardwood is owned by the Singer Company in Madison Parish. In return for fire protection for this timber, to be given by the state, the area has been made a preserve, game wardens will be installed and the entire area fenced and posted. The contract has a life of ten years, renewable for a like period.

THIRTY biologists residing in or near Tucson, Arizona, attended a dinner at the Old Pueblo Club, on November 18, for the purpose of gaining better contacts with their fellow workers. Dr. Forrest

Shreve, of the Carnegie Institution of Washington, spoke on the history and work of the Desert Laboratory at Tucson. The meeting was attended by representatives of the Desert Laboratory of the Carnegie Institution of Washington, the Boyce Thompson Institute of Plant Research, Southwestern Arboretum, U. S. Department of Agriculture, Biological Survey of the Bureau of Entomology and Forest Service, Arizona Agricultural Experiment Station and the department of biology of the University of Arizona. Meetings are to be held at frequent intervals in the future, but formal organization was considered inadvisable. Dr. J. G. Brown, Dr. Forrest Shreve and Mr. W. G. McGinnies were named as a committee to arrange for future meetings.

EFFORTS of the last two years have culminated in an agreement whereby the *Index Medicus*, published since 1879 under various auspices, and the *Quarterly Cumulative Index*, published since 1916 by the American Medical Association, will be combined and issued as a single publication to be known as the *Quarterly Cumulative Index Medicus*. The new bibliographic principles, including primarily classification of subjects and authors in one alphabet, will be maintained in the new publication. It will, moreover, include the extensive bibliographic material of the library of the Surgeon-General's Office in Washington, D. C., covering, instead of the three hundred periodicals to which the *Quarterly Cumulative Index* was formerly limited, practically the entire medical literature of the world. The publication will be printed on the presses of the American Medical Association. The Carnegie Institution, which has in recent years supported the *Index Medicus*, will bear a portion of the expense. The first issue of the new periodical will appear in April, 1927, and will cover the literature received during the first three months of that year.

Industrial and Engineering Chemistry states that in order to encourage work in the field of synthetic rubber, the Presidium of the Supreme Council of National Economy of the Union of Socialist Soviet Republics announces two prizes for processes for the preparation of synthetic rubber. Two prizes are offered for the best methods found to satisfy the conditions of the contest: a first prize of \$50,000 and a second prize of \$25,000. All contestants must present complete descriptions and reports of their processes, including 2 kgs of the synthetic rubber preparation, not later than January 1, 1928.

UNIVERSITY AND EDUCATIONAL NOTES

MRS. ISAAC H. CLOTHIER, of Wynnewood, has given Swarthmore College \$100,000 towards the erec-

tion of an auditorium or other memorial to her husband, who was for forty-eight years a member of the board of managers of the college.

JOHN D. ROCKEFELLER, JR., has made a gift of \$150,000 to Princeton University for the purpose of enlarging the university gymnasium.

COLONEL R. W. LEONARD, of St. Catharine's, Ontario, has made a gift of \$35,000 to Dalhousie University, Halifax.

BROWN UNIVERSITY has completed plans and will proceed with the erection of its proposed new chemical laboratory, which is expected to cost about \$100,000 with equipment. A contract for the building has been let.

APPOINTMENTS of former fellows in medicine of the National Research Council to academic posts have been announced as follows: Dr. Louis Leiter, assistant professor of medicine, University of Chicago. Dr. Leiter is at present on leave of absence in Munich. Dr. William H. Chambers, instructor in physiology, Yale University. Dr. Jay McLean, assistant attending surgeon and lecturer in surgery, the Polyclinic Hospital of New York City. Dr. Clarence A. Mills, associate professor of medicine, Peking Union Medical College. Dr. Bernhard Steinberg, director of laboratories and research, Toledo Hospital, Ohio. Dr. Charles S. Woodall, physician to the Walter E. Fernald State School, Waverley, Massachusetts.

DR. FREDERICK W. OWENS, assistant professor of mathematics at Cornell University, has been appointed head of the department of mathematics at Pennsylvania State College.

DISCUSSION AND CORRESPONDENCE

SAND FLOTATION IN NATURE

IN connection with the articles on sand flotation which have appeared in *SCIENCE* during 1926 (63: 405-406, 571; 64: 138), it may be interesting to note that I have observed this phenomenon on Douglas Lake in Cheboygan County, Michigan, on more than a dozen days during each summer for the past fifteen years. The best explanation in these cases is that given by Edwin H. Hall (*SCIENCE* 63: 571) that at a time when the shore is dry, ripples of water lapping dry sand take down with them a certain amount of sand which remains in the surface film until the particles are entirely wetted, whereupon they sink. At Douglas Lake it has always been noted at times when there was an offshore wind, but never when this wind was strong; usually only when the wind is hardly more than perceptible, if at all. The ripples that