between United States Route 9W and the cliffs. A condition of the offer was that all the property south of Palisade Avenue be held perpetually for park purposes and that all the property north of Palisade Avenue, east of a line 100 feet to the west of the proposed parkway, be maintained in the same manner.

As to the property west of the line, the letter made it conditional that any buildings erected on it should never exceed a certain height, and that it should not be used for commercial purposes "prior to July 1, 1945. if ever."

The restriction on buildings provided that none be erected to a height that "would make it visible from the proposed Henry Hudson Bridge across the Harlem Ship Canal and the proposed parkway extending northerly therefrom along the [Hudson] river, or from an elevation on the easterly side of the Hudson River of seventy feet above mean low-water mark."

This is the second offer made by Mr. Rockefeller. In his first offer he urged an agreement between New York and New Jersey to govern the administration of Palisades Interstate Park. At present the park is administered by separate groups of commissioners from the two states.

Two hundred guests were present at the luncheon, at which messages were received from Governor Herbert H. Lehman, of New York, and Governor Harold G. Hoffman, of New Jersey.

In reference to this gift, but referring to the highlands a little further north, *The Times* writes editorially:

Anthony Trollope in his "North America" objected to putting to military uses "the prettiest spot on the Hudson"—"one of the prettiest spots which Nature, with all her vagaries, ever formed." He wondered whether the "lads," as he called the West Point students, appreciated that they were studying amid "the sweetest river, rock and mountain scenery that the imagination can conceive." One accepts this tribute of a British visitor to the beauty of this impressive landscape, but is proud that it is a possession of the entire nation. Henry James carried it into the geography of the ideal, to be remembered, as he wrote, not as "the sternest of all seats of discipline," but as "some great Corot composition of young, vague, wandering figures in splendidly classic shades."

BASIC RESEARCH BY THE DEPARTMENT OF AGRICULTURE

ACCORDING to the terms of a bill which has passed both House and Senate in slightly differing forms and which is now in conference, the Secretary of Agriculture "is authorized and directed to conduct research into the laws and principles underlying basic problems of agriculture in its broadest aspects," and also to carry on investigations looking to improvements in handling and marketing, as well as "research relating to the conservation, development of land and water resources for agricultural purposes."

According to a statement by Science Service, the research thus contemplated is to supplement, not to replace, other researches now going on under the aegis of the Department of Agriculture; but both activities are to be coordinated so far as practicable, and "shall be conducted by such agencies of the Department of Agriculture as the Secretary may designate or establish."

The initial funds for this work will amount to \$1,000,000. This sum will be increased by an additional \$1,000,000 each year until the total reaches \$5,000,000, and thereafter the special research fund will be maintained at the latter sum each year. Forty per cent. of the total amount in any one year is to be expended under the direct supervision of the Secretary of Agriculture, in any places and for any research purposes he may approve within the frame of the act. The remaining sixty per cent. will be prorated among state agricultural experiment stations according to the size of their respective rural populations. Funds thus allocated must be matched dollar for dollar by the states receiving them.

The establishment of new laboratories is within the authorizations of the act, since it is provided that funds may be used for the erection of buildings and the purchase or rental of land needed for the purpose. These laboratories might be set up in the major agricultural regions of the United States, in places designated by the Secretary of Agriculture.

SCIENTIFIC NOTES AND NEWS

DR. RICHARD CHACE TOLMAN, professor of mathematical physics at the California Institute of Technology, was elected at the Los Angeles meeting president of the Pacific Division of the American Association for the Advancement of Science. He succeeds Dr. Bailey Willis, emeritus professor of geology at Stanford University.

AT the semi-annual meeting at Cincinnati of the

American Society of Mechanical Engineers the Holley Medal for 1934 was awarded on June 20 to Dr. Irving Langmuir, associate director of the General Electric Research Laboratory, for his "contributions to science and engineering, especially in the development of the gas-filled incandescent lamp, of the thoriated filament for thermionic emission, of atomic-hydrogen welding, of phase-control operation of the Thyratron tube, and in fundamental research in oil films." Dr. Langmuir presented a paper at the meeting, entitled "The Mechanical Properties of Matter."

THE Lamme Medal of the American Society of Engineering Education was presented to Dr. William Elgin Wickenden, president of the Case School of Applied Science, at the recent Atlanta meeting. The medal is awarded each year "for accomplishment in technical teaching or actual advancement of the art of technical training."

DR. JONAS S. FRIEDENWALD, associate professor of ophthalmology at the Johns Hopkins University, in charge of research laboratories at the Wilmer Institute, was awarded the gold medal of the American Medical Association for distinguished work in ophthalmology, at the recent convention at Atlantic City.

MEDALS of special recognition were conferred by the American Radium Society at its annual meeting in Atlantic City on Dr. James Ewing, professor of oncology at the Cornell Medical College, on Dr. Francis Carter Wood, director of the Institute of Cancer Research of Columbia University, and on Dr. George E. Pfahler, of Philadelphia, who have respectively given the annual Janeway lectures at the last three annual meetings of the society.

AT a court dinner of the Society of Apothecaries of London, held in the hall of the society on June 4, Sir Frederick Grant Banting, professor of medical research in the University of Toronto, was presented with the society's gold medal "for valuable services rendered to the science of therapeutics." Previous recipients of the medal have included Professor W. E. Dixon, Sir F. Gowland Hopkins, Professor J. J. Abel, Professor Fourneau and Sir Henry Dale.

THE first award of the Hickman Medal of the British Royal Society of Medicine has been made to Dr. Wesley Bourne, of the department of pharmacology of McGill University. The Hickman Medal was founded in 1931 and its award is made for "original work of outstanding merit in anesthesia or in subjects directly connected therewith." The medal will be awarded at intervals of not less than three years.

DR. S. LEFSCHETZ, professor of mathematics at Princeton University and president of the American Mathematical Society, has been elected a member of the Royal Society of Letters and Sciences of Bohemia.

DR. WILLIAM MANSFIELD CLARK, De Lamar professor of physiological chemistry at the Johns Hopkins University, received the honorary degree of doctor of science at the commencement exercises of Williams College.

BROWN UNIVERSITY conferred at commencement the

doctorate of science on Dr. Ernest E. Tyzzer, professor of pathology in the Harvard Medical. School.

DR. ALFRED C. REED, director of the Pacific Institute of Tropical Medicine of the University of California, received the degree of doctor of science at the commencement exercises at Pomona College, where he gave an address entitled "Environmental Medicine." Dr. Reed graduated from the college in 1906.

THE honorary degree of doctor of science has been conferred by Purdue University on Dr. Grover Francis Powers, professor of pediatrics at the Yale University School of Medicine.

LAWRENCE COLLEGE, Appleton, Wis., has conferred the honorary degree of doctor of science on Dr. Alfred N. Goldsmith, vice-president and chief broadcast engineer for the Radio Corporation of America, "in recognition of the unique place which he had made in his chosen field." Dr. Goldsmith is past president of the Institute of Radio Engineers and of the Society of Motion Picture Engineers.

DR. L. R. JONES, for twenty-six years professor of plant pathology at the University of Wisconsin, and Professor Ransom A. Moore, head of the department of agronomy, which he joined as instructor in 1895, have retired from active service with the title emeritus.

ACCORDING to an Associated Press dispatch, Dr. Raymond A. Pearson was asked on June 28 by the board of regents of the University of Maryland to place in their hands his resignation as president of the university on July 1. This action was taken after consideration of criticism of Dr. Pearson's administration. Dr. Pearson, it is reported, was informed that if the resignation were tendered as requested he would be asked to remain at the university for a time as consultant in its land-grant activities. Dr. Pearson was formerly professor of dairy industry at Cornell University; from 1908 to 1912, he was New York State Commissioner of Agriculture and from 1912 to 1926 he was president of Iowa State College.

DR. WILLIAM R. GALBREATH, clinical professor of tropical medicine at Columbia University, has resigned.

DR. JOHN A. SCHAEFFER, vice-president and director of research of the Eagle-Picher Lead Company at Joplin, Mo., has been elected president of Franklin and Marshall College at Lancaster, Pa. Dr. Schaeffer is a son of the late Nathan C. Schaeffer, first superintendent of public instruction of the State of Pennsylvania.

Dr. ALBERT C. BRODERS, of the Mayo Clinic at Rochester, Minn., has been appointed professor of surgical pathology and director of cancer research at the Medical College of Virginia, Richmond.

DR. C. H. RAGLAND, who since 1928 has been connected with the division of pomology of the University of California, has resigned to become head of the department of horticulture at Mississippi State College.

DR. JOHN A. WHEELER has been appointed assistant professor of physics in the University of North Carolina at Chapel Hill. During the past year he has carried on work in nuclear physics at the Institute of Theoretical Physics in Copenhagen.

PROFESSOR A. NORMAN SHAW has been made head of the department of physics and director of the Macdonald Physics Laboratory at McGill University, in succession to Professor A. S. Eve, who retired at the close of the academic year.

DR. FRANCIS DAVIES, reader in anatomy in the University of London, will succeed Professor C. J. Patten, Jackson professor of anatomy in the University of Sheffield, who is retiring.

THE Board of Scientific Directors of the Rockefeller Institute for Medical Research announces the election of Dr. Alphonse Raymond Dochez as a member of the Board of Scientific Directors. The following promotions and appointments are announced: *Promotions:* Assistant to associate, Dr. Joseph W. Beard, Dr. Harry S. N. Greene, Dr. Kenneth C. Smithburn and Dr. Wendell M. Stanley. Fellow to assistant, Jonathan Biscoe, Joseph S. Fruton, Dr. George L. Graham, Dr. George I. Lavin, Dr. Charles V. Seastone, Jr., Dr. William Trager and Dr. Arnold J. Ullstrup. *New appointments:* Assistants, Dr. L. Edgar Hummel and Dr. Robert J. Parsons. Fellows, Dr. William Halsey Barker and Rollin D. Hotchkiss.

DR. BOWMAN C. CROWELL, director of clinical research at the American College of Surgeons, Chicago, has been elected president of the Gorgas Memorial Institute. He succeeds Rear Admiral Cary T. Grayson, who recently took over command of the American Red Cross. Admiral Grayson has been chosen chairman of the board to succeed the late Dr. Franklin Martin, founder of the institute, who died in Phoenix, Ariz., on March 7. The new surgeongeneral of the army, Major General Charles R. Reynolds, was chosen a member of the board to succeed Major General Robert U. Patterson. Dr. Maurice C. Hall, director of the Bureau of Animal Industry of the Department of Agriculture, was elected a member of the Scientific Board.

DR. STANLEY A. CAIN, Waterman research fellow at Indiana University, has been placed in charge of the School of Plant Sociology, which has been developing at the Long Island Biological Laboratory at Cold Spring Harbor, Long Island, under the direction of Professor Henry S. Conard, of Grinnell College, Iowa.

DR. JOHN L. ULRICH, of the department of zoology of the Johns Hopkins University, has received a grant from the American Medical Association for the study of cerebral functions in the action of antagonistic muscles.

THE following delegates will officially represent the Botanical Society of America at the sixth International Botanical Congress, to be held in Amsterdam from September 2 to 7: Aven Nelson, president of the Botanical Society of America; Karl Sax, B. M. Duggar, B. O. Dodge and A. S. Hitchcock. Alternates are Donald Reddick and H. A. Gleason.

THE John R. Freeman Scholarship, offered annually by the American Society of Mechanical Engineers, has been awarded to Victor L. Streeter, of Denver, who has been a junior engineer with the U. S. Reclamation Bureau. The award grants the sum of \$1,500 for fifteen months' travel and research in Europe.

DR. WALTER B. CANNON, of Harvard University, was guest speaker at the annual meeting of the Sigma Xi Club of Peking held on May 17. The officers elected for the following year were: *President*, Y. C. Mei, of Tsinghua University; *Vice-president*, S. D. Wilson, of Yenching University; *Secretary-Treasurer*, K. P. Young, National Academy of Peiping.

OFFICERS of the Society for the Promotion of Engineering Education for 1935-36 were elected at the Atlanta meeting as follows: President, Dean D. S. Anderson, Tulane University; Vice-presidents, Dean P. H. Daggett, Rutgers University, and Dean S. B. Earle, Clemson Agricultural College; Secretary, Professor F. L. Bishop, University of Pittsburgh; Treasurer, W. O. Wiley, John Wiley and Sons; Members of Council, Professor Theodore H. Morgan, Worcester Polytechnic Institute; M. M. Boring, General Electric Company; Dean J. W. Barker, Columbia University; Professor S. C. Ogburn, Bucknell University; Professor F. L. Plummer, Case School of Applied Science; Professor L. E. Grinter, Texas Agricultural and Mechanical College, and Professor A. B. Domonoska, Stanford University.

THE Italian-American Chemical Society was organized at a meeting held at New York University on June 19. Its objects are to facilitate the exchange of scientific and technical information between America and Italy, and at the same time to bring into closer friendly and personal contact the chemists and industrialists of both countries. The establishment of the society followed the favorable expression of S. E. Professor Nicola Parravana, of Rome, president of the Associazione Italiana di Chimica, to a request sent him through S. E. Professor Filippo Bottazzi, of Naples, by a meeting held at Casa Italiana, Columbia University, on January 26. The initial officers are: *President, Jerome Alexander; Vice-president, William* C. Mac Tavish; *Secretary and Treasurer, Genio F.* Reale; *Council, Kenneth C. Blanchard, Frank* Brescha, G. de Bethune, Alexander O. Gettler, Joseph Matiello, Vittorio Molinari Ernest Conti, Wallace T. Cohoe, Harold C. Urey and F. Quattrone.

THE Latin-American Congress of Physical Therapy, X-ray and Radium will hold its first annual congress in Mexico City, from August 29 to September 5, according to an announcement made by Dr. Cassius Lopez de Victoria, executive director of the society and director of the National University of Mexico. The gathering will include physicians and workers in the field of medicine, surgery and allied subjects. Five tours to the congress have been arranged by the American Express Travel Service, with a home-bound opportunity of attending the conference on physical therapy at Kansas City, to be held from September 9 to 12. On the ocean route the delegates will leave New York on August 22, on the steamship Yucatan. After visiting Havana, Mexico will be entered through Vera Cruz. Sightseeing excursions will cover Mexico City and its environs. Delegates going by rail will leave New York on August 27. They will cross the boundary at Nuevo Laredo, arriving at the capital on August 31. The two tours have been planned to allow stopovers at Kansas City with a combination privilege of the water route to Mexico and return by rail.

A GROUP of seventy German physicians sailed from Hamburg on June 26 to make a study of hospitals in the United States. The trip was organized by the German Association for Medical Study. They will be the guests of the American Medical Association and the American Academy of Medicine. After leaving New York, a visit is planned to the hospitals of Buffalo, Detroit, Chicago, Philadelphia and Washington.

THE London *Times* publishes the following wireless message from Dr. Noel Humphreys, leader of the Oxford University Expedition which is exploring Ellesmere Land, and especially Grant Land, after wintering at Etah in North Greenland: "Thule (N. Greenland), June 7.—All well. All members of the expedition have returned to Etah. Each party got into unexplored country and discovered new mountains. The short crossing of Ellesmere Land has been completed and valuable geological work done. Unexplored Grant Land has been penetrated and a new range estimated at 10,000 feet found north of United States Mountains. The expedition is making scientific collections locally until the ship arrives."

A REUTER'S dispatch, printed in *The New York Times*, reads: "A complete issue of the works of Sir Isaac Newton and a new international botanical dictionary compiled in eight languages are to be published in Soviet Russia. The botanical dictionary will be in Latin, English, French, German, Russian, Italian, Dutch and Armenian. It is being compiled by Professor A. L. Bedelyan, of the Armenian Agricultural Institute. When complete it will contain an alphabetical list of the names of every known plant. Printing of the Newton edition will be carried out by the History of Science and Technique of the Academy of Science of the U.S.S.R. in conjunction with the Scientific-Theoretical Publishing House."

THE Lassen Volcano Observatory, which was established by the U. S. Geological Survey in 1926 for the study of volcanic processes and recent volcanism in northwestern United States, was discontinued on June 30 as an economy measure.

ACCORDING to the United Press customs officials at Tientsin have forbidden the exportation of the archeological collections made by Sven Hedin, pending government advices. The Committee for Preservation of Ancient Articles has appealed to the government not to permit this collection to go abroad.

DISCUSSION

THE PROTECTION OF BIRDS MADE PROFITABLE

MANY scientists and agriculturists, familiar with the commercial importance and historic interest of Peruvian guano, may not realize that the production of guano is a continuing process of considerable economic significance. The production is many times greater now than it was in 1908, but even then, when the population of birds on the Peruvian Islands was at its lowest ebb, it was conservatively estimated that the current production was 20,000 metric tons or more of very high-grade guano (12 to 17 per cent. nitrogen), and that the annual requirement of national agriculture was about 40,000 tons.¹ The contrast of these two figures pointed to a serious national problem, since the old deposits of "mineral" guano were ex-¹ R. E. Coker, *Proceedings of the U. S. National Museum*, 56: 449-511, Pls. 53-69, 1919.