shrubs. Trees grow like weeds under the climatic conditions existent in New York and with varied scenery of intense interest the highways of the state will eventually become as beautiful as those of any other state in the union.

THE NEW YORK MEETING OF THE AMERICAN CHEMICAL SOCIETY

A MEETING of the American Chemical Society will be held in conjunction with the Second National Exposition of Chemical Industries, September 25 to 30, inclusive. A council meeting is called for Monday afternoon and Monday evening. A general meeting follows on Tuesday morning, and on Tuesday afternoon it is hoped to have a public meeting in the large hall at the City College, with addresses by prominent men bearing upon "Chemistry and the National Welfare." On Tuesday evening a general "get-together" entertainment will be given by the New York Section complimentary to the parent society. to which visiting chemists will be invited. On Thursday evening the Electrochemical Society will give a smoker, to which the members of the American Chemical Society will be invited, and on Friday evening a subscription banquet will be held in one of New York's large hotels.

Meetings of divisions will be held on Wednesday, Thursday, Friday and Saturday mornings. One of the special features of the meeting will be general conferences on special subjects in which the chemists of the country are now interested. The idea of these conferences is to have some important topics such as

Glassware and Porcelain, Steel Alloy Metals, Paper and its Utilization, Oils and Motor Fuels, Convertibility of Plant, Medicinal Chemicals, Dyestuffs and their Relation to Munition Factories, Industrial Alcohol, Acetone and Formic Acid,

the discussion to be started by some well-known specialists in these lines. No set program is planned for these conferences, but it is believed from past experience that chemists interested in these various lines will get together and many interesting points will be brought out which will be of mutual interest. The topics for these conferences have not as yet been determined upon, and suggestions are desired from members of the society. These suggestions will all be placed before the Program Committee, and some six or eight topics selected therefrom. It is anticipated that two conferences will be in session each afternoon at the same time, one in the lecture hall of the Grand Central Palace, where the Second National Exposition of Chemical Industries will be held, and one in the lecture hall of the Chemists Club.

The president's address will be one of the general papers at the public meeting on Tuesday. The division of biological chemistry, physical chemistry and industrial chemistry will hold a joint symposium on colloids on Wednesday and Thursday mornings. On Wednesday morning the symposium will be of a theoretical nature, in which the industrial division will not take part. On Thursday morning the symposium will be composed of industrial application of colloid chemistry. A symposium on occupational diseases is also planned and is to take up part of one of the morning sessions of the industrial division.

SCIENTIFIC NOTES AND NEWS

A MEMORIAL to Major Walter Reed, of the army, who demonstrated the transmission of yellow fever by musquitoes, is planned for the campus of the University of Virginia of which he was a graduate.

PROFESSOR JULIUS STIEGLITZ, of the University of Chicago, and Dr. Leo Baekeland, of New York, were given the honorary degree of doctor of chemistry by the University of Pittsburgh at its recent commencement.

THE degree of D.C.L. has been conferred by the University of Oxford upon Douglas William Freshfield, M.A., University College, president of the Royal Geographical Society.

Dr. CHARLES H. MAYO was the guest of honor at a banquet given on June 22, by the citizens of Rochester, in recognition of his election as president of the American Medical Association. A silver loving cup was presented to Dr. Mayo.

DR. ALBERT SHIELS, director of the bureau of reference and research of the New York City Board of Education, has been elected city superintendent of schools of Los Angeles at a salary of \$8,000 a year. The salary formerly paid the city superintendents there was \$6,000 a year.

DR. A. A. EISENBERG, formerly pathological anatomist in the U. S. Army Medical Museum and School, Washington, D. C., has been appointed pathologist at Charity Hospital, Cleveland.

PROFESSOR B. E. LIVINGSTON and Dr. H. E. Pulling, of the laboratory of plant physiology of the Johns Hopkins University, will spend the months of August and September in the region of Fort Churchill and Port Nelson, Hudson Bay. They will carry out field studies of vegetation as related to soil and climate.

MISS ALICE EASTWOOD, curator of the botanical department of the California Academy of Sciences, spent five days, from June 15 to 20, collecting at the Grand Canyon of the Colorado. The Hermit Trail was traveled to the bottom of the canyon, and the Grand View or Berry Trail for about two miles down. The Bright Angel Trail had been explored previously by Miss Eastwood. About 270 species were collected.

PROFESSOR GEORGE NEILL STEWART, director of the Cushing Laboratory of Experimental Medicine, Western Reserve University, will sail for England on July 22.

MISS ETHEL GERTRUDE EVEREST, of Chippens Bank, Hever, Kent, daughter of the late Colonel Sir George Everest, surveyor-general of India, has left the house on her estate to the National Trust to be used as a home of rest for tired brain-workers, particularly writers and artists. The land round the house has also been bequeathed to the National Trust to be used as a public park for the use of the nation, and as a "bird sanctuary," where birdlife shall be encouraged, together with £8,000 for the maintenance of the estate. DURING the week of September 25 the Second National Exposition of Chemical Industries will be held in New York. The American Electrochemical Society will be one of the national societies which will meet in New York during the same week. Its meetings will be held on September 28, 29 and 30, and the outline of the program has just been announced. It is as follows:

Wednesday, September 27, evening: General reception, with registration at the Chemical Exposition, Grand Central Palace.

Thursday, September 28, forenoon: Reading and discussion of papers, general subject: "Made in America."

Afternoon: Visiting the exposition.

Evening: Complimentary smoker. An invitation will be extended to the members of the American Chemical Society and other visiting chemists and engineers.

Friday, September 29, forenoon: Reading and discussion of papers.

Afternoon: Visiting the exposition.

Evening: Subscription dinner-dance.

Saturday, September 30, forenoon: Reading and discussion of papers.

Afternoon: Visiting the exposition.

THE graduates of the course in public hygiene of the University of Pennsylvania have recently organized as an Alumni Association. The university was a pioneer in the field in this country and has been offering instruction for public health positions since 1906. In 1910 they graduated their first doctor of public hygiene, Dr.P.H., and at present the graduates of this course number twenty-six physicians, with the degree Dr.P.H. and two engineers with certificates as certified sanitarians. Of the physicians three are women. These graduates are widely scattered, in India, Siam, China, Philippine Islands, Hungary and England, in the United States from California to New Jersey and in the U.S. Army and Navy medical services. Their occupations range from medical missionaries through scientific research, epidemiology, sanitary engineering, municipal health officers, labor departments, housing commission and tuberculosis prevention work to special hospital work and teaching in public health and allied lines.

RECENT appointments to the Office of Investigations in Forest Pathology, Bureau of Plant Industry, are as follows: Samuel B. Detwiler, formerly field superintendent of the Pennsylvania Chestnut Tree Blight Commission, has been appointed forest inspector in charge of field work on the white pine blister rust. Reginald H. Colley, lately assistant professor of botany in Dartmouth College, and Minnie W. Taylor, lately assistant in botany in Brown University, have been appointed agents to assist Dr. Perley Spaulding in research on the white pine blister rust. Paul V. Siggers, lately a graduate student in botany in the University of Michigan, and Gilbert T. Posey, research assistant in botany at the Oregon Experiment Station, have been appointed scientific assistants to Mr. Detwiler. George L. Barrus and Norton M. Goodyear, recently engaged in commercial forestry, have been appointed agents also assisting Mr. Detwiler. In addition to these more or less permanent appointments, about forty field agents have been appointed for temporary periods to work on the white pine blister rust in cooperation with various state officials. Field work on the white pine blister rust east of Ohio is organized under the general direction of Mr. Detwiler; west of and including Ohio, under the general direction of Mr. Roy G. Pierce.

SIR ERNEST SHACKLETON, who, on returning from the South Polar zone last April, left twenty-two of his companions on Elephant Island, sailed on July 18 from Punta Arenas, Chile, on a small schooner, hoping to rescue them. If conditions are favorable, Sir Ernest expects to relieve the explorers and to return to Chile in four weeks.

THE final meeting for the session of the University of Pennsylvania Chapter of the Society of the Sigma Xi, was held in the electrical engineering department, President E. C. Kirk presiding. Addresses on "Illumination" were given by Professor C. L. Clewell, from the engineering standpoint, illustrated, and by Professor George E. de Schweinitz, from the standpoint of the ophthalmologist. The following officers for 1916–17 were elected: *President*, Warren P. Laird, professor of architec-

ture; Vice-president, C. E. McClung; Treasurer, J. Percy Moore; Recording Secretary, S. P. Shugert; Corresponding Secretary, W. H. F. Addison.

PLANS are now being completed for the eighty-sixth annual meeting of the British Association, this year to be held at Newcastleon-Tyne in the first week of September, as has been already noted in SCIENCE. Sir Arthur Evans, the archeologist, taking the chair in succession to Professor Arthur Schuster, will deliver his presidential address on September This year's sectional presidents will be: 5. Mathematical and Physical Science, Professor A. N. Whitehead, of the Imperial College of Science; Chemistry, Professor G. G. Henderson, Glasgow; Geology, Professor W. S. Boulton, Birmingham; Zoology, Professor E. W. Macbride; Geography, Mr. D. G. Hogarth, keeper of the Ashmolean Museum, Oxford; Economic Science and Statistics, Professor A. W. Kirkaldy; Engineering, Mr. G. G. Stoney, Newcastle; Anthropology, Dr. R. R. Marett; Physiology, Professor A. R. Cushny, University of London; Botany, Dr. A. B. Rendle, of the British Museum; Educational Science, the Rev. W. Temple, rector of St. James's, Piccadilly, and formerly headmaster of Repton School, and Agriculture, Dr. E. J. Russell, director of the Rothampsted Experimental Station at Harpenden. Evening lectures will be given by Dr. Chalmers Mitchell, secretary of the Zoological Society, on "Evolution and the War," and by Professor W. A. Bone on "Intensified Combustion."

MAJOR R. TAIT MACKENZIE, R.A.M.C., professor of physical education, University of Pennsylvania, opened a discussion on the necessity for a national scheme of physical education, at a meeting of the Royal Sanitary Institute, at the Municipal School of Technology, Manchester, on July 7.

THE collection of ethnological remains brought from South America by Dr. W. C. Farrabee will require more than three months to arrange, and therefore will not be on exhibition until next fall. The expedition, which was headed by Dr. Farrabee, extended over a period of three years, and cost more than \$100,000.

UNIVERSITY AND EDUCATIONAL NEWS

THE Yale University School of Medicine will receive \$14,845 by the will of Norman B. Bayley.

THE new master of Magdalene College, Cambridge, Mr. A. C. Benson, has established a Charles Kingsley lectureship in natural science in the college with an income of £150.

A SCHOOL of applied social sciences will be opened at Western Reserve University, at the beginning of the next academic year. It will be a graduate school with a two-year course, in which supervised field work will be an essential part of the plan.

At the University of Cambridge the proposed grace relating to the admission of women to the first and second M.B. examinations and the examination in architectural studies has been withdrawn, in order that reports on the subjects may be presented to the senate by the boards concerned.

MR. J. H. HILL has been appointed professor of mathematics at the Ohio Northern University.

R. L. DAUGHERTY has been appointed professor of hydraulic engineering at Rensselaer Polytechnic Institute. He has for the past six years been assistant professor of hydraulics in Sibley College, Cornell University. He succeeds at Rensselaer Professor Lewis F. Moody who has gone into private practise. Professor Daugherty is the author of "Hydraulic Turbines," "Centrifugal Pumps" and "Hydraulics." He graduated from Leland Stanford University in 1909 and was an instructor in experimental engineering there the following year.

THE following appointments have been made to the medical faculty of New York University: clinical professors of surgery, Drs. Joseph B. Bissell, Thomas A. Smith, Walter C. Cramp and Arthur M. Wright; professor of clinical surgery, Dr. William C. Lusk; chief of clinic, department of surgery, college dispensary and instructor in surgery, Dr. W. Howard Barber; instructor in surgery, Dr. George Francis Cahill; clinical professor of medicine, Dr. Theodore J. Abbott; instructor in medicine, Dr. Hubert V. Guile; clinical professor of cancer research, Dr. Benjamin M. Levine; assistant professor of bacteriology and hygiene, Dr. Charles Krumiede, and instructor in bacteriology, Miss Mary Smeeton.

DISCUSSION AND CORRESPONDENCE BEES AND MENDELISM

Some confusion of thought as regards Mendelian expectations is apparent in Mr. Quinn's article¹ dealing with his interesting observations on the inheritance of body color in crosses of Italian with Caucasian bees. Mr. Quinn considers that his observations are not in accord with those of Newell because the latter concluded that "the production of an F, (heterozygous) drone seems to be an impossibility and this, in turn, makes the production of a strict F₂ generation look like another impossibility." But Quinn reports obtaining a typical 1:2:1 ratio of pure yellow: heterozygous yellow: pure gray queens in F_2 , which he considers evidence that the drones as well as the queens of the F_1 generation are heterozygotes. This would indeed be true if a single F, queen mated with a single drone gave the result stated. But Quinn does not so report the facts. His statement apparently applies to the F, queens considered collectively, not to those produced by a single F_1 mother. If, as both Newell and Quinn suppose, all F. queens are heterozygotes and produce equal numbers of I and C gametes, and if they are mated some with pure I and others with pure C drones, then the expectation as regards their female offspring is that actually observed by Quinn. For a mating with a pure I drone should produce 1 II + 1 IC zygotes; and a mating with a pure C drone should produce 1 IC + 1 CC zygotes; and if the two kinds of matings are equally productive, their combined result would be 1 II + 2 IC + 1 CC, as reported by Quinn. It is therefore unneces-

¹ SCIENCE, June 30, 1916.