city forestry. Among these positions was that of chief inspector of forests for New Zealand, consulting forest engineer for the government of India, chief of the timber section of the Income Tax Bureau, forester for the province of Shantung, China, state forester of Connecticut, commissioner of forestry for Maine, deputy commissioner of forestry for Pennsylvania, forester for Illinois, professor of forest engineering, Syracuse, special investigator, in tropics, for Western Electric Company, and many other positions in national, state and private forestry, lumbering, wood products and kindred lines.

Recognition of the versatility and training of graduates of Yale in forestry has caused a demand for their services which the school has been unable to supply, and an increasing field is opening up in commercial lines, in the handling of lumber sales, tropical products and by-products. At the same time the increasing interest in forestry by state and private land owners is giving rise to a demand for foresters in increasing numbers to fill these positions.

THE AMERICAN PUBLIC HEALTH ASSOCIATION

The fiftieth annual meeting of the American Public Health Association will be the occasion of a Health Fortnight. From November 8-19, New York City will be the scene of activities connected with this event, and the publicity with its slogan, "Health First," will stimulate interest throughout the country. Health Fortnight will include three major divisions—a Health Institute from November 8-11; a Health Exposition, November 14-19; the Fiftieth Annual Meeting of the American Public Health Association, November 14-19.

The Public Health Exposition will be conducted under the joint auspices of the Department of Health of the City of New York and the American Public Health Association. Already allotments of space indicate that at least two entire floors of the Grand Central Palace will be occupied by the exhibitors. The exhibits will include those of educational

and philanthropic organizations and those of commercial houses producing approved articles of health value. The profits from the sale of tickets, after the cost of the Exposition and the Convention are defrayed, will be devoted to establishing nutritional clinics for the benefit of undernourished children.

The Health Institute from November 8-11 will present to visitors an opportunity to see the operations of established methods applied to various phases of public health work. About forty demonstrations have been planned.

Following the week of the Institute and the observance of Health Sunday, will come the opening of the scientific sessions, the meetings of the American Public Health Association in celebration of its semi-centennial. The sessions will begin on November 14 and the headquarters will be at the Hotel Astor. The scope of the meetings is indicated by their division into the following: General Sessions, Public Health Administration, Child Hygiene, Public Health Publicity and Education, Laboratory Section, Vital Statistics Section, Industrial Hygiene Section, and Food and Drug Section.

SCIENTIFIC NOTES AND NEWS

Dr. LIVINGSTON FARRAND will be installed as president of Cornell University on October 20.

Owing to a severe illness from which he is slowly recovering, Dr. Ernest Fox Nichols is unable at present to take up the work of the presidency of the Massachusetts Institute of Technology.

Dr. ALEXIS CARREL has been elected a national associate of the French Academy of Medicine, of whom there are only twenty.

The College of Physicians of Philadelphia has awarded the Alvarenga prize to an experimental study of the "Selective Bacteriostatic Action of Gentian Violet," by Dr. John W. Churchman.

Dr. Marie M. Long has been appointed head of the department of child hygiene of the city health department, Memphis, Tennessee.

Professor G. W. O. Howe, of the City

and Guilds (Engineering) College, has been appointed superintendent of the electrical department of the British National Physical Laboratory.

Mr. J. Barr, head of the textile analysis department of the City of Bradford Conditioning House, has been appointed manager of the new yarn-testing bureau at University College, Nottingham.

Dr. William Walter Cort, associate professor of helminthology in the school of hygiene and public health of the Johns Hopkins University, has returned after spending four months studying hookworm larvæ in Trinidad, West Indies. He was director of the expedition sent out for that purpose by the International Health Board of the Rockefeller Foundation.

MR. JOHN RITCHIE, associate editor of the American Journal of Public Health since 1918, has relinquished this position on the removal of the journal from Boston to New York.

Dr. Edward A. Spitzka has been appointed chief of the Medical Rating Section in the New York Office of the U. S. Veterans' Bureau, at 23 West 43d Street.

Dr. Thomas S. Roberts, professor of ornithology and associate curator of the zoological museum of the University of Minnesota, gave a lecture on Itasca Park, on September 23, in the lobby of the Mayo Clinic. The lecture was under the auspices of the Mayo Foundation Chapter of Sigma Xi and the Rochester Unit of the Minnesota General Alumni Association.

WE learn from *Nature* that the death took place on September 11, at the age of seventy-one, of Mr. R. E. Baynes, senior student of Christ Church, Oxford, and Lee's reader in physics.

Mr. G. W. Walker, F.R.S., known for his work in physics and seismology, died on September 6 at the age of forty-seven years.

The annual conference of Potato Growers was held from October 4 to 6 at the University of California Farm School at Davis. The production and marketing of potatoes

was presented in lectures, discussions and demonstrations at the University Farm Gardens. These lectures were given by members of the staff of the College of Agriculture of the University of California and the State and Federal Department of Agriculture. The meetings of the first two days were at Davis and the meetings of the third day at the University of California campus at Berkeley.

An institute of hydrology and climatology, containing laboratories, a museum, and a library, was inaugurated recently at the College of France. Lectures in hydrology will be given, and courses will be held to train specialists for watering-places and thermal and climatic stations.

It was recently reported in Science that Baron Edmond de Rothschild had contributed 10,000,000,000 francs for the endowment of an institute for scientific research. foundation will be administered by a scientific council, composed of delegates from scientific institutions devoted to the study of physics and chemistry. It will include two representatives of the Academy of Sciences-one, each, from the sections of chemistry and physics. The Collège de France, the Museum d'Histoire Naturelle, l'Ecole Supérieure des Mines, the Faculté des Sciences de Paris, the Faculté de Pharmacie, l'Ecole Normale Supérieure, the Conservatoire National des Arts et Métiers and l'Ecole Polytechnique will each have one representative. There will also be several members elected by the council itself, so that the total number of members in the council will reach approximately twenty-five. The foundation will have at its disposal each year 600,000 francs to be distributed among investigators. In accordance with the terms of the endowment 300,000 francs must be distributed in small amounts; the balance may be bestowed in the form of one or more lump sums for costly researches of great importance. Educational establishments and government laboratories will not share in the grants offered by the foundation, as these will be reserved exclusively for the use of independent investigators in the field of physics and chemistry.

THAT Chile possesses certain agricultural products which may prove of great economic benefit to California is the belief of J. W. Gilmore, professor of agronomy at the university, and for the year 1921-22 exchange professor at the University of Santiago, Chile. Professor Gilmore has found a self-propagating bamboo tree which grows on dry lands, yet affords abundant forage for cattle during the summer months when other fodder is scarce. He also tells of two new beans that he has found, one of which is grown among the Indians of Chile, and the other a species which is suitable for higher elevations. is collecting samples of all beans grown in Chile, and expects that some of them will prove to be better than those we already have. Another discovery which has been made by Professor Gilmore is a new white-seeded vetch, which he says should be a good cover crop for our orchards. Yet another is a new raisin grape grown in the dry lands of northern Chile which is exceptionally rich in sugar and which produces raisins of high quality.

The Journal of Terrestrial Magnetism reports that, according to information received from Dr. C. E. Adams, government astronomer and seismologist of New Zealand, a New Zealand Astronomical Society was recently established, and it is proposed as soon as possible to incorporate the society under an Act of Parliament. It is further hoped "that the Astronomical Society will be able to establish branches of the International Astronomical Union and the International Geodetic and Geophysical Union." The members include Dr. Adams, Dr. C. C. Farr, Professor E. Marsden, and practically all the astronomers and physicists of New Zealand.

THE Journal of the Washington Academy of Sciences states that scales for the measurement of length are now being constructed directly from the fundamental wave lengths of light without the use of any intermediary standard such as the standard meter bars. For example, the Bureau of Standards has recently completed the rulings on a 6-inch standard scale for a manufacturing concern,

using light waves from a neon tube as the length.

NATURE states that after an interval of seven years the Geological Society of London has been able to resume the issue of its annual index to "Geological Literature Added to the Geological Society's Library," which is a complete work of reference, both as to subjects and as to the output of individual authors. The present part brings the matter down to the close of 1913.

Forecasts of the wheat yield in the northern hemisphere issued by the International Institute of Agriculture show that it will be approximately 50,200,000 tons, compared to 51,300,000 in 1920, according to a press dispatch from Rome. The crop in Europe, leaving out of consideration Great Britain, France and Germany, is estimated at 12,000,000 tons, compared to 10,500,000 last year. The United States and Canada are expected to produce 28,500,000 tons, against 28,600,000 tons in 1920, and India, Japan, Algeria, Morocco and Tunis will, it is said, yield 9,400,000 tons, against 12,000,000 harvested last year. The rye yield is computed at 8,200,000 tons, as against 6,700,000 tons in 1920, while barley shows an increase of 2.4 per cent. Oats, however, have suffered from the drought, and show a decrease of 12.3 per cent. The maize yield, based upon returns for the United States, shows a decrease of 6.2 per cent.

The New York City branch of the Alumni Association of the University of Wisconsin has established an annual scholarship of the value of \$700 to be known as "The Zona Gale Scholarship"—named in honor of a distinguished graduate of the university—to be awarded to a student who has shown that he possesses special talent of an unusually high order, and who wishes to spend all his time in the university in pursuing courses which he thinks will develop his special talent, without being required to complete studies in which he has little or no interest. The holder of the scholarship will not be required to satisfy the regular entrance requirements if he is deficient therein.

This scholarship is open to any person in any part of the country who has given evidence

of exceptional creative ability in any field of human interest and activity. Nominations for the scholarship may be made to the registrar of the university by superintendents or principals of schools, by teachers, or by any one else.

UNIVERSITY AND EDUCATIONAL NEWS

YALE UNIVERSITY has received gifts and pledges for the \$2,000,000 additional endowment required to meet the terms of the conditional offer of \$3,000,000 made at commencement in 1920 by "an anonymous friend of the university." No definite statement has been made of the manner in which the endowment will be used, but it is said that the Sterling bequest of \$18,000,000 and the Harkness gift of about \$6,000,000 had bestowed upon the university building facilities without provision for professorships, for which additional endowment is urgently needed.

APPRAISAL of the estate of the late William F. Armstrong, of New York, shows that he left property valued at \$1,822,192. Public bequests exceeding \$1,000,000, include a bequest of \$100,000 and the residuary estate, amounting to \$726,786, to Wesleyan University.

Dr. George W. Pierce has been appointed as Rumford professor of physics at Harvard University, to succeed Dr. Edwin H. Hall, who has retired from active teaching, and Dr. Theodore Lyman has been appointed Hollis professor of mathematics and natural philosophy, the chair successively held by the late Benjamin Peirce and Wallace C. Sabine.

Additions have been made to the senior staff in chemistry at the University of Illinois as follows: Drs. H. A. Neville, and C. D. Hurd, of Princeton; Dr. Edith H. Nason, of Yale; and Dr. T. E. Phipps, of California, in the division of inorganic chemistry; Dr. B. L. Souther, of Harvard, in the division of organic chemistry; Dr. G. F. Smith, of the University of Michigan, in the division of analytical chemistry; Dr. E. K. Carver, of Harvard, in the division of physical chem-

istry; Dr. M. J. Bradley, of Illinois, in the division of industrial chemistry, and Dr. R. E. Greenfield, of Illinois, in the division of sanitary chemistry and water analysis.

Julian D. Corrington has resigned the position of curator in the department of zoology of Cornell University, to accept the appointment of associate professor of biology in the University of South Carolina, Columbia, S. C.

DISCUSSION AND CORRESPONDENCE GRAND AURORA OF SEPTEMBER 1-2, 1921 (AT SILVER LAKE, N. H., LAT. 43.9° N.)

An unusual aurora was seen at Silver Lake, N. H. (lat. 43.9° N.), on the night of September 1-2, 1921. Auroral glow was first noted at about 8 P.M. (75th mer. time). At 9 it was a bright arch with some streamers, and at 9:30 stretched from about NW. to NE., was double and locally knotty, and from time to time showed some motion when faint streamers reached up to a height of 30° above or down to the horizon under the general Towards 10 the lights seemed to be getting fainter. At 2 A.M. I was awakened to see the sky filled with enormous flashing curtains. The whole family turned out onto the lake. No lights were needed and the pulsations were sufficient to be readily apparent in the house without looking at the sky. Viewed from the calm, "streaming" lake the sky was magnificent. Great folds of perhaps a dozen whitish curtains covered the sky except for a segment about 15° high in the south. Here and there a reddish tinge showed at the base of brighter folds. Waves of light rapidly traversed the sky upwards to the magnetic zenith, where some of the filmy curtains met in solid light traversed with beautiful curved The stars, which were brilliant, atlines. tracted the attention of the small children nearly as much as did the sheets of light that "winkled." The youngest, 15 months old, gazed steadily for several minutes at the bright flickerings in the NW. at 2:30. The display slowly faded, but at 2:45 there were still some lights in the zenith and to about 30° south of it. The aurora, flashing all the time