

ports an increase of new members for 1932 of 97, or 9.3 per cent.

The report includes an urgent plea for an addition of not less than one million dollars to the endowment of the garden in order to care for the increased service which it is being called upon to render to the general public and to botanical science and education.

#### FELLOWSHIPS OF THE CHARLES LATHROP PACK FOREST EDUCATION BOARD

MAKING its fourth annual award of fellowships for training leaders in forestry, the Charles Lathrop Pack Forest Education Board announces its selection of three American and two Canadian fellows for the year 1933. The fellowships were established to encourage men to obtain advanced training to better qualify them for leadership in forestry and in the forest industries. The successful candidates are:

Walter U. Garstka, instructor in forestry, Penn State Forest School. To make organic analysis of leaf litter, immediately after its fall in the autumn, collected from forests growing on podzolized and brown-earth soils.

Harold R. Hay, graduate student, University of Wisconsin. To make a study of changes in the physical properties and chemical constituency of wood subjected to steam treatments.

John Edward Liersch, junior forester, British Columbia Forest Service. To continue a demonstration begun under Charles Lathrop Pack Fellowship awarded in 1932 regarding the practicability of economic selection in the Douglas fir region.

Nicholas T. Mirov, graduate student, University of California. To make a study of transpiration by different forest cover species with reference to precipitation and to moisture content of the soil.

Louis René Scheult, graduate student, University of Toronto, Toronto. To make a regional study of forest development.

This is the fourth award of fellowships by the board. They are available to Americans and Canadians for further training in the general practice of forestry, in the forest industries, in the teaching of forestry, in forest research, or in the development of public forest policy.

The directors of the board are: Henry S. Graves, dean, Yale Forest School; Samuel T. Dana, dean, School of Forestry and Conservation, University of Michigan; John Foley, forester, Pennsylvania Railroad; William B. Greeley, secretary-manager, West Coast Lumbermen's Association; Arthur Newton Pack, director, Charles Lathrop Pack Forestry Trust; E. O. Siecke, director, Texas Forest Service; Ellwood Wilson, acting professor of silviculture, New York State College of Agriculture; Hugo Winkenwerder, dean, College of Forestry, University of Washington, and Raphael Zon, director, Lake States Forest Experiment Station.

The offices of the board are at 1214 Sixteenth Street, N.W., Washington, D. C., and correspondence should be addressed to Tom Gill, secretary.

## SCIENTIFIC NOTES AND NEWS

DR. HENRY NORRIS RUSSELL, research professor of astronomy and director of the observatory at Princeton University, president this year of the American Association for the Advancement of Science, will deliver the Halley Lecture at the University of Oxford on June 1. His subject will be "The Composition of the Stars."

DR. ROBERT A. MILLIKAN, of the California Institute of Technology, has accepted the invitation of Oberlin College to deliver the Centennial Commencement address on June 20. Dr. Millikan was recently reelected alumni trustee for a term of six years; he has served on the Board of Trustees since 1918.

DR. IRVING LANGMUIR, of the General Electric Company, Schenectady, New York, will be made an honorary member of the School of Engineering Alumni Association of Columbia University at the annual dinner on April 26. Dr. Langmuir and Dr. Michael I. Pupin will be the principal speakers.

DR. WALDEMAR LINDGREN, Rogers professor of economic geology and head of the department of geology

at the Massachusetts Institute of Technology, will retire at the end of the academic year.

THE Paris faculty of medicine has conferred the degree of doctor, *honoris causa*, on Professor Sanarelli, director of the Hygienic Institute of the University of Rome.

THE Bessemer Gold Medal of the British Iron and Steel Institute has been awarded to Dr. W. H. Hatfield, director of research in the firm of Messrs. Thos. Firth and John Brown, Ltd., in recognition of his distinguished services in the advancement of metallurgical science.

THE Gold Medal of the British Institution of Mining and Metallurgy, the highest distinction in its power to confer, has been awarded to Sir John Cadman in recognition of his work in the advancement of technical education and the development of the mineral industries, and of his distinguished public services. The following awards have also been made: The Consolidated Gold Fields of South Africa Gold Medal to Mr. Charles Arthur Banks for his paper on