London County Council, and others took part in the discussion.

DR. GEORGE D. HUBBARD, head of the department of geology of Oberlin College, will address the annual meeting of the Central Association of Teachers of Science and Mathematics at Columbus, Ohio, which will be held from November 30 to December 1, on "Why should geography be taught in the high schools?" Dr. Hubbard has recently been retained in Toledo in connection with certain problems of physiography and geography involved in the riparian case in litigation in which agricultural and fishing industries clashed.

DR. R. H. WARD, of Troy, N. Y., known for his work in microscopy and from 1869 to 1892 professor of botany in the Renssellaer Polytechnic Institute, died on October 29, aged eighty years.

SIR WILLIAM JAMES HERSCHEL, discoverer and developer of the system of identification by fingerprints, died on October 24. Sir William was born in 1833. He was the grandson of Sir William Herschel, the English astronomer, and the son of Sir John Frederick William Herschel, whom he succeeded in the baronetcy in 1871.

THE death is announced of Mr. Charles Latham, at Glasgow. Mr. Latham was the first Dixon professor of mining in Glasgow University.

WILLIAM ROBERT SYKES, the inventor of the lock-and-block system of railway signalling, died on October 2, at the age of seventy-seven years.

UNDER an agreement between the executors of the estate of the late James Buchanan Brady and his heirs, most of the estate, estimated at \$3,000,000, is now available for the New York Hospital, and makes possible the establishment of the James Buchanan Brady Foundation of Urology, which is in accordance with the testator's plans. Dr. Oswald S. Lowsley, who was named by Mr. Brady as director, has the plans of the foundation in charge. THE Robert Dawson Evans Memorial for Clinical Research and Preventive Medicine of the Massachusetts Homeopathic Hospital will receive about \$1,000,000, as residuary legatee of the estate of Maria Antoinette Evans.

THE forty-fifth annual convention of the American Public Health Association opened in Washington on October 18. Herbert C. Hoover, director of the United States Food Administration, addressed the convention at its first general session. The program for the afternoon called for a joint session of the association with the American Social Hygiene Association, the Baltimore Medical Society and the Maryland Society for Social Hygiene. A symposium on easily preventable disease control in the army, the navy and the civilian community was given by Colonel F. F. Russell, U. S. A.; Surgeon R. C. Holcomb, U. S. N.; Raymond B. Fosdick, chairman of the commission on training camp activities; Assistant Surgeon General J. W. Kerr, of the Federal Public Health Service, and Surgeon William H. Frost, director of the Red Cross Sanitary Service.

THE Civil Service Commission of the State of New York announces examinations for the State Department of Health for a physiological chemist at a salary of \$1,500; for a laboratory assistant in chemistry at a salary of \$720 to \$1,200 and for a laboratory assistant in bacteriology at a salary of \$720 to \$1,200. These positions are open to non-residents and to citizens of other countries except those at war with the United States, and in the first two positions a degree from a college maintaining a standard satisfactory to the commission or an equivalent education is required.

## UNIVERSITY AND EDUCATIONAL NEWS

COLUMBIA UNIVERSITY, New York University and the Presbyterian Hospital are beneficiaries in the will of Kate Collins Browne, who died on August 19. They will share the residue of the estate after half a million dollars is distributed in bequests. YALE University has acquired by purchase another entire city block in the center of New Haven.

THE enrollment in the College of Medicine of the University of Cincinnati shows an increase of about 40 per cent. over last year. The enrollment in 1916 was 102 compared with 143 for the year 1917-18.

In the Oregon Agricultural College Adolph Zeifle has been made dean of the newly created school of pharmacy; Miss Ava B. Milam dean of the school of home economics, and E. K. Soper, head of the department of mines at the University of Idaho, has been appointed dean of the school of mines to fill the vacancy made by the resignation of Dean H. M. Parks to head the Oregon Bureau of Mines and Geology.

PROFESSOR HOTCHKISS, of the department of business education of the University of Minnesota, has been made chief of the department of economics during the absence of Professor Durand.

PROFESSOR C. C. PALMER, of the College of Agriculture of the State University of Minnesota, has been appointed head of the department of bacteriology, physiology and hygiene, at the Delaware College, Newark, Del.

DR. ALBERT C. HERRE, for several years past professor of geography and agriculture in the Bellingham, Washington, State Normal School, has recently been appointed head of the department of biology in the same institution.

EBEN H. TOOLE, recently of the Kansas Agricultural College, Manhattan, Kansas, has been appointed to succeed Professor G. N. Hoffer as assistant professor of plant pathology and physiology, at Purdue University. Professor Hoffer has been transferred to the Agricultural Experiment Station of Purdue.

DR. C. C. FORSAITH, instructor in botany in Dartmouth College, has been appointed instructor in wood technology in the New York State College of Forestry.

E. A. REID, for the past two years instructor in electrical engineering at Minnesota, has resigned to accept a similar position at the University of Illinois.

PROFESSOR CLARENCE A. MORROW, formerly professor of chemistry in the Nebraska Wesleyan University, has been elected assistant professor of agricultural biochemistry in the University of Minnesota.

MRS. J. A. NYSWANDER has been appointed assistant professor of mathematics at the University of Nevada, to take the place of her husband, who has been called to government service.

## DISCUSSION AND CORRESPONDENCE THE "AGE AND AREA" HYPOTHESIS OF WILLIS

THE "Age and Area" hypothesis of Willis, recently discussed and endorsed by Professor De Vries in SCIENCE,<sup>1</sup> states that "the area occupied by any given species (of plants) at any given time in any given country in which there occur no well-marked barriers depends upon the age of that species in that country." The older the species is, in other words, the wider is its range. If confirmed, this hypothesis would be of the greatest scientific importance, for not only would it discredit the efficacy of natural selectionthe point chiefly emphasized by its author and Professor De Vries-but, by enabling us to identify with certainty the most widespread types as the most ancient ones, in any given region or in the world as a whole, it would also clear up a host of vexed questions in plant geography and plant phylogeny. Certain objections to the hypothesis appear to be so great, however, as to cast doubt upon its universal applicability; and a careful study of the floras of Ceylon and New Zealand, the regions with which Professor Willis has chiefly worked, serves to emphasize the complexity of the whole problem involved.

Factors other than age evidently share in determining the area occupied by a species.

<sup>1</sup> De Vries, H., "The distribution of endemic species in New Zealand," SCIENCE, N. S., Vol. XLV., No. 1173, pp. 641-642, June 22, 1917.