develop improved kinds of timber trees, by selection, by hybridization and by comparative tests of wild seed, selected seed and hybrid seed. We have every confidence in the outcome of such research and experimentation, for the tree is only a plant and that kind of experiment has succeeded with every other plant to which it has been scientifically applied. A white pine so improved in its rate of growth that it will reach in fifty years or in sixty years the size that now requires eighty years would repay the cost of the National Arboretum for a generation.

The members of the American Society of Landscape Architects here present may with propriety be asking for what purpose is this address delivered before this society, for although much has been said about the relation of the arboretum to forestry and to horticulture, little has been said about its relation to landscape art. I must confess that at the present time I am chiefly concerned not with what the National Arboretum can do for landscape art but with what landscape art can do for the National Arboretum.

The arboretum is still in the land-purchase stage. Its actual operation has not yet begun. The secretary of agriculture has purchased, or is in process of purchasing, 268 acres. He expects to make additional purchases which, with other land already owned or claimed by the government, will make a total of approximately the thousand acres originally planned for the arboretum. The site contains several elements of great dignity and beauty: Mount Hamilton, covered with a growth of mature hardwood timber and overlooking the city, with an excellent view of the Capitol, the Washington Monument and the Arlington hills in Virginia; Hickey Hill, with fine views up the Anacostia River and down it to the Potomac; the curve of the upper Anacostia, bordered with wild-rice and sweeping around to the old deer lick at Licking Banks, and the waterlily gardens at Kenilworth, one of the most beautiful sights in the city of Washington.

The National Arboretum is to be an outdoor laboratory for scientific research on trees. The materials for research are the trees and shrubs that will be planted in the area. It is planned to bring there every kind of tree that will thrive out of doors under this climate. There will be buildings, greenhouses and nurseries. Broad highways will border the arboretum, and it is expected that one of the principal entrances to Washington will pass through it. The parts of the arboretum in contact with these principal streets, or in view from them, should be developed with all the natural beauty that the situation affords. The greenhouses, the nurseries, the experimental plantings in straight lines and the every-day work with spades and hoes should be secluded from the main highways.

In the development of the National Arboretum the secretary of agriculture already has the hearty cooperation of the Garden Club of America, the American Association of Nurserymen and many scientific organizations. He would greatly appreciate the cooperation and advice of the American Society of Landscape Architects.

OBITUARY

JULIUS BUEL WEEMS

DR. JULIUS B. WEEMS, chief chemist of the Agricultural Department of the State of Virginia, died suddenly on Saturday morning, January 25, at his home in Ashland, Virginia.

Dr. Weems had been with the state for fifteen years and was widely known as a chemist. His contributions to scientific journals, in the form of articles on agricultural and chemical problems, added to the reputation which he had as a consulting and analytical chemist, and a student of farm questions before he came to the Department of Agriculture.

He was born in Baltimore, August 27, 1865, the son of Edwin Dawson Weems and Rosetta Norman Weems. Following his graduation from Maryland Agricultural College in 1888, he studied at Johns Hopkins University for two years. In 1894, while a fellow in chemistry at Clark University, he received his degree of Doctor of Philosophy. For the next ten years he was professor of agricultural chemistry and chemist of the experimental station at Iowa College.

Dr. Weems was a member of the Society of American Bacteriologists, the American Chemical Society, and a fellow of the American Association for the Advancement of Science.

W. C. J.

AUGUST TOBLER

THE death is announced on November 23 of Dr. August Tobler, the director of the Geological Section of the Natural History Museum, Basel, Switzerland. Dr. Tobler was a geologist of international reputation. He did much work in the Netherlands East Indies, his principal publication on that region being "Djambi-Verslag," which consists of a volume of 585 pages of text and 19 plates and an atlas of 9 geological maps, structure sections and a table of the different geological formations. Dr. Tobler also made studies of the geology and paleontology of northern South America, especially Venezuela and Peru. The high quality of Dr. Tobler's work is recognized by every one familiar with it. Besides the respect due him because of his scientific attainments, he endeared