west in New Jersey. There are some indications that slight disturbances have arisen in the Triassic belts of the Connecticut Valley and the Gulf of Maine, but these may be associated with the post-glacial uplift of eastern North America which is evidently still in force, if we may judge from the fact that the larger of the nearby earthquakes have occurred in those areas where this uplift has been greatest, namely, in Quebec Province, Canada. As New York City is situated near the southern margin of the territory covered by the last ice sheet and as the post-glacial changes in elevation have been comparatively slight there, no earthquakes have arisen within the city limits, nor are they likely to occur. Tremors, generated by quakes arising in New England and to the northward may be felt, however, within the city, particularly in those portions built on made land or unconsolidated sediments. It may be said, therefore, that the New York City district is for the most part an aseismic area and offers an excellent field for the instrumental study of distant and nearby earthquakes.

CHESTER A. REEDS

AMERICAN MUSEUM OF NATURAL HISTORY

## WILLIAM E. SAFFORD

DEATH has recently taken from the United States Department of Agriculture one of its most brilliant men, whose place in the agricultural world will be extremely hard to fill.

Dr. William E. Safford, for many years an expert botanist in the Bureau of Plant Industry, died in Washington, D. C., in the latter part of January after an illness of over a year, which kept him confined closely to his room.

During all the months he was ill Dr. Safford worked regularly on two books which he wanted to finish and leave as an appropriate ending to his life labors. I understand the MSS was practically completed before he passed away.

Dr. Safford was one of the most genial, wide-awake men it has ever been my good fortune to know. He was interested in everything. A musician; an artist; a world-known writer on plants and agricultural topics of every kind; a wonderful linguist; frank and boyish in his manner; a friend of every one and every one his friend; a loving husband and parent: this is the man we all knew and loved. He was born in Chillicothe, Ohio, in 1859 and graduated from Annapolis Naval Academy in 1880 with high honors. The education given a naval officer at Annapolis is conceded to be the most thorough of any educational establishment in this country, along with West Point, but Safford was not satisfied. In

1883 he took post-graduate studies in botany and zoology at Yale and later in 1885 marine zoology at Harvard. In 1920 he was given his degree of Ph.D. at George Washington University at Washington.

While in the navy he was always deeply interested in scientific botany and marine zoology. He was probably the foremost expert on the seed foods and food plants of early pre-Columbian inhabitants of this continent and contributed many important bulletins and papers on these subjects. Mr. Safford was a prolific writer and has left a large list of publications on many scientific subjects as a record of his tremendous industry.

While still in the navy he was for two years naval governor of the Island of Guam and wrote several interesting books on the people and plants of the little known island.

He had a remarkable command of languages, being frequently called upon by the state and other government departments at Washington to help entertain distinguished foreign guests. He spoke with great fluency several of the tongues of South American countries.

In his home life Dr. Safford was most happy. He idolized his wife and two fine children, a boy and a girl, whom he left to mourn his loss.

He will be sadly missed in social and scientific circles of the National Capital.

At the time of his death Dr. Safford was economic botanist in the Bureau of Plant Industry in the United States Department of Agriculture—a position which he had held for almost twenty years with distinguished success.

It is a most unfortunate fact that the farmers and stockmen of this country know so little of the important work done by such scientists as Mr. Safford and his fellow worker in the department, Charles V. Piper, recently deceased. These two men devoted almost their whole lives to the study and development of pasturage and range plants and general agricultural forage crops in the United States. It is a great pity that the scientific work of this kind which has been done by men such as Safford and Piper is generally carried on so quietly and with so little blowing of trumpets as to be almost unnoticed by the everyday world.

This, however, seems to be the fate of the scientific investigator and student. The agricultural and pastoral interests of this country owe much to Mr. Safford for his work in their behalf. May his memory ever be kept green by those who like myself have profited greatly through knowing him.

WILL C. BARNES

FOREST SERVICE, WASHINGTON, D. C.