THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE GEOLOGICAL HISTORY OF THE ANTILLEAN REGION

In selecting a subject for the address of the retiring vice-president of Section E, I have taken the most interesting but least known portion of one in which I have been very much interested during the past twenty years and more, namely, the paleogeography of North America. The portion dealt with on this occasion is the known geological development of the greater Antillean region, that is, the seas and lands bounded by the perimeters of the Gulf of Mexico and the Caribbean Mediterranean.

The deciphering of the geological development of this greater Antillean region began with the versatile and philosophical Alexander von Humboldt. In June, 1799, he and the botanist Bonpland set out for Central and South America to study their physical geography and tropical botany. Humboldt first studied Venezuela and the Orinoco country, and later traveled more than a year in Cuba. After visiting western South America, he devoted the year 1803 to Central America. True to his training, Humboldt was an ardent Wernerian, and yet the leading student of volcanoes of his time. His most valuable results, however, are his geographic descriptions.

The geographic and geologic literature of the greater Antillean region is very voluminous, embracing the results of a host of workers, widely scattered in several languages. It is, indeed, altogether too extensive to be presented in brief form. The first important work on the stratigraphy and structure of the Greater Antilles is the report on the "Geology of Jamaica" by James G. Sawkins and his English associates, published in 1869. But the father of Antillean geology is undoubtedly Robert T. Hill, whose work in Panama, Jamaica, Cuba and the Lesser Antilles forms the broad foundation on which all subsequent work must be built. The stratigraphic succession, and especially the marine faunal correlation from place to place, have been worked out more recently by T. Wayland Vaughan and his associates. Voluminous additional paleontologic work is by Gil-