is seldom found in a region of so complex geologic history. The actual conditions thus far revealed at the present stage of construction tend to confirm the anticipated behavior. In addition to the special requirements at the dam site, there are equally critical features connected with the impounded water and its delivery. The heavy load of silt, tending by its accumulation in the reservoir to reduce its storage capacity; the salt deposits of the basin, tending to contaminate the water; the shifting sands of the dune belt crossed by the All-American canal, tending to obstruct its flow—all present problems that have had to be taken into account. The discussion is devoted to the relation between these geologic features and the plan and execution of the project.

1932 International Expedition to the West Indies. Marine geology: RICHARD M. FIELD (introduced by William Bowie). The purpose of the 1932 International Expedition to the West Indies was to determine whether a geological study of an oceanic area might yield results which would appreciably advance our knowledge of geological processes and subcrustal conditions. The decision to make this effort was strengthened by fundamental investigations by Dr. F. A. Vening-Meinesz in the East Indies and his 1928 expedition in the Gulf and Caribbean. The expedition, which completed its program at Miami on March 19, is also in a measure the result of a number of oceanographic investigations in the region of the Bahamas and neighboring waters, beginning with the cruise of the *Wild Duck*, directed by Alexander Agassiz, and ending with the series of Princeton expeditions initiated in 1927. The results of the 1929 expedition to the Bahamas are already in print or are in the course of publication, the latest paper being "The Microbiological Precipitation of Calcium Carbonate in the Tropical Sea." Following the 1929 expedition, it became obvious that the related problems presented by the region covered such a wide field of geological and biological research that an International Council was formed for the further investigation of these West Indian problems. Since it was felt that, at present, the fundamental question was the relation of the structure and stability of the islands to the origin, migration and alteration of the sediments which mantle their surfaces, the 1932 expedition was planned as a geophysical survey to provide further data as to the submarine topography and related subcrustal conditions affecting the local intensity of gravity. The expedition was made possible principally through the cooperation of Dr. Meinesz, the British Government, the United States Navy and the U. S. Coast and Geodetic Survey. Four thousand miles of sonic soundings have been made and sixty-six gravity stations determined (fifty-four at sea and twelve on the islands). The submarine profiles are already available, and a number of the gravity stations have been computed. Upon the completion of the isostatic reductions, a chart will be issued by the Hydrographic Office of the United States Navy which will show not only the results of the 1932 expedition but also all the geophysical data, including seismic epicenters, for the entire Gulf and Caribbean region and contiguous continental areas. It is expected that this chart will be available for distribution early this summer. The full report on the 1932 gravimetric survey (marine unit) will be published by the Hydrographic Office of the United States Navy.

The reports of the Princeton University expeditions to Patagonia: W. B. SCOTT.

Two types of sex determination in dioecious strains of maize: R. A. EMERSON. In some organisms the male is the heterogametic sex, producing two kinds of sperm, and the female is homogametic, producing only one kind of egg, with respect to sex determination. In other forms the male is homogametic and the female heterogametic. To the first group belong flies, man, certain fishes and some dioecious plants. To the second group belong moths, birds and certain fishes. Recently Jones has reported a dioecious strain of maize in which the male is the heterogametic sex. Using somewhat different material, I have synthesized two dioecious strains of maize, the male of one strain and the female of the other being the heterogametic sex. The male type used in producing these strains is what is known as barren stalk, *ba*, a simple Mendelian recessive having normal anther-producing tassels but no ear shoots. The female types employed are known as tassel-seed, producing seeds not only on the ear but also in the tassel to the exclusion of anthers. One of these, ts_1, is a simple Mendelian recessive and the other, Ts_2, is a simple dominant. These strains maintain an approximately 50–50 numerical relation between the sexes as do most dioecious species of plants and animals. Moreover, the known linkage relations of the heterozygous genetic factors of one strain make it readily possible to demonstrate typical sex linkage of certain common maize characters.

(*To be concluded*)

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