

#### THE SMITHSONIAN STATION FOR THE STUDY OF SOLAR RADIATION

THE Smithsonian Institution has established a station for the study of solar radiation on Hump Mountain, two miles from the town of Elk Park, North Carolina, at an altitude of about 4,800 feet. Dr. Charles E. Abbot, who has just returned from Hump Mountain, reports that the main and auxiliary buildings are ready and that the equipment is nearly all hauled up to the station. With the assistance of Mr. A. F. Moore, of Los Angeles, who is to be the local director, Dr. Abbot unpacked and set up most of the observing apparatus, all of which he expects will be ready for use in a few days.

Assisting Mr. Moore, is Mr. Leonard H. Abbot, of Worcester, Mass., and associated with Mr. Moore for some weeks will be Mr. L. B. Aldrich, of the Astrophysical Observatory, who left Washington recently for North Carolina to represent Dr. Abbot. The expedition is expected to continue at Hump Mountain for a year, or longer if conditions warrant. Its purpose is to observe variations of the sun's output of radiation, such as have been discovered by the Smithsonian Astrophysical Observatory and recorded heretofore at its station located on Mount Wilson, in California. It is hoped that the cooperative measurements of the new Smithsonian station in North Carolina and the station on Mount Wilson will promote weather forecasting.

The data needed for such forecasting is secured from measurements of the sun's variation made with the bolometer, invented by Dr. Samuel P. Langley, late secretary of the Smithsonian Institution, taken at observing stations located in different parts of the world. After comparing and correcting these readings registered by the sun's rays, they are referred to standardized tables and the corresponding changes in the temperature of the earth's surface calculated in advance for different localities.

In a pamphlet on this subject recently published by the Smithsonian Institution, the author, Dr. H. Helm Clayton, of the Argentine Meteorological Service, states:

Two important conclusions are derived from this study: (1) That there is an intimate relation between solar changes and meteorological changes of short period, and that measurements of solar radiation like those made by Dr. Abbot and his associates have the greatest importance for meteorology. (2) That there is a class of meteorological changes which have their origin in equatorial regions and by a transference of air, probably in the upper layers, are felt within a few days in higher latitudes. These changes are the complement of the complex meteorological drift which goes from west to east in temperate latitudes with a component of motion from pole to equator in both hemispheres.

#### THE AQUARIUM OF THE CALIFORNIA ACADEMY OF SCIENCES

By the will of Mr. Ignatz Steinhart, recently deceased, the California Academy of Sciences will receive the sum of \$250,000 for an aquarium building to be erected in Golden Gate Park adjacent to or adjoining the buildings or museum of the Academy of Sciences. According to the terms of the will the aquarium is to be known as the Steinhart Aquarium, to be under the management, superintendence and control of the California Academy of Sciences, and the expense of maintenance to be met by the city of San Francisco.

At a recent election a charter amendment was adopted which directs the Board of Supervisors of the city of San Francisco to include each year in their annual budget an item of *not less* than \$20,000 for aquarium maintenance.

Mr. Steinhart made many bequests to charitable and educational institutions, the total amount disposed of being about \$3,000,000.

#### SCIENTIFIC NOTES AND NEWS

AMONG the degrees conferred at the commencement at Princeton University were the doctorate of laws on Dr. George E. Hale, chairman of the National Research Council, and the degree of doctor of science on Dr. Charles H. Mayo, retiring president of the American Medical Association, and Theobald Smith, director of the department of animal pathology of the Rockefeller Institute for Medical Research.