—so that the station was abandoned. This movement was not due to wind, nor to a magnetic storm, nor to any mechanical jarring of the earth.

Except an indefinite item in a newspaper, I have seen no mention of a similar experience.

To determine whether there is from trees such a discharge of electricity as might affect a delicate magnetic needle, I made (in 1895) a coil about 80 cm. diameter of fifty turns of wire, mounted on the end of a long pole, with a contact breaker and a telephone receiver in circuit, and had this coil held in such relation to large, dense limbs of trees as to enclose the lines of magnetic force from a discharge stream (if there be one) of electricity from the limb, selecting limbs in such direction as would make the coil when in proper relation lie in the magnetic meridian plane, determined by simple compass.

April 8th–12th, buds just swelling on deciduous trees, I tried a number of trees, including two or three evergreens. I could hear no disturbance in the telephone, in any position of the coil. Then putting the coil in the magnetic meridian, as explained above, to make the action (if any) stronger than mere variation of discharge, I had the circuit opened and closed. Still there was not the slightest effect perceptible. In the latter half of May, leaves quite fully developed on all except the various oaks, the experiments were repeated with the same negative results.

According to Dr. Waller's experiments, it would have been better to try my experiment in June (when the unexplained action was observed), rather than April and May, the leaves then being in fuller vigor and the temperature higher.

I. Thornton Osmond.

State College, Pa.,
January 21, 1901.

Scientific Expedition to Iceland, Greenland and Labrador.

A geological and geographical excursion in the North Atlantic is planned for the summer of 1901. Conditionally on the formation of a sufficiently large party, a steamer of about 1,000 tons, specially adapted for ice navigation, and capable of accommodating sixty men, will leave Boston on or about June 26th and return to the same point on or about September 20th. The main object of the voyage will be to offer to the members of the excursion party opportunity of studying the volcanic cones and lava-fields, the geysers, ice-caves and glaciers of Iceland, the fiords and glaciers of the west coast of Greenland, and the mountains and fiords of Northern Labrador. Some attention will be paid to the hydrographic conditions of the waters traversed. Botanists, zoologists, ornithologists, mineralogists and those interested in other branches of natural history may pursue independent studies. A hunting party may take part in the expedition; it could be landed for a fortnight or three weeks in Greenland and for about the same period in Labrador.

Explanatory lectures on the regions visited will be given from time to time by the leader of the excursion, who will also act as guide on the Labrador coast where he spent the summer of 1900. It is expected that in Greenland and Iceland, specialists on the geology and physical geography of these countries will lead the party. Wherever possible the attempt will be made to increase the stock of existing information concerning the three regions. It is desirable, though not necessary, that applicants for membership in the party possess at least an elementary knowledge of geology. Citizens of other countries as well as of the United States are invited to participate in the expedition. A physician will accompany the party.

An inclusive fee of $500 for each member will be charged, $250 to be deposited with the leader of the expedition on or before March 15th, the balance to be paid on or before June 1st.

The trip will be under the direction of the writer, and applications for membership should be addressed to him.

R. A. Daly,
Department of Geology and Geography, Harvard University.

Current Notes on Meteorology.

Report of the Chief of the Weather Bureau.

The 'Report of the Chief of the Weather Bureau for 1900' devotes considerable space to forecasts. The beginning of storm forecasts for

the North Atlantic Ocean is noted, this step being made possible by the use of reports now received from the West Indies, the Bahamas, Bermuda, France, Great Britain, Germany, etc. Whenever possible, forecasts are to be made of wind force and direction for the first three days of the voyage of all outgoing steamships. A brief history of each hurricane that occurred during the year is given, with copies of statements from persons not connected with the Weather Bureau regarding the efficiency of the storm-warning service. An important improvement in connection with the display of storm-warnings for the benefit of mariners has been made by the adoption of a specially constructed steel tower, with a flagpole at its summit. From this pole the signal flags are flown by day, and on it lanterns are displayed at night. 'Eminently satisfactory' progress is reported to have been made with experiments in wireless telegraphy. The importance of the Weather Bureau's Lake Marine service may be understood from the statement that 'each of the 20,000 or more vessels that pass Detroit receives the latest information available with regard to the force and direction of the wind, and the location and probable movement of storms.'

WEST INDIAN HURRICANES.

UNDER the title 'West Indian Hurricanes' the Weather Bureau has issued a report, prepared by Professor E. B. Garriott, which will find many interested readers. Since the United States has come to take an active political interest in West Indian affairs, West Indian hurricanes have assumed an additional importance in the eyes of the American people. This monograph gives a general account of these storms, their laws of circulation, cloud movements, tracks, formation, prognostics and characteristic phenomena. Poëy's table of hurricanes from 1493 to 1855 is given, supplemented by a table based on Weather Bureau records, giving the hurricanes from 1878 to 1900. Then follow brief descriptions, arranged by months, of recent hurricanes, including the famous 'Galveston Storm' of last September, and lastly local descriptions of historic hurricanes. Charts showing the hurricane tracks for each month for the years 1878 to 1900 accompany the report, which is to be recommended as being a readable, non-technical discussion of the subject with which it deals.

MONTHLY WEATHER REVIEW.

THE *Monthly Weather Review* for September (issued November 16th) contains the following articles: 'West Indian Hurricane of September 1–12, 1900,' by Professor E. B. Garriott; 'Special Report on the Galveston Hurricane of September 8, 1900,' by Dr. I. M. Cline, Local Forecast Official at Galveston; 'The Storm Waves of South Carolina and Texas,' by General E. P. Alexander; 'On the Color and Polarization of Blue Sky Light,' by N. E. Dorsey; 'Review of Professor Very's Memoir on Atmospheric Radiation,' by N. E. Dorsey; 'The Frequency of Hail in the United States' and 'The Crop as depending on Meteorological Conditions,' by Professor Cleveland Abbe.

R. DEC. WARD.

BOTANICAL NOTES.

BOTANICAL OPPORTUNITIES IN WASHINGTON.

IT may be doubted whether the botanists of this country fully realize the magnitude of the botanical work now being done in Washington. In the Department of Agriculture there are several 'divisions' devoted wholly to botanical investigations, and several others whose work contributes more or less to the enlargement of our scientific knowledge of plants. Thus the 'divisions' of Botany, Vegetable Physiology and Pathology, and Agrostology are so many divisions of the science of botany, while the 'divisions' of Forestry, Soils, Biological Survey, Experimental Gardens and Grounds, and Pomology, and the 'section' of Seed and Plant Introduction, are more or less contributory to botanical science. All these have much in them which is of interest to the botanist; in fact, some of the most interesting contributions to the scientific aspects of botanical inquiry have come from the second list, where the applications of science are generally emphasized. To these must be added the National Herbarium under control of the Smithsonian Institution, where are stored nearly a million botanical specimens.