

knowledge of the sun have recently been made here, and when the instrumental equipment now in process of construction has been completed, this observatory will be able to undertake more solar work than any other institution. It is, therefore, of special importance that a party should be sent from here to observe the eclipse of May 28, 1900 (probably to Georgia), particularly as the next total eclipse visible in the United States will not occur until 1918. As the work which has been planned for this party will require special instruments constructed for the occasion, the expense of the expedition will amount to about \$3,000. It is proposed to undertake three special lines of work.

THE IMPERIAL DEPARTMENT OF AGRICULTURE IN THE WEST INDIES.

WE have already given some account of the Imperial Department of Agriculture in the West Indies, established by the British Government, with Dr. Daniel Morris as Commissioner. The *Experiment Station Record*, quoting from the first number of the *West Indian Bulletin*, the official organ of the Department, gives an account of its work. In accordance with the recommendations of the West Indian Royal Commission, appointed in December, 1896, the British Government has appropriated £4,500 for the new department for the first year, and it is estimated that in future an annual grant of £17,500 will be required to carry out the recommendations of the Commission as adopted.

The headquarters of the department are at Barbadoes. Its duties are twofold: "(1) To endeavor to restore the sugar industry to a condition in which it can be profitably carried on, and (2) to encourage the establishment of other industries in such colonies as afford suitable conditions to supplement the staple industry."

Four 'principal' or 'central' experiment stations and eight 'local' stations for the improvement of the sugar cane will be established on the island of Barbadoes. The object of the central stations will be the growing of seedlings and improvement of varieties, and the carrying on of fertilizer experiments. The more promising varieties will be given a practical trial at the local stations to test their adaptability and value in different soils and localities,

and also as a demonstration to the planters in each parish. Experiments on similar lines have been arranged for at Antigua and St. Kitts, while the work previously inaugurated at Trinidad will be largely extended and the necessary chemical assistance provided. The botanic stations placed under the control of the department are those at Tobago, Grenada, St. Vincent, Barbadoes, St. Lucia, Dominica, Montserrat, Antigua, and St. Kitts-Nevis. The object of these stations is to test and distribute promising economic plants for the region, introduce new or little-known plants for experimental cultivation, and conduct experiments on the improvements of sugar cane. In addition they distribute information, and send out lecturers for institute work.

It is also proposed to establish central sugar factories equipped with the best machinery, and it is the expectation of the department to establish one or two experimental factories at an early date. The plan of the Royal Commission to establish agricultural schools in connection with the botanic stations has been carried out by opening a school at Dominica, and others will be started at St. Vincent, St. Lucia and St. Kitts-Nevis as soon as the necessary land is obtained. Furthermore, the department is prepared to offer grants to enable certain institutions to employ teachers in agricultural science, and possibly to provide a number of scholarships and in coöperation with the central educational authorities in each colony, the teachers in the elementary schools will be given a course of instruction in the principles of agriculture, to enable them to give simple instruction and conduct school gardens. It is proposed to attach an agricultural instructor to each of the botanic stations, who will travel about holding meetings and demonstrations, and imparting information on improved methods directly to the planters; and in addition instructors or experts in special lines, will be employed to spend a month or two on each island. The publications of the department will include handbooks on the cultivation of special crops, bulletins and leaflets—the latter especially being in very simple clear language. The *West Indian Bulletin*, mentioned above, will be issued by the department periodically.