

and Venus. Nothing else could be distinguished, not even the first-magnitude star Aldebaran. The plates exposed during the last half showed even less, as the clouds were then thicker.

The accompanying illustration (Fig. 2) shows the instrument used to obtain the photographs. If the weather had been fine it would have been possible to have obtained photographs which

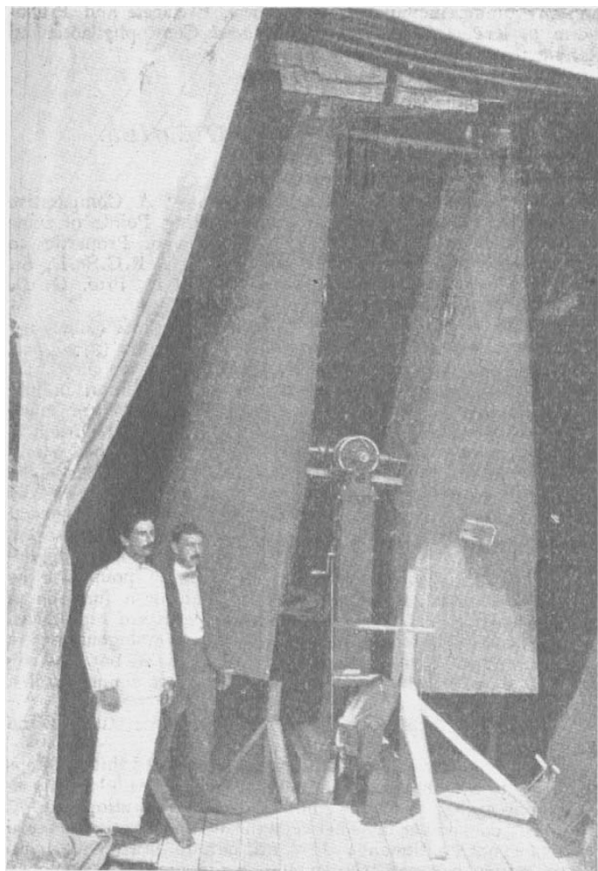


FIG. 2.—The Intra-Mercurial Planet Apparatus of the Smithsonian Institution.

would have decided whether the impressions of the supposed small planets within the orbit of Mercury, which appear upon the photographs of the previous eclipse, represent real bodies or not.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

A FEW particulars of the late Mr. Robert Irvine's bequest for the chair of bacteriology in Edinburgh University are given in the *Lancet*. Certain shares in the Christmas Island Phosphate Co., Ltd., are to form a separate trust to be invested until the property accumulates to the value of 25,000*l.* or 30,000*l.*, when the trustees are to pay the sum over to the Association for the better Endowment of the University of Edinburgh, or to such authorities in connection with the University of Edinburgh as the trustees shall deem expedient, for the purpose of founding a professorship of bacteriology in the University and the equipment of a class-room and laboratory for the teaching of the same, and for conducting original investigation in that subject.

FOLLOWING the example of the London Technical Education Board, the Central Welsh Board has arranged for a conference of science teachers, to be held on Thursday, May 15, at the County

Buildings, Festiniog. At the morning meeting, papers will be read by Mr. J. Griffith, on "The Teaching of Science as a Preparation for Industrial Life," and Miss Holmer, on "The Value of Biological Teaching for Girls." At the afternoon meeting, papers will be read by Dr. J. J. Findlay, on "The Correlation of the Teaching of Science and Mathematics in Lower Forms," and Mr. W. Saunders, on "Nature Study as an Introduction to Science Teaching." It is hoped that the conference will assist the development of science teaching in Welsh intermediate and technical schools.

AT the Glasgow meeting of the British Association last year, a committee was appointed in connection with the section of Educational Science to consider the conditions of health essential to the carrying on of the work of instruction in schools. The committee is collecting information and tabulating records with reference to original observations on the periods of day appropriate for different studies, the length of lesson, and the periods of study suitable for children of different ages; anthropometrical and physiological observation forms in use in various schools, with a view to prepare a typical form for general use; anthropometrical and physiological observations recorded in different schools for a series of years on the same children; investigations into the causes of defective eyesight in school children and a definition of the conditions necessary for preserving the sight, and the practical knowledge of hygiene possessed by school teachers. Cooperation in obtaining information on these points is invited. Any facts or references relating to the subjects under consideration should be sent to the chairman, Prof. C. S. Sherrington, F.R.S., or to the secretary, Mr. E. White Wallis, 72 Margaret Street, W.

A NOTABLE event, marking the progress made by agricultural education in the States, will take place on July 7, when the first classes of the Graduate School of Agriculture assemble in the Townshend Hall of the Ohio State University. The Graduate School will provide advanced instruction in agricultural science for teachers and investigators. It meets under the auspices of the Ohio State University (where the movement originated), the Department of Agriculture, and the Association of American Agricultural Colleges and Experiment Stations. The session will last for four weeks, and parallel courses of instruction in animal husbandry, dairying, the culture of field crops and other subjects will be given by a special staff of thirty professors and lecturers, including many of the best-known teachers at the American agricultural colleges. The classrooms, laboratories and apparatus of the Agricultural College of the Ohio State University will be placed at the disposal of this staff. Typical animals will be provided for demonstration purposes, and lectures will be illustrated by specially prepared specimens and diagrams. Admission to the school is limited to graduates, or to persons specially recommended by college authorities. The fee for instruction is six dollars, and the entire cost of the course, apart from travelling expenses, need not exceed thirty dollars.

SCIENTIFIC SERIALS.

American Journal of Science, April.—On the use of the stereographic projection for geographical maps and sailing charts, by S. L. Penfield. In continuation of previous papers on the same subject, the various modes of stereographic projection are described with photographic illustrations from models, with remarks on the use of the stereographic protractor for measuring distances along great circles, of measuring spherical angles at a given point, together with various applications in navigation.—On the hind limb of *Protostega*, by S. W. Williston. A description of a hind limb of what is probably *P. gigas*, found in the Kansas chalk two years ago. The specimen had for the most part been washed from its matrix, and the original relations of the bones lost. It is characterised by the femur being much more slender than the specimen described by Case.—The physical effects of contact metamorphism, by Joseph Barrel. Although much has been developed in past years concerning the physical, chemical and mineralogical effects of the metamorphism produced in sedimentary beds by the contact of igneous masses, but little has been said concerning the wholesale liberation of gases from the sediments so affected. The shrinkages of volume, the formation of vein fissures, impregnation deposits, and new intrusion