MAGNETIC AND ALLIED OBSERVATIONS DURING THE TOTAL SOLAR ECLIPSE OF AUGUST 30, 1905.

THE stations finally decided upon by the department of terrestrial magnetism of the Carnegie Institution of Washington in order to provide for the proper distribution and successful study of the subject under investigation were as follows:

Labrador: Battle Harbor (magnetograph, atmospheric electricity observations and declination eye-readings, the whole under the direction of J. E. Burbank, assisted by Messrs. Bowen and Homrighaus) and Turnavik (magnetic declination eye-readings by Mr. G. L. Hosmer, of the Massachusetts Institute of Technology). Both parties were supplied with full sets of absolute instruments with which important magnetic secular variation and magnetic distribution data will be obtained en route and returning. As the Canadian magnetic expedition, under the direction of Professor Stupart, located its station in Labrador within the belt of totality, the above stations were selected so as to have one immediately south of the belt and the other about the same distance north. Dr. W. G. Cady, of Wesleyan University, furthermore, made magnetic observations at Black Point, Nova Scotia, and Dr. L. A. Bauer, assisted by Professor W. C. Bauer, of Baker University, observed at Missinabi, Ontario, Canada.

In addition, Professors Elster, Geitel and Harms made atmospheric electricity observations at Palma, Majorca. It was also found that the department could avail itself of the skill and experience of Professor Palazzo, director of the meteorological and magnetic service of Italy, and so made arrangements for magnetic, electric and meteorological observations under his direction at Tripoli.

Observations were made under the auspices of the United States Coast and Geodetic Survey at Pembina, North Dakota, by Professor H. W. Fisk, of Fargo College; at Wausau, Wisconsin, by Mr. C. C. Craft; at Colebrook, New Hampshire, by Dr. G. B. Pegram, of Columbia University, and at the various magnetic observatories. At the Cheltenham Magnetic Observatory both special magnetic and electric observations were made under the direction of the observer-in-charge, Mr. W. F. Wallis.

At all of these stations the assigned program of work as published in SCIENCE was successfully carried out.

These stations in addition to those by other countries will afford a unique and most valuable collection of data covering the entire belt of totality. The hearty cooperation secured from foreign countries has been very gratifying, some of them going to considerable expense and pains. To cite but one instance, Russia in order to complete the distribution of stations along the belt of totality, sent under the auspices of the St. Petersburg Academy of Sciences, an expedition specially equipped for magnetic work and placed it under the direction of one of its most experienced magneticians, M. Dubinsky, in charge of the Pawlovsk Magnetic Observatory. Other European countries were no less zealous and likewise either sent special expeditions equipped for magnetic and electric work under the direction of able and experienced observers or made special arrangements for careful and comprehensive observations at their home stations.

According to the reports already received from observers in the United States and Canada, the eclipse interval was a rather disturbed one, due to a cosmic magnetic storm, the magnetic disturbances having in fact begun several days before the day of the eclipse. During the night of August 29 and 30, brilliant polar lights were visible at the northern stations.

At the writer's station (Missinabi, Canada, 48° 28′.6 N. and 5^h 33.9^m west of Greenwich) in addition to the disturbances already referred to, there was a smaller fluctuation about the time of maximum obscuration of the sun of the character and amount to be expected as the eclipse effect—as judged by previous eclipses. However, whether this particular fluctuation is really to be referred to the eclipse can not be stated definitely until the records have come in from other stations. If it is found that the characteristic features of

this fluctuation did not take place simultaneously at widely distant stations, but progressed in accordance with the passage of the shadow cone, the presumption will be strong that an eclipse effect has again been detected. A fuller announcement must be reserved for a later occasion.

L. A. Bauer.

Dept. Terrestrial Magnetism,
Carnegie Institution,
Washington, D. C.,
September 11, 1905.

A National Conference of Trustees of American Colleges and Universities.

A National Conference of Trustees of American Colleges and Universities will be held at the University of Illinois, Urbana, Illinois, beginning Tuesday, October 17, 1905. All trustees of such institutions and all persons who have served as trustees are cordially invited to attend.

The sessions will be held during the week in which Dr. Edmund J. James will be formally inaugurated as president of the University of Illinois. The members of the conference will be invited to attend the exercises connected with the inauguration. This will give the members of the conference an opportunity to meet representative men, presidents and professors, from many different institutions, who will be in attendance as delegates, and also to inspect the work of one of the larger of the state universities.

It is well known that the method of governing higher institutions of learning by boards of trustees, that is, bodies of non-experts—laymen, so to speak, in the field of education, —is peculiarly American.

In England the old universities are self-governing bodies, controlled largely by the faculties; in France and Germany they are departments of the government, and so far as they are not directly under the control of the government, they are autonomous, that is, ruled by the faculties. In the United States alone we felt it necessary to create a third organ, an independent, often self-renewing body of non-experts, in whose hands the entire legal control has usually been placed.

Many authorities regard this as a most satisfactory method; others find in it some of the most serious weaknesses of our American system of higher education; all believe that the problems connected with such a plan of control are far from being worked out satisfactorily.

This conference has been called for the purpose of discussing some of the most important questions of college and university administration, involving the relations of trustees, presidents and faculties. Among the questions which will be discussed are the following:

1. What should be the real administrative body of a college or university, the faculty or the trustees?

Should the trustees limit their functions to selecting a faculty and then vest in the latter the actual administration, or should the board itself undertake to administer the institution, either as a body or through its committees?

2. Should the president of the institution be the sole advisory authority to the board of trustees, or should the other administrative officers, or the various faculties, be consulted?

3. Should the faculty be authorized to nominate men to the board for vacancies, or should that be done by the president or by the committees, or by the members of the board?

4. How should trustees be selected? (*A*) By cooperation? (*B*) By the alumni? (*C*) By outside authority? (1) In case of private institutions, by the church or other body? (2) In case of state institutions: (*a*) Appointed by the governor? (*b*) Elected by the people? (*c*) Or *ex officio, e. g.,* governor, superintendent of public instruction, etc.?

5. Should the trustees assume entire control of the financial administration, or should they allow the faculties to have a representation also, by allowing them to submit a budget either by departments or as a whole?

6. Should the trustees, if they reserve the financial authority, undertake to determine the budget in all its details, or should they simply distribute by departments and leave it to the individual departments to make detailed distribution?