

## ANNUAL MEETING OF THE ASTRONOMICAL SOCIETY—PROF. W. H. PICKERING ON THE NOMENCLATURE UPON MARS—ELECTION OF OFFICERS—DR. OTTO HAHN ON METEORITES.

The annual meeting of the Astronomical and Physical society of Toronto was held at the residence of Dr. E. A. Meredith, Rosedale, Mr. John A. Paterson, M. A., vice-president, in the chair. The attendance was large. The chairman made a verbal report respecting the interview had with Mr. H. A. Massey the preceding week. The hope was expressed that Mr. Massey's noble example would be emulated, and that the day was not far distant when Toronto shall possess a popular observatory for the use of students of astronomy. The letters read included one from a resident of Assiniboia, who takes an interest in the published reports of the society, and one from Prof. W. H. Pickering, director of the Harvard college observatory established at Arequipa, Peru, an observatory which has become famous owing to the work done in observing the planet Mars during the opposition of 1892. Difficulty had been experienced in appreciating everything contained in Professor Pickering's telegraphed reports to the press owing to a want of uniformity in the Martian names employed in England, Europe and the United States. His attention having been called to this, the professor thus wrote to the society:—"The nomenclature upon Mars is certainly in very bad shape, and I should be glad to join in any movement to improve it. I feel the more interest in the matter as I hope to publish a map of the planet, showing a number of features not previously located. Personally, I find Prof. Schiaparelli's names often very long and very hard to remember. The English nomenclature, in that respect, seems to me much superior. On the other hand, if that is retained, it seems to me the same difficulty will arise in the future that now exists in the case of the moon—very inconspicuous and uninteresting peaks commemorate great names like Herschel, Le Verrier and Encke, while much more important summits are named after mediocre men who lived long before them. Moreover, it seems to me a little presumptuous to foist any man's name upon a grand natural object. I am quite prepared in my work to adopt any plan of nomenclature that meets with general acceptance."

Owing to the fact that Dr. Otto Hahn had accepted an invitation to address the society upon the subject of "Meteorites," one to which he has given much attention, the routine business was postponed until the next meeting. The following officers of the society for 1893 were, however, declared to have been duly elected:—Honorary president, the Hon. Geo. W. Ross, LL.D., minister of education; president, Charles Carpmael, M.A., F.R.A.S., F.R.S.C., etc., director of the Toronto observatory; vice presidents, Larratt W. Smith, Q.C., D.C.L., and John A. Paterson, M.A.; treasurer, James Todhunter; corresponding secretary, G. E. Lumsden; recording secretary, Garnet H. Meldrum; librarian, G. G. Pursey, who with the following gentlemen compose the council of the society:—Messrs. A. Elvins, A. F. Miller, E. A. Meredith, LL.D., Arthur Harvey and D. J. Howell.

Dr. Hahn's paper was an elaborate one and the interest aroused by it was enhanced by the exhibition of a large number of micro-photographs and specimens. Having referred to the superstition respecting meteorites during the period when they were objects of worship, and to the use by the ancients of meteoric iron for weapons, at a time when the melting of iron was unknown, Dr. Hahn dealt in a critical manner with the chemical and physical nature of meteorites, the different kinds—iron, half-iron and stone (chondrites, enkrates and cool meteorites), their constituents and the chemical combinations contained in them, the former being the same as on the earth, the latter nearly all the same. The doctor then took up the question of the origin of meteorites, concerning which he has published a book, in which are detailed the organisms found by him to occur in the chondrites. On this point, he laid stress on the constitution of the chondrites, their structure as rocks, the structures of the enclosures (Xondroi), which have not the appearance of fossils bedded in rock, nor of a glassy mass, but as particles of the rock itself. Next, he explained the structures of the enclosures, or substances, found in the meteorites and their relation to the structure of organisms such as corals (Favosites), sponges and crinoids, all fossils occurring in the earliest schists of the earth. Dr. Hahn contends that meteorites are not broken planets, that most of them have fallen in the same shape and are of the same constitution; and that "as they are born, each is the germ of a planet if it could find material enough for growing." The doctor's collection of meteorites is very large, and many of the specimens have been polished so as to show the beautiful forms within them. His collection of micro-photographs seemed to be very complete and challenged the admiration of the members of the society, the doctor having, with patience and skill, prepared his own microscopic slides. The examination of the slides, by means of seven or eight powerful microscopes, which brought out perfectly the exquisite details of the specimens, was by no means the least interesting portion of the evening's work. Dr. Hahn was accorded a hearty vote of thanks for his able paper, and for a series of photographs and meteorites presented by him to the society.

The next meeting of the society will be held at the residence of Mr. G. G. Pursey, 139 McCaul street, when the business left over will be transacted and the annual address of the president be made.