MOSSES OF THE CASCADE MOUNTAINS.

UNDER this title the Cambridge Botanical Supply Company is publishing sets of mosses collected by J. A. Allen, in 1898, in the Cascade Mountains of Washington. Each set contains 147 numbers, one of which (56. *Pohlia porosa*) is new to science, and another (46. *Zygodon rupestris*) is new to North America. The determinations have been made by Mrs. E. G. Britton, with the aid of Geo. N. Best, J. Cardot, Harold Lindberg, F. Renauld and others. An examination of the specimens shows them to be ample and well preserved. The collection is a notable addition to the exsiccati of Western North American Mosses.

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*ACTIVITY IN MAGNETIC WORK.**

Magnetic Survey of Wurtemburg.—Work on this survey, under the direction of Professor August Schmidt, will be begun during present summer.

Magnetic Survey of the Azores.—Captain F. A. Chaves writes, that the magnetic survey of the Azores was begun last year, and that he has established at Ponta Delgada a declinometer for eye-readings, with the aid of which he will reduce the field observations to the same moment of time.

Magnetic Work in Japan.—In Japan, complete photographic registrations of the variations of magnetic elements are now being continuously made at the Central Meteorological Observatory, and the four stations belonging to the Earthquake Investigation Committee, viz:

	Lat. (North)	Long. (E. of Gr.)
The Meteorological Station, Nemuro.....	43° 20′	145° 35
The Second Higher School, Sendai.....	38 15	140 52
Central Meteorological Observatory, Tokio.	35 41	139 45
The Meteorological Station, Nagoya.....	35 10	136 55
The Fifth Higher School, Kumamoto.....	32 48	130 42

All these stations are provided with a set of Mascart's self-registering magnetograph, and the instruments for direct measurements. The daily records are all dispatched without delay to the Central Meteorological Observatory for comparative investigations.

Since 1897, at the Central Meteorological Observatory, the absolute measurements of magnetic elements are being taken once a month. The instruments with which the measurements are carried out are the declinometer, vibration and deflection apparatus constructed by Professor Tanakadatè, of the Tokio Imperial University, and a dip circle of Kew pattern.

The buildings at all the stations are constructed of wood, with exclusion of iron, and the supports for instruments are made of granite, or marble, placed on the masonry work of white bricks which are free from magnetic ingredients.

The extreme dampness of the soil in this country renders it difficult to use underground rooms, which are very desirable for constancy of temperature. On this account the buildings at the four stations, except at Tokio, are made above the surface of the ground, and great care is taken to keep off the sudden changes in temperature.

At Tokio, besides the underground rooms for the variation instruments there is also a building for absolute measurements, constructed with proper precautions against any disturbing influence.

The first annual report on the observations of terrestrial magnetism and atmospheric electricity made at the Central Meteorological Observatory is now passing through the press.

The precise account of the recent magnetic survey in Japan carried out under Professor Tanakadatè, we understand, is to appear shortly in the *Journal of the College of Science*, Tokio. The first and second papers of the magnetic survey made in this country several years ago have already been published in the same Journal.

Magnetic Survey of the United States and Countries under its Jurisdiction.—The Congress of the United States has appropriated for field expenses, and purchase of magnetic instruments during fiscal year, July 1, 1900, to July 1, 1901, the sum of $25,000; this is exclusive of office expenses and salaries of permanent employees. The field work is fairly well under way. Ten complete magnetic outfits are now in use by observers in various parts of the United States and Alaska. A site for the standard

* From advance proofs of *Terrestrial Magnetism and Atmospheric Electricity.*

Magnetic Observatory or Principal Magnetic Base Station, near Washington, D. C., has been selected, and the erection of the buildings is now in progress. A temporary magnetic observatory, equipped with the Eschenhagen magnetograph, is in operation at Baldwin, Kansas. Sites for the magnetic observatories in Alaska and Hawaiian Islands will also soon be selected, and the erection of the necessary buildings will begin within a year. At certain specified times simultaneous observations, at present simply of declination, are made by all the magnetic parties, in which important work, beginning with September, various universities distributed over the entire country will co-operate.

Magnetic Observatory at Tacubaya, Mexico.—Senor Moreno sends us the following information: "In the beginning of last year, having finished our magnetic department we installed the apparatus and began taking observations in March. A little later we were obliged to take out the apparatus on account of the excessive humidity which appeared in two of the subterranean rooms. After the rainy season had passed some provisions were made to prevent the recurrence of dampness in the future, and we were successful to the extent that the two rooms mentioned are entirely dry. On the 5th of February of this year we began anew our observations with three direct reading instruments."

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*JENNER INSTITUTE OF PREVENTIVE MEDICINE.**

THE annual general meeting of the Jenner Institute of Preventive Medicine was held at Chelsea on June 29th last, under the chairmanship of Lord Lister. Among those present were Sir Joseph Fayrer, Surgeon-General Hooper, Professor Greenfield, Professor Simpson, Dr. McCrury, Dr. Bridgwater, Colonel Addison, and Mr. Shattock. The governing body reported that the transference of Lord Iveagh's gift for the promotion of the objects of the Institute had been effected, and a governing body which would in future control its affairs had been constituted. The Director (Dr. Allan Macfadyen) reported satisfactory progress in the work of the Institute during the past year. The fitting up of the Institute buildings, with the exception of the museum, was now completed. Among other additions during the year were a physiological room, a room for incubating purposes, and a cold-storage room.

Mr. Briggs had presented a Hansen apparatus for yeast culture, and considerable additions had been made to the library. The second volume of the *Transactions* contained nineteen contributions and included a paper by Professor Ehrlich. Three papers had been communicated to the Royal Society on the influence of the temperature of liquid air and hydrogen upon bacterial life. The experiments were conducted with the kind co-operation of Professor Dewar and a further series was contemplated. In conjunction with Dr. Morris and Mr. Rowland a paper has been submitted to the Royal Society on Expressed Yeast-cell Plasma (Buchner's 'Zymase'), and the research had discovered a new method for triturating organisms. Systematic investigations were being carried out in the bacteriological department upon enteric fever, tuberculosis, and the etiology of cancer, with the co-operation of Dr. Hewlett and Mr. Rowland. Various investigations had been published during the year by Dr. Hewlett and other members of the staff. It was proposed to set on foot a systematic inquiry into the nature and origin of food poisons. A number of workers had utilized the laboratories for purposes of research during the year. Special investigations had been carried out for public authorities during the year on tubercle in milk, on glanders and anthrax, and other subjects.

The illustrations for the *Transactions* had been prepared by Mr. J. E. Barnard in the photographic department of the Institute. Dr. Harden, chemist to the Institute, was continuing his investigations on the chemical products of pathogenic and other micro-organisms. Dr. Harris Morris, lecturer on Technical Mycology, reported that a number of students had made use of the Hansen Laboratory, and that researches on yeasts, diastases, zymase, and other subjects of technical interest had been prosecuted. Dr. George Dean of the antitoxin department, had made experiments on the best conditions for obtaining powerful toxins and

* From the *British Medical Journal.*