

DESCRIPTION OF THE OBSERVATORY BY DR. SMALLWOOD.

The observatory is placed in the magnetic meridian, is constructed of wood, and has an opening in the roof, furnished with sliding shutters for taking observations by means of the Transit Instrument, of the passage of a Star across the meridian for the purpose of obtaining correct time.

It is also connected by the Montreal telegraph with the principal places in the United States; the wires being laid into the Observatory. It has also a seven-inch achromatic telescope, 11 feet focus. The object glass, by Fraunhofer of Munich, is mounted equatorially and possesses right ascension and declination circles; and observations are taken on the heavenly bodies as often as there are favourable nights.

Observations for the purpose of Meteorology, are taken by the usual instruments, at 6 and 7 a.m. 2, 9 and 10 p.m. daily, besides, extra hours, on any unusual occurrence. Constant tri-daily observations are also taken on the amount and kind of atmospheric electricity, also on the amount of Ozone, and likewise particular attention is directed to the phenomena of thunder storms—all of which observations are regularly recorded. Besides these daily observations, record is kept of the temperature of springs and rivers and the opening and the closing thereof, by ice; also on the foliation and flowering of plants and trees, and the periodic appearance of animals, birds, fishes and insects, besides the usual observations on auroras, haloes, meteors, zodiacal light, and any remarkable atmospheric disturbances.

Many of the instruments, are self-registering and to some the photographic process may be applied, being constructed for that purpose.

The Observatory is furnished with four barometers. 1. A Newman standard, 0.60 of an inch bore; the brass scale extends from the cistern to the top of the tube, and is adapted for registration by the photographic process. 2. A Negretti and Zambra's tube, 0.30 of an inch bore; another of a small bore, and also an Aneroid. The cisterns are all placed at the same height (118 feet,) above the level of the sea and are read at each observation.

Thermometers of Sixes, Rutherford, Negretti, &c., the readings of which are corrected, with the standard instruments of the new observatory, and most of the scales are engraved on the stem of the tubes. Care is taken to verify them twice a year, they are placed four