

Observatory

Latitude, N. $45^{\circ} 30' 17''$. Longitude, $4^{\text{h}} 54^{\text{m}} 18^{\text{s}} 65$.

Height above sea level 187 ft.

Superintendent.—C. H. McLEOD, M.A.E.

Assistants. } ROBT. BICKERDIKE, Jr., B.A.Sc.
 } O. E. S. WHITESIDE, B.A.Sc.

Meteorological Observations are made every fourth hour, beginning at 3^h 0^m Eastern standard time; also at 8^h 0^m and 20^h 0^m. Independent bi-hourly temperature observations are also made. The principal instruments employed are the following:—Two standard mercurial barometers; one Kew standard thermometer; two Pastorelli thermometers; one maximum thermometer; one minimum thermometer; one set of six self-recording thermometers, with controlling clock, battery, etc.; two anemometers; one wind vane (wind-mill pattern), one anemograph, with battery, etc.; one sunshine recorder; one rain-band spectroscope; and one rain gauge.

The Anemometer and Vane are on the summit of Mount Royal, at a point about three-quarters of a mile northwest of the Observatory. They are 57 feet above the surface of the ground and 810 feet above sea level.

The Astronomical Equipment consists of:—The Blackman Telescope ($6\frac{1}{4}$ in.); a photoheliograph ($4\frac{1}{2}$ in.); a $3\frac{1}{4}$ in. transit, with striding level, etc.; a prismatic (8 c.m.) transit instrument also arranged as a zenith telescope, a 2 in. transit in the prime vertical; two collimating telescopes; one sidereal clock; one meantime clock; one sidereal chronometer; one meantime chronometer; one chronograph; batteries, telegraph lines and sundry minor instruments.

Observations for clock errors are made on nearly every clear night. Time exchanges are regularly made with the Toronto Observatory. Time signals are distributed throughout the city by means of the noon time-ball, continuous clock signals, and the fire alarm bells; and to the country, through the telegraph lines.

Observations of sun spots, for position and area, are made with the Blackman telescope and the photoheliograph.

Courses of instruction are given in the use of the meteorological instruments, see parag. 13, page 55, and in astronomical work to the Fourth Year Students in the Civil Engineering Courses.