

## REMARKS ON TABLES.

TABLE I.

The times of observations given in this table are those employed at all the telegraph stations in North America. Most of the stations report by telegraph to Toronto three times daily, but there are some which report only by mail; of these some take observations at all three hours, some omit the night hour, and some observe only in the morning. This observation corresponds in time with the international synchronous series.

For the morning observations at Cornwall, Stratford and Goderich this office is indebted to the Principals of the High Schools at those places, who, by permission granted by the Department of Education of Ontario, have kindly taken these observations, in addition to those required by that Department.

*Barometric Corrections.*

The readings of the barometer, as given in the present tables, are reduced to sea level by means of the formula of Laplace, omitting the term which depends on the latitude, and that for the diminution of gravity with increased height above the sea.

There are a few stations which were not supplied with barometers from the Toronto office, and which have not been visited for verifying either the errors of the instrument or the supposed height above sea-level.

At Toronto the standard barometer has a tube with an internal diameter of .506 inches. The correction for capillarity has, by frequent measurements of the meniscus, been determined as .007 of an inch. This correction has been applied in the tables. In making comparisons between readings of the barometer taken in Canada and those in the United States, it should be remembered that, as already stated in the Fourth Annual Report of this office, the standard barometer employed for the Dominion reads higher by .014 inches than that of the Signal Office.

*Remarks on the Combinations employed for obtaining Mean Temperature.*

Unless otherwise stated, the mean temperatures given are the arithmetic means of the temperature observed at 7 a.m., 2 p.m. and 9 p.m., giving double weight to the latter hour.

At Welland and North Gwillimbury, where 8 a.m. has been used, they have been reduced to 7 a.m. by the application of corrections obtained from the Toronto bi-hourly series.

Halifax, N.S., equal intervals of three hours,

Sydney, N.S. do

Spence's Bridge, B.C. do

Woodstock, Ont. do

Fredericton, N.B. do

Montreal, Q. do

St. John's Coll., Manitoba do

Quebec, Lt.-Col. Strange, R.A., equal intervals of two hours.

Fort Walsh, N.-W. Territory do

St. John, N.B. do

Kingston, Ont., Lieut.-Col. Irwin, R.A. do

Toronto, at 6 and 8 a.m., 2, 4 and 10 p.m. and midnight.

Newmarket, Ont., 7 a.m., and 1 and 9 p.m.

Ten Ontario High Schools, viz.:—Goderich, Stratford, Barrie, Windsor, Simcoe, Hamilton, Peterborough, Belleville, Pembroke and Cornwall, 7 a.m., 1 and 9 a.m.