

the country, as it were, actually before his eye, instead of the flat map on which the data are charted.

The official may know and predict accurately the general direction in which a storm will move, and yet in thickly populated parts, as western Ontario, the passage of a storm only twenty miles to the northward or the southward of the point fixed in advance by the forecaster will result in weather conditions which must disappoint thousands of people who are interested therein. The narrow difference of a few miles in predicting twenty-four hours in advance the path of a storm which travels 600 or 700 miles daily is almost infinitesimal as regards the storm itself, and yet it is sufficient to produce cold northerly winds, with snow, in place of warm southerly winds, with rain, or vice versa.

The introduction of the telegraph made it possible to collect meteorological data from a large section of country in time to make it of use in following the weather changes over a whole region at the time the events are actually taking place, and also to transmit storm warnings in advance of the approach of a storm. The telegraph is to the meteorologist what the telescope is to the astronomer. Thus we follow the movement of cyclones and anti-cyclones and their accompanying weather conditions across the country in much the same manner that we can follow the movements of a railroad train if we know its time and place of starting, and its route and speed. But the cyclones or storms vary so much in intensity, in the paths which they take, and in their velocity of movement, that their positions and conditions can usually be foretold only day by day. Once having fixed the position of a cyclone or anti-cyclone with regard to any place, we know the general weather conditions at that place as shown by the distribution of the meteorological elements in cyclones and anti-cyclones.

The daily weather maps are prepared in the following