and it varies with the time of year; for these reasons days of rain, according to the total fall in 24 hours, have been arranged in three classes.

Light rain not exceeding ·1 of an inch.

Direction.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
October to March.....	9	11	15	16	15	13	12	9
April to September.....	10	11	13	10	10	16	17	13
Year.....	10	11	14	13	13	14	14	11

Moderate rain more than ·1 of an inch and less than ·5 of an inch.

October to March.....	5	13	26	20	17	10	5	4
April to September.....	10	15	14	12	12	15	12	10
Year.....	8	14	20	16	15	12	8	7

Heavy rain amounting to 0·5 of an inch and upwards.

October to March.....	5	19	39	18	9	5	3	2
April to September.....	9	20	21	13	9	13	8	7
Year.....	7	19	30	15	9	9	6	5

Rain without regard to season or amount.

	8	15	22	15	12	11	9	8

In the foregoing tables it is apparent that while easterly winds on the whole are most prevalent on days of rain, and N.W. winds most rare, it is only with heavy rains that a like distribution is maintained separately in both half-years, and that in the summer half-year, on days of light rain, the west wind is most frequent.

If the days of snow are classified according to the amount that falls, it is found that while with heavy snow, winds from N.E. are five times as numerous as those from the west, the westerly winds are by far the most prevalent when the snow is 1 inch and under.

If days of rain and days of snow be treated indiscriminately and without regard to season or amount, the distribution of the winds will be shown in the annexed table, where, for comparison, analogous numbers are given for New Haven and Cincinnati. It will be seen that at New Haven and Cincinnati the most rainy winds are from opposite quarters, and that at Toronto the distribution of the winds during rain resembles, but in a less prominent manner, that of New Haven.

	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Toronto.....	12	19	19	11	8	10	11	10
New Haven.....	8	37	6	19	7	15	1	7
Cincinnati.....	2	10	1	9	10	25	18	25

Having touched very briefly, but as far as space will allow, on a few points connected with the climate of Toronto, it is now necessary to enumerate some of the means to be employed for carrying into effect the objects stated at the commencement of this article.

I. All persons who possess records relative to the climate of British North America, made either by themselves or by others, and who may desire to utilise their contents, should send them either as gifts or on loan to the Toronto observatory.

II. All persons in the habit of recording facts connected with the climate, or who may be disposed to engage in the work, by regular observations or by confining their attention to those points for which they have a special inclination, would confer a great benefit on science by opening a correspondence with the Toronto observatory, and by transmitting periodic as well as special returns of any facts which they may have observed.

Those who are not disposed to incur the cost and labour of observing all the ordinary elements at stated hours, might confine themselves to one or more of the following.

(*a*) Thermometric observations.

(*b*) A daily record at stated hours of the direction and force of the wind.

(*c*) A daily record of rain and snow, and if possible of the times and directions of the wind when rain or snow begins and ends.

(*d*) If a *daily* record be too burdensome, statements of the total *monthly* fall of rain found in the gauge and the *daily* fall of snow, with the days of the month in which rain or snow occurs would be very useful contributions.

(*e*) Monthly records of the days of the month when occasional phenomena occur, such as thunder, lightning, hail, fog, Auroras, &c., &c.

(*f*) Descriptions of unusual storms; special notice being made of the direction and force of the wind, and of the changes in its direction and force, with the times when the changes take place.

(*g*) Descriptions of any other unusual phenomena.

(*h*) Well authenticated records are desired of all cases of damage by lightning that occur throughout the country.

(*i*) Records of first and last snow and frost, opening and close of navigation, leafing and flowering of plants, movements of migratory birds, &c., &c.

III. With a view of increasing the efficiency of the instrumental appliances employed by contributors, and of the methods of observing which they practise, periodic visitation should be made by some one furnished with standard instruments to enable him to detect instrumental errors and supply the necessary corrections.

A system of visitation has prevailed for many years in Germany, and is now in operation in England, and its establishment here would give an opportunity for mutual counsel and interchange of experience.

IV. The establishment of three or four Normal Stations, including one at Red River, where observations at regular intervals of one, two, or three hours, may be carried on for a