

willing to extend their work beyond the morning measurement of rain and snow:

- (1). Times of beginning and ending of Rain or Snow.
- (2). Total depth of Snow on the ground.
- (3). Sleighing.
- (4). Depth measured at 9 p.m.
- (5). Duration in hours.
- (6). Weather and phenomena.

As regards the relative importance of the different columns with respect to the *regularity* with which the entries are to be made, it is to be noticed that while an omission in the column, depth of rain or snow, renders the whole column comparatively worthless, occasional omissions in the other columns do not invalidate in the same degree those entries that are made in them; it should be borne in mind, however, that it is better to be regular in the use of one or two columns, the others being left blank, than to make only occasional entries in several.

Again, although a full description of the weather on every day would be very valuable, it would be better to select one or more conditions or phenomena, such as fog, thunder, lightning, Aurora, &c., &c., and to make a point of never failing to record examples of the selected class when they occur, than on some days to give a full and on others only a scanty statement or none.\*

#### REMARKS RELATIVE TO THE SUPPLEMENTARY CHAPTER.

The general temperature of a district—an important element of its climate—is inferred from the temperature observed at various points within the district.

Now, although the temperature is not liable to vary from point to point to an extent comparable in any degree with that noticed in the case of rainfall, it is requisite, with a view to eliminate the effects of local circumstances, that the stations at which the temperature is observed should greatly exceed in number those where full observations are taken of the other elements.

For this reason thermometers are furnished to a few of the Rain Stations, where the observer is willing to take the additional observations with the requisite regularity.

It should be understood that these observations, to be of any use, should be made with the same regularity as those of rainfall.

In order that the observer may better appreciate the precautions enjoined as to the exposure of thermometers, a few explanatory remarks on certain properties of heat have been introduced in this chapter.

\* This must not be understood to mean that fuller accounts during unusual weather would be otherwise than valuable, even although on ordinary occasions the record is limited to facts in the selected class.