

"With respect to the influence of these displays upon the movements of the magnetical elements registered by Photography at Toronto, I may say that I find the symbols which represent, in the abstract, 'total absence of disturbance,' 'moderate disturbance,' 'considerable disturbance,' and so on, against almost every variety of observation, and am not yet prepared to give any settled opinion on the subject."

Our space prevents us from entering into the consideration of the question in its fullest extent, although rendered so captivating by the matter before us. Our purpose will have been attained if we attract attention to the subject, and induce others to enter a field so full of the most enticing topics of examination. On this point also we prefer to let the author speak for himself:—

"And if each observer will bear in mind that others, hundreds, and some of them thousands of miles off, are noting down the features of the very displays he may be looking at, as it appears to them, and that from a comparison of all these accounts, it is hoped to arrive at definite views concerning this most singular phenomenon, he cannot fail to see the value which every clear, distinct, and definite record of facts and particulars will possess, and to acquire a greater interest in the subject than the constant repetition of familiar descriptions might otherwise afford."

The following instructions will be found highly valuable to those who desire to continue the subject and to assist in the work of observation:—

"Private observers should make a regular practice of looking for Auroras, every clear evening, from dusk to as late an hour as may be convenient, recording the result whether there has been an Aurora or not, together with the times of observation. The notes may be short, but they should be clear and precise. Wet or cloudy evenings should be noted.

"Auroral Phenomena may be divided into the following classes:

- (1.) A faint light in the north without definite form or boundary.
- (2.) "A diffused light, defined by an arch below."
- (3.) Arches resembling the rainbow in size and form, but of a uniform white colour, sometimes retaining their apparent position for a considerable time without change.
- (4.) "A dark segment under the arch;" if any star can be distinguished within this space, the circumstance should be particularly noted.
- (5.) "Floating patches of luminous haze or cloud."
- (6.) Beams, rays, streamers, transverse and serpentine bands, sometimes tinged with colour, and undergoing more or less rapid changes. It may be necessary to define the last two expressions—Transverse bands are frequently nothing more than arches which have advanced nearly to the zenith, or, perhaps, have passed it, and retain their regularity of form, although now projected nearly as straight lines. Serpentine bands rather resemble curtains of light, and undergo in their outline changes like those of the folds of a curtain, they are usually the most brilliant part of a display.