

myself to a mere detail of facts, without venturing upon any theory. My notes upon the appearances of the Aurora coincide with those of Dr. Richardson, in proving, that that phenomenon is frequently seated within the region of the clouds, and that it is dependent, in some degree, upon the cloudy state of the atmosphere.

The manner in which the needle was affected by the Aurora will need some description. The motion communicated to it was neither sudden nor vibratory. Sometimes it was simultaneous with the formation of arches, prolongation of beams, or certain other changes of form, or of activity of the Aurora; but generally the effect of these phenomena upon the needle, was not visible immediately, but in about half an hour or an hour, the needle had attained its maximum of deviation.

From this, its return to its former position was very gradual, seldom regaining it before the following morning, and frequently not until the afternoon, unless it was expedited by another arch of the Aurora operating in a direction different from the former one.

The bearings of the terminations of the arches are to be taken with considerable allowance. They were estimated by the position of the Aurora, with respect to the sides of the house, the angles of which had been previously determined. The bearings given in the whole of my observations refer to the magnetic meridian, and are reckoned from the magnetic north, towards the east round the whole circle, which, it is conceived, will afford a means of more readily computing the horizontal extent of the arches.

It is to be noticed, that the bearings given by Dr. Richardson and Lieutenant Hood are true, and not magnetic.

THE END.

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