

"below its mean value, and during the afternoon a rapid
"recovery commenced between 0h. 38' p.m. and 4 p.m.
" (Eastern time), an increase of .0096 C. G. S. took place;
" the total change of horizontal force during the disturb-
" ance was over .0148 C. G. S. Between 6 and 9 p.m. the
" vibrations were very swift. The changes in the vertical
" component were also considerable."*

This magnetic storm was preceded by a most unusual outbreak of sun spots. The group of spots which became visible by rotation on Feb. 5th was, on the morning of the 8th, and for some days thereafter, easily visible to the naked eye. The area of the group, as measured here on the 8th, amounted in area to about $\frac{1}{120}$ th of the sun's visible hemisphere, the length of the disturbed area being about 140,000 and the breadth about 100,000 miles. On Feb. 13th there was also another very large group of spots, then about making good its position on the eastern limit, which added very materially to the total spotted area on this day. This latter is probably the same group of spots which, after making one rotation, is now (March 14th) nearly central on the sun.

* From a statement kindly furnished by Mr. C. Carpmæl.