

the N.N.E.' In his aurora borealis journal Hansen describes that of this evening as follows: 'About 8 P.M. an aurora borealis arch of light was observed, stretching from E.S.E. to N.W., through the zenith; diffused quiet intensity 3-4 most intense in N.W. The arch spread at the zenith by a wave to the south. At 10 o'clock there was a fainter aurora borealis in the southern sky; eight minutes later it extended to the zenith, and two minutes after this there was a shining broad arch across the zenith with intensity 6. Twelve seconds later flaming rays shot from the zenith in an easterly direction. During the next half-hour there was constant aurora, chiefly in bands across or near the zenith, or lower in the southern sky. The observation ended about 10.38. The intensity was then 2, the aurora diffused over the southern sky. There were cumulus clouds of varying closeness all the time. They came up in the southeast at the beginning of the observation, and disappeared towards the end of it; they were closest about 10 minutes past 10. At the time that the broad shining arch through the zenith was at its highest intensity the cumulus clouds in the northwest shone quite white, though we were unable to detect any aurora borealis phenomena in this quarter. The reflection of light on the ice-field was pretty strong at the same time. In the aurora borealis the cumulus clouds appeared of a darker color, almost the gray of wool. The colors of the aurora were yellowish, bluish white, milky blue—cold coloring.' According