

where it cut off the risen parts of the segments, but for half a degree or more the bank of haze at the horizon was dense enough to absorb the light of the halo, and the risen parts seemed to stand well up in the sky with a blank space between them and the horizon, and to be complete objects in the field of view. This was not really the case, but on account of the absorption of light they had the appearance of being complete mock-suns. Mr. Pike's own statement suggests why he failed to note the real facts of the case, for he says :—"The effects (of the sunrise were) of long duration, as the sun is close to the horizon a considerable time before he shows above it." The duration was evidently too long for the whole phenomenon to be visible as a single feature, or to be kept under observation by one person until it explained itself, as it can do to better advantage here in more southern latitudes where the sun rises more abruptly with reference to the horizon. The phenomenon on each occasion showed the great distance of the halo, whose light was so completely absorbed by the haze of the horizon.

Dr. Leslie G. Pearce, of Brantford, Ont., in a letter to Professor Chant, recorded the same halo as it appeared at that city, by means of a diagram. He adds this remark :—"On February 4th, at 7.30 a.m., we had a very fine display of solar halos. What we saw in Brantford was like the following sketch."



SOLAR HALO, FEBRUARY 4, 1918, OBSERVED AT BRANTFORD BY
LESLIE G. PEARCE

It becomes evident from the diagram sent by Dr. Pearce, that at Brantford, just after sunrise there was absorption of the lower parts of the halo by the haze of the horizon, similar to the absorption phenomenon observable at Barrie.