

Often a sun dog is the first thing to appear and more or less of these attendants accompany the sun during his short stay above the horizon." Within a few days after my attention had been called to this passage, I had the good luck to witness a halo of the sun at Barrie, Ont., in which mock-suns seemed to be visible above the horizon before the sun appeared. On February 11th, 1918, at 7.30 a.m., (E.S.T.), what appeared to be two mock-suns were quite distinct before sunrise, as Warbinton Pike describes. There was also a notable sun pillar, before sunrise, and after rising the sun was the centre of a cross. The mock-suns, however, on this occasion, were the more interesting parts of the



SOLAR HALO, FEBRUARY 11, 1918, 7.30 A.M. (E.S.T.) OBSERVED  
AT BARRIE BY A. F. HUNTER

The parts of the circle shown above the horizon had the appearance of two  
"mock-suns."

halo. First appearances and first impressions are not always safe guides. If I had seen no more than what I saw before sunrise, I should have been willing to corroborate Mr. Pike's observation. But I was able to keep the phenomenon under observation for two hours, by the end of which time the explanation of the appearance had become clear. The visible parts that first looked like mock-suns were actually ends of segments of the primary circle in the neighborhoods of the mock-suns, as became evident when the whole phenomenon had risen with the mock-suns showing no higher than the sun. When the halo was first to be seen before sunrise, the horizon did not make a sheer edge