

(in his article in the U. S. Weather Review for July, 1914) regarding which he makes this remark: "the ordinary halo (22 degrees) is almost always simultaneously visible."

Again, as the observer of a phenomenon, I will venture to use my right to speculate as to its causes, and to offer an explanation, as, in the words of a notable French writer, "it requires a theory to satisfy the mind."

EXPLANATION OF THE ELLIPSE.

By means of this simple diagram (Fig. 6) we can arrive at an understanding of this elliptic form of halo. If we suppose that



FIG. 6

A circular halo viewed edgewise.

an observer at B is looking at a great white horizontal circle passing through the sun's disk, for example, made by a film of haze, extending, say, at a height of ten miles, he would see it as a great circle with the zenith as its centre and the sun in its rim. But an observer at A, say ten miles distant from B, and with the luminary at, say, an altitude of 45 degrees, would see it as an ellipse with the sun as its centre, because a horizontal circle formed by re-