

distance of some 60 miles. Adopting the course laid out by Professor Chant the error would be considerably larger. In this case it seems as if there must have been some mistake, or misprint, rather than error of judgment. These are all of the observers located more than 200 miles west of the Ontario station whose observations are of any value whatever for locating the path of the meteors, and we find that all of them, with the exception of the observer at Pense, whose observation appears to be hopeless, confirm the revision of the location of the path, as determined from the Bermudas and the two ships at sea. The importance of its accurate location will be obvious at once when we consider that on it all of our other numerical computations depend.

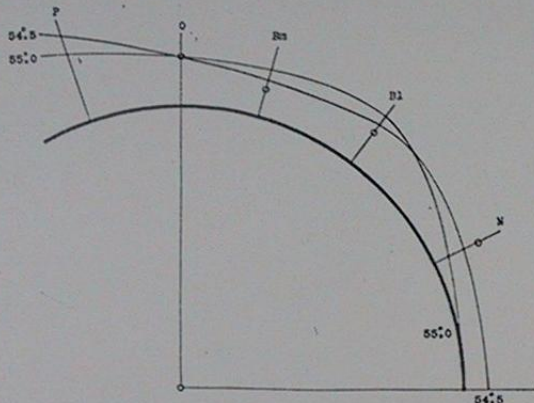


FIG. 1.

All of the results given in the table are plotted in Figure 1, where the heavy circle represents the surface of the earth. Its radius is drawn on one-twentieth the scale of the heights of the meteors, which for azimuths 54.5 and 55.0 are represented by fine lines. The heights for the impossible azimuth 54.5 are represented by small circles. By this plan we greatly exaggerate the sharpness of the curves, and can see which are plausible and which are not. While it would not be safe to judge entirely by appearances, yet we can see that it is certain that the meteors never escaped from the earth, but finally buried themselves somewhere in the South Atlantic. Even if they followed the improbable azimuth of 54.5 , when they passed the Newlands their height, as we see by Table I, would have been only 25 miles. So close an approach to the surface would have prevented their escape. Thus one of the previously undetermined facts may now be considered as settled.

In closing this portion of our investigation, it is important to note

that owing to the unexampled length of the course traversed by the meteors, and also to the fortunate location of the later observers with regard to it, it has been possible to give accurately their maximum heights at the three stations, Bermudas, Bellusia, and Newlands. This is of course very unusual. We have adopted a height for the meteors at the Ontario station of 35 miles, which appears to us very plausible, and which is in close agreement with the figures suggested by both Professor Chant and Mr. Denning. A glance at Figure 1 shows that they could not well have been higher. Finally we find that while remaining at this altitude the meteors were able to traverse a course of some 2,000 miles, and as we shall see in a later paper at an only slightly diminished speed. In our next paper we shall discuss the speed of the meteors, their constitution, and the velocity of the sound produced by them.

Mandeville, Jamaica, B. W. I.

September 27, 1922.

The Comfort of the Stars.

When I am overmatched by petty cares
And things of earth loom large, and seem to be
Of moment, how it soothes and comforts me
To step into the night and feel the airs

Of heaven fan my cheek; and, best of all
Gaze up into those uncharted seas
Where swim the stately planets; such as these
Make mortal fret seem slight and temporal.

I muse on what of life may stir among
Those spaces knowing naught of metes and bars;
Undreamed-of dramas played in outmost stars,
And lyrics of archangels grandly sung.

I grow familiar with the solar runes
And comprehend of worlds the mystic birth;
Ringed Saturn, Mars, whose fashion apes the earth,
And Jupiter, the giant, with his moons.

Then, dizzy with the unspeakable sights above,
Rebuked by Vast on Vast, my puny heart
Is greated for its transitory part,
My trouble merged in wonder and in love.

—M. STAHL