The position of the "trace" or track over which the meteors passed is, no doubt, well placed by Professor Chant. The writer would be inclined to locate it two or three miles south of the line adopted, but there are uncertainties due to the conflicting evidence, and the positions shown in Professor Chant's maps, probably represent the best deduction that can be made.

The stream must have had a curved flight, fairly concentric with the earth's surface. Had it been travelling in a straight horizontal line without any curve or deflection, and 38 miles high near Toronto — it would have had a height of 250 miles at the beginning and end of its observed luminous flight owing to the earth's curvature. Of course it could not travel in any such straight line owing to air resistance and gravitation. There is no well attested case of a meteor ever having been seen at anything approaching the latter elevation and it is probably far outside even the rarer limits of our atmosphere.

The stream seems to have consisted of from ten to twenty groups, or meteors with fragments in the form of spark trails, including in all several hundreds of particles. The larger ones were probably traced over 180 miles by individual observers, and the duration was 23 seconds.

Had the stream met the earth in her orbit and moved east to west the velocity would have been about 44 miles per second, and the interval occupied in passing a given point 33 seconds. The motion at the end does not appear to have been very different to that remarked at the beginning. Judging from the aspect of the swarm as viewed from Bermuda it was not nearing exhaustion, but apparently quite capable of a further 1,000 miles or more flight across the North Atlantic Ocean.

It is probable that the stream may have developed from one mass originally, and that it was formed by one of the largest bodies of the kind we have ever encountered. The disintegration of meteors is a well attested fact of observation. The meteoric stones of L'Aigle, April 26, 1803, numbered two or three thousand, and their fall was distributed over an ellipse, of which the larger axis was 6·2 miles and the smaller 2·5 miles.

The meteorite of May 12, 1861, at Batnera, descended in fragments which were picked up several miles asunder, and they fitted precisely.

In any case the vanguard of the meteors of February 9 must have been of enormous size to have sailed with astonishing brilliancy, and retained their compact form, along a curved path of some 2,600 miles. Even after this extensive flight, Col. Winter, at Bermuda, where the last observation was made, says its diameter was equal to that of the moon. The testimony of various observers was that the chief bodies were subject to explosions scattering fiery sparks behind them in long trains. There was evidently a great expenditure of material going on along the whole line. The low velocity would certainly cause a vastly slower rate of combustion than that of meteors which dash into our atmosphere like the Leonids at 44 miles per second and acquire a white heat, destroying them instantly.

These meteors were red or yellowish-red and their color sufficiently showed the very moderate rate of combustion. It is generally the case that the apparently slow meteors overtaking the earth, and moving in nearly horizontal flights, last a long time, and travel over very lengthy paths. I found a path of 611 miles for the meteor of August 21, 1902, and a path of 590 miles for that of February 19, 1911, and they were probably much longer. The small area of England is not suitable for the determination of these long flights.

At Pense, the second station from whence the meteors of February 9 last were observed, the phenomena were described as a "procession of stars" lasting about two minutes.

At Bermuda, where the final view was obtained, Col. Winter estimated that the meteors occupied two minutes in passing a given spot, so that their enormously lengthy flight had certainly not extended the stream. This string of newly-made terrestrial satellites maintained the same relative distances from each other, without any lagging behind of the tail, even after encountering all the vicissitudes involved in a journey of one-tenth the distance around the earth. The times occupied in their passing