

ished, but many continued on the east. The spectacular display, and Professor C. A. Chant, *Royal Astronomical Society of Investigation*. His conclusion was almost horizontally at an altitude of 6 miles per second (reports of a phenomenon of un-Regina, Saskatchewan, and from Toronto and in opposite directions, was that the bodies were maintaining a sensibly circular path's surface, while slowly being and that the same objects had those for the orbit a great circle and cutting the equator in longi-

appeared to have traveled nearly which have never (as far as I 100 miles. Yet Pelion was shortly of England was able to discover of the same sort of "procession," y no less than 3000 miles south- 2 miles.² Assuming that the same e may conclude that they had te orbital revolution around the do de Noronha Island, south still apparently "going strong," eoritics that can compare with

some 10 years after the event, ore detail, but was not able to seemed to indicate a velocity cond (orbital velocity for satel- ns also failed to lie well on a me that the procession seen in same course as that seen from J. Fisher⁴ pointed out for the dies traveling over such great rbe a true great circle, but a e Earth rotated beneath them: fitting all the points to a single data it turns out that the curva-

ture of the path is rather too great to be satisfactorily accounted for by a velocity as high as 5 miles per second.

A much more serious discrepancy was the impossibility of the supposed orbit, because of its excessive closeness to the Earth. A body traveling only 30 miles above the ground in Ontario would, as Fisher pointed out, collide with the equatorial bulge of the Earth before it reached the equator; the air resistance in any case would prohibit any such long flight except by bodies of enormous size. The simple picture drawn by Chant was consequently rejected, or at least modified. Attempts were made⁵ to re-interpret his height determination (26 miles) or to disregard it altogether, by accepting something like 40-45 miles instead; but this procedure was too arbitrary. The alternative was to assume that the peculiar slow-traveling processions seen at the different stations were not identical after all, but were merely related manifestations. It could be imagined that a vertically-extended swarm, or rather "stack," of large meteorites, whose lower end reached down to the 30- or 40-mile-level, was the actual satellite, and that the processions witnessed along its path were caused by the successive "peeling off" of its lower members by the air as the stack slowly lost altitude in its orbital flight. This assumption would account for the striking similarity of the display at all the points of observation without requiring any single meteorite to traverse more than a fraction of the whole trajectory. This hypothesis of continuous replenishment by fall-in was suggested by Davidson⁵ and by Hoffmeister,⁶ and endorsed by Fisher in his review of 1928.

Another and more radical way of dealing with the problem is to deny that there was any connection whatever between the various observations, and to explain each as a local phenomenon whose linkage with the others is only a product of the imagination. This approach was first adopted by Charles Fort in 1923, who suggested that what was seen near Toronto was a fleet of extraterrestrial spacecrafts, whereas what was seen elsewhere may have been ordinary meteors.⁷ In 1939, C. C. Wylie presented an analysis of the Toronto observations intended to show that they could be interpreted as a "meteor shower" localized over that area, and unconnected with the distant observations.⁸ Wylie's views, presumably because they were regarded as the most "conservative," have been accepted by some,⁹ altho they are not likely to seem plausible to those who have examined the extensive observational data. There has been no original contribution on the subject since Wylie's study in 1939.

II. RESULTS OF THE PRESENT WORK

All the attempts at interpretation have been based upon the observational material collected in 1913-22 by Chant, Denning, and