

other bodies were seen coming from the northwest... Onward they moved, at the same deliberate pace, in twos and threes or fours, with tails streaming behind... They all traversed the same path and were heading for the same point in the south-eastern sky... Several [witnesses] report that near the middle of the great Procession was a fine large star without a tail, and that a similar body brought up the rear..."

The mysterious glowing orbs were traveling southeast. They crossed into Minnesota from Canada and then over the Great Lakes, passing about 25 miles south of Toronto. From Saskatchewan to the Atlantic coast, scores of spectators marveled at the celestial extravaganza, their descriptions differing only in details. At Alpena, Michigan, the Weather Bureau reported: "A group of 10 brilliant meteors, one following the other in a straight line, appeared in the northwest and passed over the city in an easterly direction. Each gave off a faint reddish trail of light. Shortly another group... appeared... apparently traveling in the same direction." In Gainesville, New York, one eyewitness wrote to the local newspaper: "A shower of burning meteors crossed the sky to the eastward, leaving a trail of fire and smoke that hid the stars for several minutes." Some observers suggested that the Procession may have stretched across the sky for a hundred miles or more.

Passing directly over Buffalo, New York, the "shower of stars" cut across the corner of New York State and Pennsylvania, moving out to sea near Sandy Hook, New Jersey. Subsequent ship sightings placed them next in the vicinity of Bermuda, and ultimately in the South Atlantic below the equator, about 200 miles off the Brazilian coast.

It is difficult to estimate the actual number of bodies making up the star-spangled show. Some spectators saw only one or two solitary bodies, while others nearby counted dozens. The greatest number was mentioned by a Trenton, New Jersey, high-school student watching with binoculars. He saw "about ten groups in all and each group... consisted of from twenty to forty meteors."

An accurate census evidently was impossible because, like Fourth of July sparklers, members of the heavenly troop persisted in bursting into frenzies of fiery fragments. A weather observer in Upper Michigan saw a large fireball mount above the horizon: "... it separated into 2 bodies, each about half the size of the Moon: when these reached the zenith, they

burst into a great number of small bodies which continued to the south-eastern horizon."

Another witness reported seeing "a meteor break into about fifty pieces like the explosion of a skyrocket." A group of New Jersey churchgoers was treated to an especially dazzling show. According to a local newspaper account, "As the congregation was leaving the musical service last evening at Watchung, the members were astonished to see 7 stars shooting across the sky... They followed each other in rapid succession, and 5 of them passed out of the line of vision, but the remaining 2 seemed to explode like skyrockets, and burst into a thousand tiny stars..."

But even though Professor Chant identified the bodies as natural meteors, they were not "shooting stars." Rather than plunging toward the ground like most meteors, these bursting, flaring objects held a constant altitude, as Professor Chant remarked, while maintaining a kind of formation in flight. "One was following directly in the path of the other," stated a Boyne City, Michigan, resident. "Like they were strung on a wire" was an expression used by two different observers. At Fenlon Falls, Ontario, one man likened the Procession's leisurely movement to "the angular speed of a flying crow."

The Canadian Fireball Procession of 1913 maintained an almost horizontal path, neither gaining nor losing altitude, for some 5,600 miles, or almost one-quarter revolution of our planet before disappearing. "There is nothing in the annals of meteoritics," exclaimed one investigator, "that can compare with this path-length."

With the glare of air friction, meteors plunging to Earth usually become visible about 90 miles above the globe. The atmosphere quickly brakes their burning speed, however, cooling the surface, quenching flames; and the object disappears from view at an average height of some 30 miles. Professor Chant's calculations placed the Procession at an altitude of not more than 30 miles—remarkably low for a sustained trajectory of any natural bodies and close to the bottom line of visibility. Furthermore, despite their low velocity—Professor Chant estimated that the Toronto aerial display lasted 3.3 minutes—the bodies apparently produced what we now call sonic booms. (Back in 1913, of course, practically no jargon of the Air Age had entered people's vocabularies.) Professor Chant compared the Procession's noise to "a carriage passing