

## Comment by the Editor

### THIS AMAZING UNIVERSE

As the earth goes whirling about the sun it is continually pelted with "star dust" — or would be if the particles were not melted by the friction of the atmosphere and changed to gas. Probably millions of shooting stars strike the earth in a single day. From comet heads and meteors the substance of the universe is gathered. According to one hypothesis the planets of our solar system were formed by the accumulation of just such celestial debris, though the principal harvest must have been finished millions of years ago. Other worlds are now in the process of creation. The heavens are apparently full of the stuff that stars are made of.

Most of the matter encountered in space never reaches the earth in solid form; some of it "falls" in pieces no larger than marbles; but occasionally a meteorite descends with such a roar and dazzling light that people pause to wonder what it is and whence it came. Stones do fall from the heavens, but how they got into space is uncertain. No terrestrial volcano has the power to eject missiles with sufficient velocity to carry them beyond the earth's attraction. Maybe they are the remains of a previous solar system that was wrecked by a passing star.

The substance of meteorites is the same as the earth — usually stony, though sometimes composed of nickel-iron. They are irregular in shape, with corners rounded and surface pitted by the friction of the atmosphere, while the exterior is normally coated with a thin black crust formed by the tremendous heat generated during the flight through the air. No new chemical element has been discovered in them, and only about a third of those already known. A meteorite in Arizona contained small diamonds, but no traces of gold or silver have been found. Although carbon compounds occur, like those resulting from the decay of vegetable life, no forms of vegetation such as often exist in sandstones have yet appeared. But who can tell what the next one will bring?

Nor can any one say when or where the next one will fall. The orbits of comets have been computed and spectacular "star showers", the relics of defunct comets, can be predicted to the day (November 13, 1932), but most meteors are irresponsible rovers. They appear at any time of the day or night and strike the earth at random. The largest known meteorite, weighing thirty-six and one-half tons, was found by Peary in northern Greenland. Several have fallen in Iowa. C. W. Irish accounted for four in 1886, and a thorough survey, now in progress, will doubtless add others to the list.

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