

flashed across southern Ontario and northern Ohio, and possibly regions farther south. It was seen by the writer from Ann Arbor, Michigan, and was reported from Cleveland as having been seen in western Pennsylvania. It left a reddish train, parts of which were visible for some seconds. The brilliancy of the meteor lasted perhaps three seconds as seen by the writer, and was equal to that of a very bright flash of lightning, the surrounding landscape being strongly illuminated. The writer did not see the entire path, because a building obstructed the view. An observer in Detroit states that the meteor burst into a number of fragments. His data, coupled with the writer's observations, would appear to indicate that the burst occurred over central or southern Ohio.

The writer is desirous of obtaining as much information as possible concerning this body. Such data should include the altitude and azimuth of the point of burst or of the mid-point or ends of the luminous train or all these, if possible. The apparent angle between the path or train and the vertical should be given. The best kind of observation would be a plot of the apparent path of the meteor relative to identifiable stars. Even rough values, if obtained at points one hundred miles or more from Ann Arbor, would be of value, and observations of the meteor passing directly overhead, or nearly so, are also desirable. It is evident that a person need not know even the barest rudiments of astronomy in order to furnish some of the data mentioned. Undoubtedly many who saw it have refrained from giving any notice of it because they feel that their observations would be of no value.

If the observer recalls the place where he stood when the meteor was seen and remembers the relation of its path to the neighboring terrestrial objects, he may be able to determine fairly reliable data by going again to the point of observation with a transit or clinometer and compass, or even with no instruments at all except his eyes and a little good judgment. From some localities even the bare statement that the meteor was seen to burst in the northern sky would be of value, since it would set a limit to its flight.

If enough information can be obtained it should be possible to calculate the orbit of the meteor, both

relative to the earth and to the sun. The point of burst especially should be well determined, and it might be possible to indicate within rather close limits the area within which fragments might be found.

DEAN B. McLAUGHLIN

DETROIT OBSERVATORY,
ANN ARBOR, MICHIGAN

SYNCHRONOUS FLASHING OF FIREFLIES

SYNCHRONOUS flashing of fireflies is noted in the Philippines December 6, and with the seven preceding notes published in *SCIENCE* since E. S. Morse raised the question February 4, 1916, the phenomenon has been frequently recorded. Since none of these references mention Mexico I call attention to Terry's Guide, page 568:

"A singularly beautiful insect is found in and near the Palonque ruins." Then follows a quotation from early Spanish chroniclers and statements: "This insect, which is common to the tropical forests bordering the Gulf of Mexico, belongs to a family of beetles known as the Elateridae, and is called by the Indians *cucuji*. . . . The insects congregate by the thousands on certain forest trees, and as if at a given signal simultaneously flash their lights; then darken them and flash them again," etc.

R. H. MERRILL

BUSUANGA HERRE, NEW GENUS

THIS genus is distinguished from other genera of the Belonidae by the anterior extremity of the mandible, which extends beyond the snout and terminates in a thick, spongy, somewhat flexible tip, much thicker than the rest of the mandible and forming a continuation of the upper profile of the beak.

The type is *Busuanga philippina* Herre. It has been described and figured as *Tylosurus philippinus* Herre, in *Philippine Journal of Science* 35 (1928), 31, plate 2, and in *Philippine Journal of Science* 36 (1928), 228, plate 3.

Busuanga, from the island where the fish was first found. Busuanga is one of the Calamianes, an island group in the Philippines between the Sulu and China Seas.

ALBERT W. HERRE

ZOOLOGY MUSEUM,
STANFORD UNIVERSITY

SCIENTIFIC BOOKS

The Problem of Krakatoa as Seen by a Botanist.

By C. A. BACKER, formerly government botanist for the flora of Java. For sale by Martinus Nijhoff, The Hague. 18 by 26 cm. 299 pp.

THE volcanic island Krakatoa, devastated in 1883

by a terrific eruption, has greatly interested botanists ever since Treub published his observations on revegetation. This universal interest was due to the fact that it was considered certain that the original flora and fauna had been wholly destroyed by the eruption.