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NEW VOLCANOES AND A NEW MOUNTAIN RANGE

By Professor Emeritus WILLIAM H. HOBBS
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IN Michoacan province, some two hundred miles due west of the city of Mexico, a volcano was born above a cornfield on February 20, 1943, is already more than 1,500 feet in altitude and is still in a lusty growth. It has been christened *El Parícutin*. The event has figured in world news, and the volcano has been visited by throngs of tourists from the city of Mexico. Already an account of this unusual event has been printed in SCIENCE (December 10, 1943) and the occurrence has been pronounced unique in history.

What is so unusual is the birth and growth of a volcanic mountain away from other volcanoes, for scores of such mountains have been observed as they have been born upon the flanks of giant volcanoes, such as Etna, and phenomena in all respects comparable to those observed at Parícutin are therefore familiar to volcanologists.

As I shall show, the birth of a volcano like Parícutin, which is some tens of miles distant from other volcanoes, is not unique. Below are listed seven such

births recorded in literature, all from the Christian era,¹ and there must have been others which are not of record:

- NEW VOLCANOES (IN ORDER OF THEIR BIRTHDAYS)
Monte Nuovo (New Mountain), September 29, 1538. Bay of Naples. 440 feet high. Description by Lyell in "Principles of Geology," Vol. 1, pp. 607-619, on the basis of accounts by contemporary observers. Important gun position in the shelling of Naples, 1943.
- Jorullo*. . September 28, 1759. Province of Michoacan, Mexico. 1,600 feet high. Rose above the plain of Malpais. Described by v. Humboldt in *Cosmos*. Fumerole action as late as 1906.
- Izalco*. February 23, 1769. San Salvador. 1,900 feet

¹ Strabo in his "Geography" has reported two earlier births, that of Madane during the third century B.C. and a submarine eruption in 196 B.C., both in the Aegean. Many submarine eruptions in new localities are of record, the best known that of Nwöe Island (New Island), thirty miles off Cape Reykianes, Iceland, in May, 1783; and Graham Island between Sicily and Tunisia, July, 1831. Unless eruption is long continued such islands are cut away by the waves and are subsequently marked only by shoals.

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