

marked results, but it did not restrict itself to the bounds of Spain and Portugal, nor was its severity by any means measured solely by distance from any supposed focus. The convulsion is estimated to have affected an area equal to a twelfth part of the surface of the globe; not only was all Europe shaken but a part of America and North Africa. The disturbance, however, was not simultaneous over this extent. It distributed

itself through some days. Turin and Milan felt it seriously, the latter on the 1st of November, and the former on the 9th. In Brieg houses were overthrown. The Lake of Neufchâtel overflowed its banks. The small Lake of Morat near it sank twenty feet, and remained at the new level. Vesuvius, in eruption at the time, was suddenly silenced, and its column of smoke re-absorbed into the crater. Churches in Rotterdam were shaken ten hours



CRATER OF MERBABU.

after the Lisbon shock. Lakes and springs in many parts of Germany, Norway and Sweden were affected. A littoral wave swept the coasts of Western Europe, rising eight or ten feet on the coast of Cornwall, and doing great mischief there. The Scottish lakes rose three feet. Tetuan, Tangiers, Fez, Mequinez and other African towns, approached Lisbon in the completeness of their destruction. At Mequinez a mountain opened and

discharged torrents of turbid water—one of the escape-valves, possibly. Westward across the Atlantic the vast oscillation took its way. At Madeira the sea rose fifteen feet. A billow twenty feet high is said to have entered the harbour of St. Martin's in the West Indies. On the 18th November the impulse reached New England. In Boston chimneys were overthrown or cracked, and among the farms stone fences had the like mishaps.