

Science and Art.

WHAT A VOLCANO CAN DO—Cotoaxi, in 1738, threw its fiery rockets 900 feet above its crater, while in 1743 the blazing mass, struggling for an outlet, roared so that its awful noise was heard a distance of more than 600 miles. In 1797 the crater of Parícutin, one of the great peaks of the Andes, flung out torrents of mud, which dammed up rivers, opened new channels, and in valleys of a thousand feet deep made deposits of 600 feet deep. In 1794, a stream from Vesuvius, which in 1793 passed through Torre del Greco, contained 33,600,000 cubic feet of solid matter; and in 1794, when Torre del Greco was destroyed a second time, the mass of lava amounted to 45,000,000 cubic feet. In 1679, Ætna sent forth a flood which covered 104 square miles of surface, and measured nearly 100,000,000 cubic feet. On this occasion the sand and gravel formed the Monte Rossi, near Naples, a cone two miles in circumference, and 4000 feet high. The lava thrown out by Ætna in 1810 was in motion at the rate of a yard per hour for nine months after the eruption; on record that the lavas of the mountain, after a terrible eruption, were not thoroughly cooled and consolidated ten years after the event. In the eruption of Vesuvius, A. D. 79, the scoriae and ashes vomited forth far exceeded the entire bulk of the mountain, while in 1660 Ætna disgorged more than twenty times its own mass. Vesuvius has thrown its ashes as far as Constantinople, Syria, and Egypt; it has hurled stones eight pounds in weight from Pompeii, a distance of six miles, and similar masses were tossed up 1000 feet above its summit. Cotoaxi projected a block of 169 cubic feet in volume a distance of nine miles, and Sombawa, in 1815, during the most terrible eruption on record, hurled its ashes as far as Java, a distance of 400 miles of surface, and out of a population of 12,000 souls only twenty perished.—*London Journal.*

PUGNACITY OF HUMMING-BIRDS.—A writer on humming-birds describes their fighting propensities: "It is a most pugnacious bird. Many a time have I thought to secure a fine male, which I had, perhaps, been following from tree to tree, and had at last seen quietly perch on a leafless twig, when my deadly attention has been anticipated by one less so in fact, but to all appearances, equally so in will. Another humming-bird rushes in, knocks the one I court off his perch, and the two go fighting and screaming away at a pace hardly to be followed by the eye. Another time the fighting is sustained in mid-air, the belligerents mounting higher and higher, till the one worsted in the battle darts away, seeking shelter, followed by the victor who never relinquishes the pursuit till the vanquished, by doubling and hiding, succeeds in making his escape. These fierce raids are not waged alone between members of the same species. The exquisite frill-necked coquette and royal blue myrtle-suckers, are greatly addicted to fighting. It is very seldom that two males meet without an aerial battle. The contest commences with a sharp choleric shriek; after which, with dilated throats, the feathers of the whole of their bodies erected on end, and their tails outspread, they begin to fight with their bills and wings, and the least powerful soon falls to the ground or flies away. I have never known one of these battles last longer than about ten seconds; and in the specimens I have had under my notice in cages, their fighting has mostly ended in the splitting of the tongue of one of the two, which then surely dies from being unable to feed."

FROST MUSIC.—I was once belated in Canada on a fine winter day, and was riding over the hard snow on the margin of a wide lake, when the most faint and mournful wail that could break a solemn silence seemed to pass through me like a dream. I stopped my horse and listened. For some time I could