

making a tolerably continuous oval. Looking to the Atlantic, another system may be traced from Iceland past the Hebrides, the middle Rhine, Auvergne, and the Apennines to Vesuvius, Etna and the Grecian Archipelago. This line may be connected with the other system on the coast by Ararat and the Thian-Shan, and to the west by Madeira, the Azores, the Caribbees and Venezuela. From this

branch an offshoot skirts the African coast in a line parallel with it, and strikes by way of Teneriffe, St. Paul and St. Helena, toward the same objective point at the South Pole.

Upheavals and depressions on a great scale, and operating slowly over vast areas, have made broad gaps in these lines, and obliterated others formerly no doubt quite as clearly marked. No one of these rows of



STAFFA.

chimneys is at any time continuous and synchronous in activity; but the clefts supposed to underlie and be tapped by them reveal their continuity frequently by sympathetic movements involving points separated by thousands of miles. Paroxysms in Hecla, Vesuvius and Etna have more than once been palpably coincident. In 1835, Coseguina in Nicaragua, Corcovado and Aconcagua, burst into eruption on one and the same day. The first and last are separated by an interval of thirty-five hundred miles. What vehicle of communication is it that travels with such velocity? Sound

would traverse the distance named in about five hours. It is on record that Coseguina was heard at Bogotá, eleven hundred miles as the crow flies. The atmosphere could not have accomplished this. The reverberation must have been conveyed along the crust of the earth through the secret speaking-tube of the fraternity. The mere concussion may have caused the explosions, by unsettling the equilibrium of the slumbering forces, much as the Strockr is summoned into action by a pebble. Without requiring the existence of hollow cores to the mountain-ridges, we may