

of gases given off by dead bodies buried in the strata. Caverns generally consist of a series of galleries and apartments, to which the first open space is but the vestibule. Rivers take their rise in some caverns, and in others they are lost. But this is not the only proof of the existence of subterranean waters, for we are assured of the fact by the phenomena which attend the activity of the volcanic force, by springs, and other appearances. It is stated by a traveller, that in some of the caverns of Norway, the roar of the subterranean torrents may be heard as they bound along their contracted channels, beneath the floor of their gloomy recesses. A rivulet flows through the Peak Cavern, in Derbyshire. The entrance to this beautiful cave is a deep depressed arch, 120 feet wide, and 40 feet high; the cave itself is about 800 yards in length. From some caverns, that of Mount Eoto, near Turin, for example, an intensely cold wind proceeds, and others give out malignant vapours. The roofs of some are covered with stalactites, pendent masses of calcareous matter, presenting singularly fantastic forms. The grotto of Antiparos, situated in an island of the same name, one of the Cyclades, has been long celebrated for the variety and beauty of the incrustations which cover its ceiling, walls, and floors.

#### SPRINGS.

Springs, which frequently give birth to rivers and lakes, are found in nearly all districts. There is no class of natural appearances that presents more varied and interesting phenomena, and few that more deserve the attention of the geographer. Springs which are constantly flowing, without any apparent diminution of quantity, are called perennial others are called periodical springs. An intermitting spring is one that flows at fixed intervals, such as that at Como, in Italy, described by Pliny, which rises and falls every hour; and that at Colmars, in Provence, which rises eight times in an hour. There are also some spouting springs, such as those of Iceland, which rise to a great height, and the phenomenon is probably produced by the fall or pressure of the water contained in a reservoir at a considerable elevation above the aperture from which the water is thrown. Many springs are undoubtedly connected with the sea, for they rise