

STRATIFIED. Rocks arranged in the form of *strata*, which see.

STRATIFICATION. An arrangement of rocks in *strata*, which see.

STRATA, STRATUM. The term *stratum*, derived from the Latin verb *struo*, to strew or lay out, means a bed or mass of matter spread out over a certain surface by the action of water, or in some cases by wind. The deposition of successive layers of sand and gravel in the bed of a river, or in a canal, affords a perfect illustration both of the form and origin of stratification. A large portion of the masses constituting the earth's crust are thus stratified, the successive strata of a given rock, preserving a general parallelism to each other; but the planes of stratification not being perfectly parallel throughout a great extent like the planes of cleavage.

SYENITE. A kind of granite, so called because it was brought from Syene in Egypt.

TALUS. When fragments are broken off by the action of the weather from the face of a steep rock, as they accumulate at its foot, they form a sloping heap, called a talus. The term is borrowed from the language of fortification, where *talus* means the outside of a wall of which the thickness is diminished by degrees, as it rises in height, to make it the firmer.

TERTIARY STRATA. A series of sedimentary rocks, with characters which distinguish them from two other great series of strata—the secondary and primary, which lie *beneath* them.

THERMAL. Hot, *Etym.*, *thermos*, hot.

TRAP and TRAPPEAN ROCKS. Volcanic rocks composed of felspar, augite, and hornblende. The various proportions and state of aggregation of these simple minerals, and difference in external forms, give rise to varieties which have received distinct appellations, such as basalt, amygdaloid, dolorite, greenstone, and others. The term is derived from *trappa*, a Swedish word for stair, because the rocks of this class sometimes occur in large tabular masses, rising one above another, like steps.

TUFA, CALCAREOUS. A porous rock deposited by calcareous waters on their exposure to the air, and usually containing portions of plants and other organic substances incrustated with carbonate of lime. The more solid form of the same deposit is called "travertin," into which it passes.

TUFA, VOLCANIC. See "Tuff."

TUFF or TUFA, VOLCANIC. An Italian name for a variety of volcanic rock of an earthy texture, seldom very compact, and composed of an agglutination of fragments of scoræ and loose matter ejected from a volcano.

VEINS, MINERAL. Cracks in rocks filled up by substances different from the rock, which may be either earthy or metallic. Veins are sometimes many yards wide; and they ramify or branch off into innumerable parts, often as slender as threads, like the veins in an animal, hence their name.

ZEOLITE. A family of simple minerals, including stilbite, mesotype, analcime, and some others usually found in the trap or volcanic rocks. Some of the most common varieties swell or boil up when exposed to the blow-pipe, and hence the name of *zeo*, to boil, and *lithos*, stone.