tion. If the unstratified masses at Cloud's Hill owe their form to the action of heat, it is difficult, if not impossible, to conceive how this heat could have changed internal portions of the limestone, without affecting the surrounding strata. In Devonshire, and elsewhere, hills of mountain limestone may be seen in which the stratification of the entire mass is obliterated or nearly so; but there can be no difficulty in this case,—indeed, it may be said that we do not know that the limestone was ever stratified, though the probabilities are greatly in favour of its having been so.

Remarkable sudden changes may be sometimes observed in the quality of the same beds of mountain limestone. At Llanymynah, in Shropshire, (a hill composed of this limestone,) the quality of the limestone, on one side of the hill, is considered by the lime-burners of the very best kind; while, at a little distance, the same strata are so impure, from an intermixture with sand and clay, that they cannot be used with advantage : but what is more remarkable, I have seen, in this hill, a stratum of the best limestone, lying regularly between other strata, suddenly terminate, and a whitish calcareous marle occupy its place, preserving the same degree of thickness, and the same direction. As these strata contain marine organic remains, and were deposited at the bottom of the occan, we may suppose that a submarine current had prevented the limestone from extending further, and supplied its place by a deposition of clay, before the stratum above was deposited. In the former case, where the strata of good limestone become, in some parts, calcareous and impure, we may suppose that submarine currents, carrying away particles of sand, had intermixed them with the calcareous depositions in one part, but not in another. Indeed, this sudden change in the quality of the limestone is so common in that part of Wales, that the workmen have given to it the expressive name of Balkstone. When I was first informed of the balkstone, and saw that it impeded the operations of the quarrymen, I expected to have found a dyke of basalt, and was surprised to observe a mass of stratified limestone, of an impure quality, cutting through the best limestone like a thick wall and left standing, the good limestone being worked away on each side of it. This wall of limestone is of a darker colour than the rest; it contained the remains of the encrinites. It is owing, I conceive, to the irregularities in the deposition of the strata, from causes attending their original formation, that soft and irregular beds or masses of clay occur in mountain limestone, which have subsequently been washed out by subterranean currents of water, and formed excavations and caverns of considerable magnitude. Many instances might be cited of large streams, and even rivers, engulfed in mountain limestone, and rising again at the distance of several miles. In the northern counties these openings are called Swallow Holes. Mr. Farey has enumerated twenty-eight swallow holes in the mountain limestone of Derbyshire.