

and twenty or even thirty in others. It consists of basalt, coarse grained in texture, and composed of white felspar and black hornblende: the latter mineral predominating, and giving the rock a dark greenish grey colour.

The basaltic rocks exhibited in the valley of the Tees (which traverses the above mountain group) are believed to be the prolongation of the same stratum, laid open by denudation. These rocks extend from near the source of the Tees to Egglestone.

At Caldron snout, situated on the moors ten miles above Middleton, a basaltic ridge crosses the river, and occasions a succession of cascades for the space of 596 yards, which form a fine contrast with the pool of still water or *wheel*, above the falls. It was here immediately under the basalt that the Rev. J. Harriman discovered some garnets? crystallized in dodecahedrons, and imbedded in a thin stratum of pale red hornstone or chert with particles of calcareous spar.

Near the steep acclivity which terminates Cronkley Fell, another range of basalt interrupts the course of the Tees, and causes the cataract called the High or Mickel force, where the water is precipitated from the height of 56 feet.

The rock which here crosses the river, is apparently an *overlying mass* of coarse-grained grey basalt, the hornblende and the felspar which compose it not being intimately combined. It rests upon the lead-mine sills, and shoots, on the banks of the Tees, into regular columns of considerable magnitude and elevation. A few miles below this cascade, and about three above Middleton, perpendicular basaltic rocks again form the bank of the river. To these, iron chains have been fastened, for supporting Winch bridge.

This remarkable structure, if it can be so called, is a plank two feet in breadth, with low hand-rails, suspended 56 feet above the Tees, which is here 63 feet wide. Some miners contrived it for the purpose of passing from the county of Durham to Holwick in Yorkshire.

In the fragments of basalt which are found scattered over the surface in Teesdale, and in other parts of the district, small grains of yellow olivine, and of greenish black augite, are found imbedded. (G. T. vol. iv. p. 73.)

A bed of basalt is penetrated at the depth of 159 fathoms in the Aldstone Moor mines: this is also referred by the miners to the above stratum of the great Whinsill. But Mr. Winch considers their identity as problematical; and remarks that the miners regard all the beds of basalt which occur in the mountainous district, as ramifications of the great Whinsill.

At Dunstanborough castle, and at Gunwarden castle, near