RIVERS.

The blocks are very often perched; show no marks of abrasion; no other drift matter is with them; they are collected sometimes into small groups; and they may be regarded as having been uplifted and floated by ice, and dropped on surfaces which had been swept by currents clear of other loose matter.

In lower ground, to the southward, westward, and eastward, the slaty blocks have been carried very much further; in this case they are no longer solitary, but mixed with other sorts of detrital matter, and occasionally show marks of attrition in water—which they never do on the high limestone hills (see the Lithograph, Pl. V.).

The river quits the elevated region which is north of the Craven Fault at Settle, the limestone country here dropping suddenly down 1000 feet. Long picturesque cliffs mark the line of this singular and enormous displacement. Of these great scars, Giggleswick, on the west, is perhaps the most remarkable; Castleber, above Settle, is also a fine mass of rock, worth ascending. At the foot of Giggleswick Scar is a small spring, subject to uncertain fits of rising and falling,-a phænomenon which the stone basin into which it flows renders apparent. Variable pressure on the water, derived from a curved or siphonal passage underground, is the principle on which explanations have been offered for this and other such springs by Gough and other writers, and the effect may be copied by artificial experiments. In dry seasons it is useless to wait for the performance.

The course of the river is southward by Hellifield Peel (an ancient rural tower of defence) and Gisburn, where still the old breed of almost white cattle, which formerly roamed in the forests of the north of England, may be seen. At Bolton by Bolland, an ancient mansion which once sheltered Henry VI., caverns appear in the limestone. A little further down the river is the admired ruin of Sawley Abbey (Cistercian, 1147).

The Ribble now becomes for a few miles the boundary between Yorkshire and Lancashire, leaving on the Lancashire side

112