

			Yds.	Ft.	In.	Yds.	Ft.	In.
Rock measures	-	-	-	12	0	0		
Coal (Whickham St.)			-			2	0	0
Rock measures	-	-	-	10	0	0		
Coal (Brockwell)			-			1	0	2
Various rock measures			-	50	2	0		
Millstone grit								
			<hr/>			<hr/>		
			380	0	6	15	2	3

In Mr. Buddle's excellent sections, published in the "Transactions of the Natural History Society of Newcastle," the extent of the several alternations of coal, sandstone, shale &c., in the upper parts of this series are clearly shown. There is very little ironstone in the coal tracts of the Tyne and Wear. In Yorkshire, the total thickness of the coal formation is from 1000 to 1500 yards. In Lancashire, perhaps a greater thickness must be ascribed to it. In South Staffordshire (Dudley), it does not exceed 1000 feet. The most variable parts, in all coal tracts, are the sandstones and shales; the most regular parts are the coal beds and ironstones.

Organic Remains. — The forms of life buried in the carboniferous system of strata are exceedingly numerous and varied, and, being generally in an excellent state of preservation, allow of a most strict comparison with existing types. They consist of very many races of plants, abundance of zoophyta, multitudes of mollusca, some crustacea, many fishes, but, as far as we yet know, neither reptiles, birds, nor mammalia. Many of the plants, indeed by far the greater number, are of terrestrial growth: all the zoophyta, and nearly all the mollusca, crustacea, and fishes, are marine. The excepted mollusca occur among the remains of plants swept down from the land: the excepted crustacea are those referred to by Dr. Hibbert, in his account of the Burdiehouse limestones, with which also a few fishes are found, which, by this author, are referred to a freshwater origin.

The plants are partly very similar to existing races, as the large group of ferns generally, and partly appear altogether unlike them, as the large-furrowed stems of