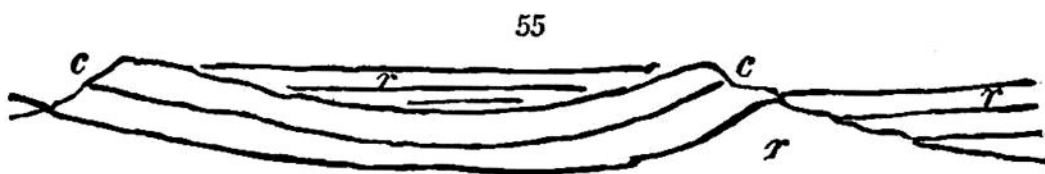
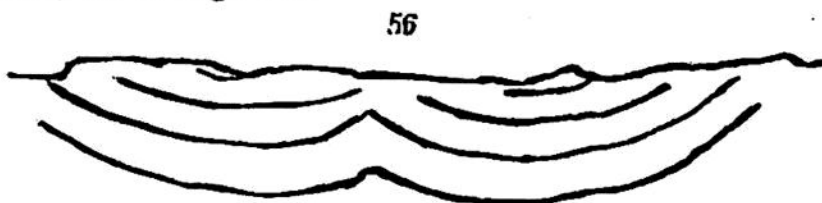


the whole Craven country into a series of parallel undulations. Through Derbyshire runs an axis, from which the rocks dip eastward and westward; and this ridge, continued northwards towards Colne, effects a complete disunion of the great coal field on the east (Yorkshire, Derbyshire, Nottinghamshire), from that on the west (Lancashire, Cheshire) which it appears most probable were once united on the bed of the sea. It is only by considering the effects of subterranean movements, that we can at all account for the disjointed and fragmentary condition of the central coal fields of England. Their disunion is sometimes real, but very frequently only apparent, since they often dip towards



each other, as *c c*, and would perhaps be seen to unite but for the covering of red sandstone, which conceals the coal along the middle of the basin.

The great South Wales coalfield is a vast double trough, having an included anticlinal axis, ranging east and west; as *Diag. 56*.



and if the Barnstaple and Bideford beds belong to this system, their principal dislocations range also east and west: this is, perhaps, the most general line of movement in the Somersetshire tracts, where dislocations are numerous and remarkable: it is renewed in the north of France and Belgium (at Mons and Namur), and about Elberfeld. Without now stopping to discuss the bearing of these results on M. de Beaumont's views, we shall observe, that a careful study of the phenomena in the north of England has left but slight doubt on our mind that the application of Mr. Hopkins's mechanical theory