

(b) *Mineral contents.* This series forms the principal depositary of the British Lead mines; those of Northumberland, Durham, York, Derbyshire, and Somersetshire, are all situated in it; † it also affords ores of some other metals; all

cott. Phil. Trans. & Rees). Golconda near Hopten. Knowles mine cavern. Merlin's cave. Orchard mine cavern. Peaks hole, Castleton (Catcott, p. 234.) Placket mine cavern. Pool's hole, Buxton (Catcott, p. 236.) Ranter mine. Reynard's hall and cave in Dove-dale. Speedwell or Navigation mine cavern, Castleton.

In Staffordshire. Thor's house, or Thyrsis cave in Wotton dale. Ribden and Ruden caves near Calden here receive the waters of the Manifold, &c. Ludchurch, between Swithamley and Wharnford, is 208 yards long and 40 or 50 deep, (Plott.) Hobchurch cave near Welton mill. And Plott mentions caves at Wharnford, north-east of Leek; a large one at Yelpersley Tor; one at Kinsare; under Kinfare edge; at Holloway near Stourbridge; and under Peakstones in Olverton parish under Long Hursh hill.

In Gloucestershire. In Catcott on the Deluge mention is made of caverns in St. Vincent's Rock near Clifton. Penpark hole on Durdham Down is by some suspected to be the workings of an old mine: and there are huge caverns near Colford, which serve to ventilate the mines.

In Somersetshire. Lockston cavern and Banwell cavern, 12 miles north-west of Wokey, (see Ph. Trans. by Lowthorp, vol. 2. p. 368.) There are also caverns in Charterhouse liberty, Mendip, and Green-ore farm, 4 miles from Wokey; and a cave called the Lamb cavern near East Harptree.

Subterranean rivers are frequent all over the limestone district. Such are the Manifold, which passes beneath the limestone hills about three miles south-west of Ecton mine in Staffordshire, and after traversing a cavern through the base of the limestone hills four miles in length, re-appears near Ilam. The Hamps river also breaks out near the same place (Farcy). The Ribble is also an underground river; as also is the Greta (Goldsmith, Nat. Hist.) Such also are Horton Beck, and Bransil Beck, at the foot of Pennigant in Yorkshire. The stream which forms the cataract in Speedwell mine near Castleton, is, according to the inhabitants of that place, proved to be the same as the stream which traverses the Peak cavern at that place.

The streams forming these subterranean rivers are absorbed by funnel-shaped hollows on the surface of the limestone, called provincially *Swallowers*, and *Swallet holes*.

† The following notice, communicated by Mr. John Taylor, of the produce of lead in England, may be here appropriately introduced. Where two asterisks (\*\*) are prefixed, the mines belong entirely to the carboniferous series: where a single asterisk (\*) they are partly in these and partly in other formations: where no asterisk, entirely in other rocks.

In round numbers the annual produce is as follows,—

ENGLAND.—**Durham, Cumberland & Yorkshire	Tons	19,000
**Derbyshire, probably	"	1,000
*Shropshire	"	800
Devon and Cornwall (transition and primitive rocks)	"	800
		21,600
*WALES..... (Flintshire and Denbighshire)		7,500
*SCOTLAND .....		2,800
		Tons 31,900