

of the south-west of Ireland" (Quart. Journ. Geol. Soc. London, vol. 26, p. 348, 1870, published in abstract only), raised some discussion on the age and the mode of origin of the copper deposits of West Carbery and Bearhaven. David Forbes then said that he regarded the veins as post-Carboniferous (which Jukes would certainly have admitted), and, in opposition to the views of Jukes, as not filled by segregation from the Devonian strata. Here, however, he seems to have spoken without knowledge of the features in the field.

The list of mines that have been actually worked is long, but is, as Jukes urged, somewhat deceptive. In the following notes a selection has been made from Griffith's lists (1855, p. 204, and 1861, p. 141), and from Kinahan's descriptive account for the Geological Survey (Mem. 200, 203-5, 199, p. 21, 1861), and from that by Jukes of the mines from Bantry south-westward along the southern shore of Bantry Bay (Mem. 192 and 199, 1864). For convenience, the names have been placed in alphabetical order, as will be done in the case of the numerous iron mines of north-eastern Ireland. It may be noted that Ballycummisk, Cappagh, and Horse Island were formerly known as the **Audley mines** (Weaver 1838, p. 26; Griffith 1861, p. 141), from their being on Lord Audley's property. The "Audley" mine of Hunt (1848) is probably Cappagh, since the record of the output of Audley begins where that of Cappagh closes.

The development of copper mining in this district began with the recognition and raising of ore at Ballycummisk and Horse Island in 1814, at Ballydehob in 1818, and at Cappagh in 1820. When Colonel Hall sent cupriferous peat-ashes from Glandore to Swansea (see under Glandore), vein-mining seems to have been unknown in the whole county of Cork. Allihies opened in 1813. It is remarkable, however, that the indications of copper and lead ores in the county of Cork, afterwards so freely noticed, were unknown to Stewart (1800).

Ballycummisk. 1" 199. 6" Cork 140 S.W. The mine is marked on the Mineral Map by the coloured spot N.W. of the Horse Island mine, and below the word Sta. of Woodlands Sta. The shafts are marked on the 1" Ordnance Survey map, north of Rossbrin Cove. Weaver (1838, p. 26) states that *Ballycomisk* was sunk 20 fathoms in a quartz lode two feet wide, associated with barytes, and with shale mixed through it. Hunt (1848) records under *Ballycummisk* 16 tons of ore, raised as far back as 1814, and 42 in 1815. The next record is in Min. Stat. (*Ballycummish*) 1857, when 17½ tons were sold by private contract. The ore raised in the next few years yielded over 10 per cent. of copper, but declined towards 7½ per cent., with a maximum output of 671 tons in 1869. Memoir 200, etc. (1861) speaks of the mine as then being one of the best developed and very satisfactorily worked. Details