

*Note on a peculiar occurrence of Galena.*

By J. STUART THOMSON.

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SOME time ago I was informed that galena was being obtained in a sandstone quarry at Aimville, about two-and-a-half miles north of Kirknewton, which had been recently re-opened for the purpose of supplying building material in connection with the extension of the Harperrig Reservoir, belonging to the Edinburgh Water Trust. As I saw no likelihood of my soon being able personally to visit the spot, I mentioned the fact to my friend, Mr. Alex. Lumsden, M.E., who I knew had sometimes occasion to pass near the locality, at the same time telling him that I did not attach much importance to the alleged occurrence, and that I did not expect that it would be of such interest as to be worthy of a special visit. Subsequent investigation showed, however, that I was mistaken, and as the mode of occurrence of the mineral is so unusual, some account of it may not be without interest.

Up to the present time I have been unable to visit the quarry personally, so that the following account is mainly based on notes made by Mr. Lumsden, who has kindly put them at my disposal.

The special interest in this instance lies in the fact that the galena only occurs as isolated loose crystals, in cavities in the otherwise solid sandstone. The cavities are small—not larger than a pigeon's egg, and more frequently not bigger than a hazel nut—and are filled with a fine soft clay in which the crystals lie imbedded. There is never more than one crystal found in a cavity, and not unfrequently the cavities contain no crystals, or are, as the quarrymen term them, "barren." The cavities are scattered over the whole section which is exposed, and do not appear to be disposed in any particular zone; they are by no means common, in fact they are of rather rare occurrence. The rock itself is situated among the upper members of the Old Red Sandstone, if it is indeed not a part of the Old Red itself. The strata immediately overlying the sandstone are somewhat vitrified, apparently by the whinstone of the neighbourhood.

The crystals are mostly simple cubes, but a few are modified by the octahedron and occasionally twins are found; the crystals are small, none that I have seen exceeding half-an-inch in length.

Professor Heddle records finding crystals of galena in the Old Red Sandstone, in the island of Rousay, Orkney; the galena occurring in small nests of crystals—cubo-octahedra --without any connecting string.

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