

we might conclude that it was met with very frequently.

There is one curious circumstance appertaining to the ore, viz. that it assumes a different colour and external appearance; it is not the *bronze-red* ore only which contains nickel, but that portion of it also which has the semblance of arsenical pyrites; a fragment of it well roasted leaves a green oxide, whence we are led to infer that the arsenic and nickel which form the alloy, if alloy it be, in this ore, vary in their relative proportions.

WILLIAM GREGOR.

II.—CAVERN IN DOLCOATH MINE.

In November of 1814, a large cavern was discovered in the principal vein in Dolcoath copper mine, at the depth of one hundred and seventy fathoms from the surface; it is remarkable on account of its dimensions, being the largest ever found in the county: its form was very irregular, from eighteen to twenty fathoms in length, three fathoms high, and from four to nine feet wide; in the lower part, and wedged between the walls, there are several rocks, between which are spaces which communicate with other cavities below. The air is contaminated with large quantities of fixed air, and extinguishes flame. The country in which this cavern occurs is slate.

JOHN RULE,