

A GOLD-WASHING APPARATUS.

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I HAVE been allowed, by the kindness of Mr. Moses Bawden, to make careful drawings of a curious zinc article found in the old tin stream-works of "Golden Dagger" Mine, near the Vittifer Works by King's Oven on Dartmoor. Traces of gold are found in the works here, together with tin in abundance. The stream-works of the upper portion of the West Webburn are of extraordinary interest, and are associated with hut circles, the Challacombe Avenue, cairns and kistvaens.

In a heap of rubbish of the old works was found a small zinc apparatus, which was probably intended for washing gold. It is very small, measuring $2\frac{7}{8}$ inches by $1\frac{7}{8}$ inch, and consists of an oblong box with bottom and a roll in the zinc along the sides. The box has a part-cover extending $\frac{2}{8}$ of an inch from the head. It may be compared to an old-fashioned snuff-box with a half-lid, that fitted to the fixed half on a hinge, only that this had no hinged lid.

Inside this box are two articles, also in zinc. One consists of a very elaborate arrangement of thirty-seven double teeth, fitting between each other, and hinged the one in the other, held together by a clenching-plate of zinc. These teeth were never intended to move on the hinge, because the apex of the angle formed by the upper row of teeth is fixed by melted zinc run over them, soldering them together.

Under this arrangement of teeth, and detached from it, is a zinc receiver to catch the grains of gold that pass between the teeth. It is curved up away from them, so that the water may flow away over the lip, leaving the grains in the lap. Both the contrivance of double teeth and the receiver

are removable, but were found in the box, which they fit exactly.

It is quite impossible to fix the date of this extremely interesting relic. The ancient works at "Golden Dagger" belong to two distinct periods. The first, when the surface was scratched with oak scrapers to the depth to which the disintegrated granite and elvan lay; and a second, when iron tools were used, when pits were sunk, and the lodes were followed for short distances in the solid rock. The first are the pre-historic stream-works; then came works in historic ages, probably before the Saxon invasion; the third belong to the mediæval and Elizabethan period. To which of these the zinc gold-washing apparatus belongs it is hard to say; but certainly it does not date from the very earliest works of all, which began before even bronze tools were in employ.