

separate and moveable pieces, confined by a ring, into which they are most accurately fitted, and so adjusted that the metal may be forced into the letters by its lateral spread, at the same time that the coin receives the blow of the screw-press.

Coins are generally completed by one blow of the coining press. These presses are worked in the Royal Mint by machinery, so contrived that they shall strike, upon an average, sixty blows in a minute ; the blank piece, previously properly prepared and annealed, being placed between the dies by part of the same mechanism.

The number of pieces which may be struck by a single die of good steel, properly hardened and duly tempered, not unfrequently amounts at the Mint to between three and four hundred thousand, but the average consumption of dies is of course much greater, owing to the different qualities of steel, and to the casualties to which the dies are liable :— thus, the upper and lower die are often violently struck together, owing to a fault in the *layer-on*, or that part of the machinery which ought to put the blank into its place, but which now and then fails so to do. This accident very commonly arises from the boy who superintends the press neglecting to feed the hopper of the *layer-on* with blank pieces. If a die is too hard, it is apt to break or split, and especially subject to fissures, which run from letter to letter upon the edge. If too soft, it swells, and the collar will not rise and fall upon it. or it sinks in the centre, and the work becomes distorted and faulty. He, therefore, who supplies the dies for an extensive coinage has many casualties and difficulties to encounter.

In the mint, it is considered that the destruction of eight pair of dies per day, (one for each press), is a fair average result, though we much more frequently fall short than exceed this proportion.