



The Evolution of the Penny

FOUR-COIN SET



Origins of the British Penny

The British penny has an impressive history dating back more than 1,000 years. The first appearance of the penny can be traced back to the Anglo-Saxons, and the first British pennies are also thought to have been indirectly derived from the Roman denarius coin.

The history of The Royal Mint began in the 880s and pennies of Alfred the Great are used to date its founding. This early iteration of the British penny features a monogram of 'Londonia' on the reverse, denoting where the coin was struck, and a stylised portrait of Alfred the Great on the obverse.

Although modern pennies are made using copper-plated steel, the original incarnation of the penny was struck in silver. These first pennies were much thinner than modern pennies.





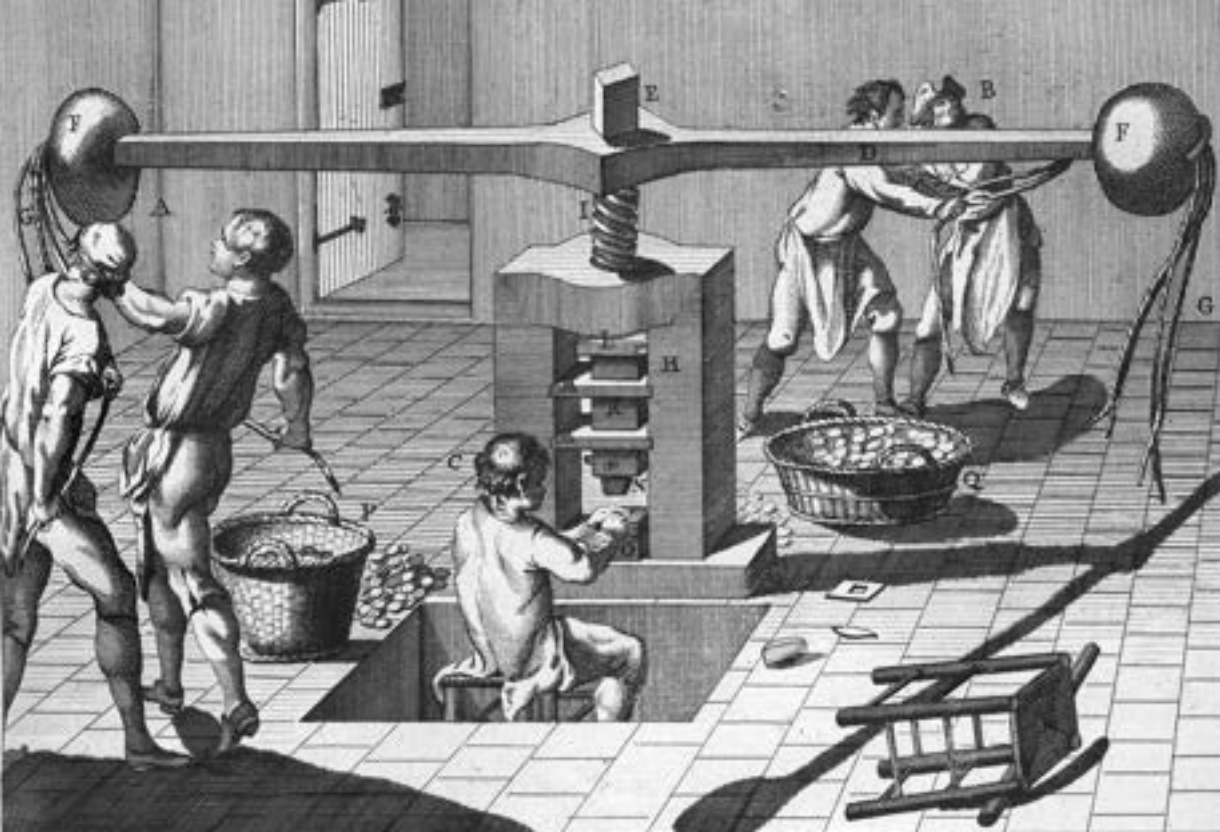
Hammered Coinage

Around 1279, The Royal Mint moved to the Tower of London where coins were struck by hand using dies engraved with both obverse and reverse designs.

The bottom die was secured into a block of wood using a spike at the base of the metal tool. A fresh blank would be placed on the die, the second die was held over the blank, and the moneyer would strike it with a hammer. The top die would wear out more quickly than the bottom one, so the former would bear the reverse design which was easier to replace than a royal portrait.

As these coins were cut and produced by hand, the edges were uneven, and the coins themselves were thin. Due to their silver content, the pennies were often subjected to clipping by counterfeiters. As a result of this practice, a cross design extending across the coin was used on the reverse to help prevent clipping.





The Introduction of the Screw Press

Hand striking remained the principal method of coin production until the reign of Charles II. The seventeenth century saw the full transition to mechanisation with the introduction of horse-drawn rolling mills and the screw press.

The rate of production was around 30 coins a minute, but the process was still labour intensive. Six horses were required for the rolling mill – four to operate it and two to provide rest rotation. The screw press required a team of seven operators, with a young moneyer being responsible for flicking away finished coins and placing a fresh blank in their place.

Silver was still used for creating pennies, but due to the rise in price of this precious metal, the size of the penny was reduced. After 1660, the silver penny only meaningfully appeared as part of Maundy money, a tradition which still exists today. Silver pennies are gifted to pensioners at the Maundy Thursday service, the number of coins given matching the age of the current monarch.



Coins shown are not actual size. Full specifications are available on request.

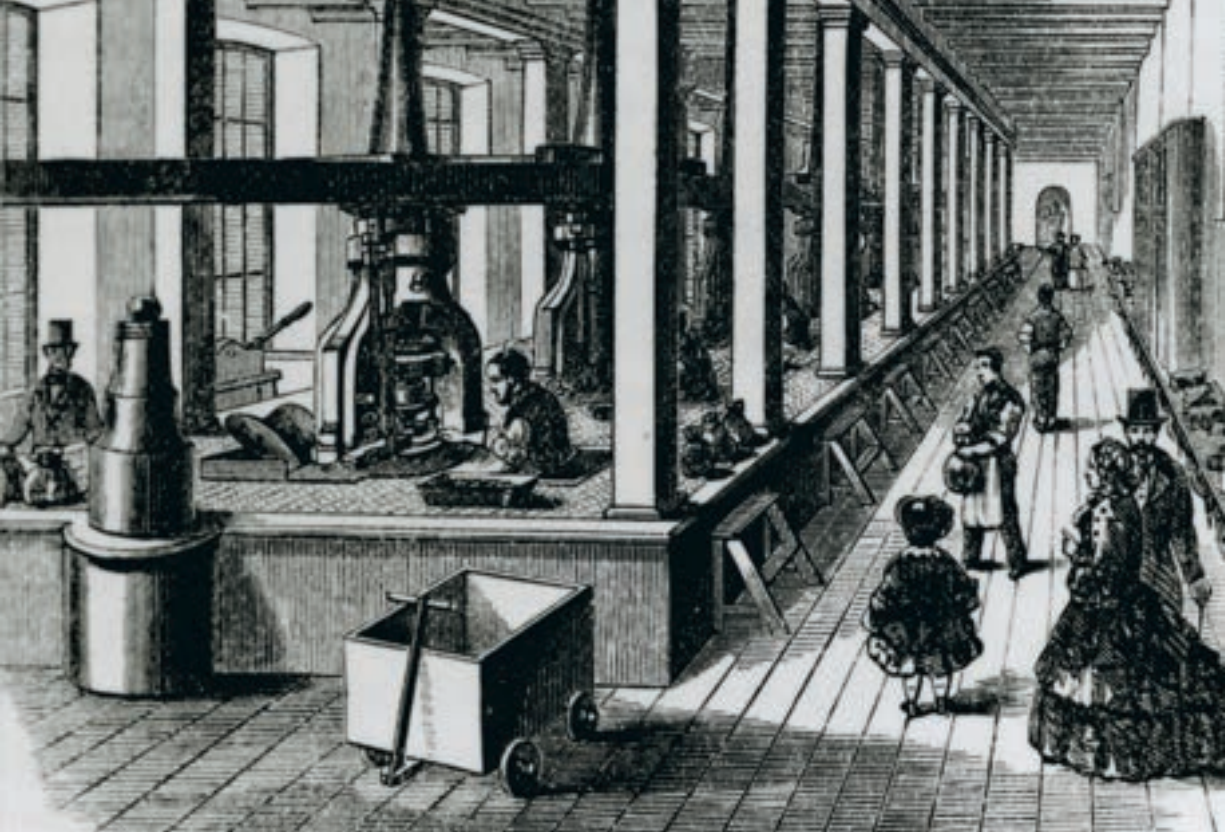
Moving with the Times

Matthew Boulton installed steam-powered coin presses at his private mint in Birmingham, where he produced the famous 'cartwheel' pennies. The steam power employed more tonnage to create larger, heavier coins. After petitioning from Boulton, the cartwheel pennies were made legal tender in 1797 and remained in circulation until they were replaced in 1860 by the bronze 'bun' pennies featuring Queen Victoria.

Losing out on business to Boulton, The Royal Mint was forced to modernise its machinery. In 1810, the mint moved to a custom-built site at Tower Hill. Eight steam-powered coin presses had been supplied by Boulton, each capable of striking up to 60 coins a minute.

When all these presses were operating at once, the noise was deafening. These louder presses were replaced in the 1880s with smaller, quieter and faster presses from Heaton's of Birmingham.







The Electrification of Striking

Coin production today is very different from the historical methods. The most recent method of striking coins uses electric, which was first introduced in the late nineteenth century. These electrified presses are much quieter and cooler than the steam-powered machinery of the early nineteenth century.

Historically, engravers had to physically create their designs onto the dies used for striking coins. Today, engravers first create a low-relief plaster model. This model is electroplated with nickel and copper, then mounted onto an engraving machine for scanning. The movements of the scanner are sent to a rotating cutter, which copies the design into a block of steel at the correct size for striking coins.

The modern electrified press is capable of using 150 tonnes to impress designs onto the prepared blanks. These presses can produce an impressive 750 coins per minute, vastly greater than the production rate of previous presses.



An Enduring Denomination

The penny is a denomination that has endured throughout the years, from its Roman predecessor to decimalisation. However, some pennies have become rarer than others, such as the 1933 penny.

The production of coins for circulation is dependent on the demand from banks. In 1933, there were ample pennies in stock, so new pennies weren't required for that year. However, at the time, there was a tradition of complete sets of year-struck coins being placed under the foundation stones of new buildings.

A small number of 1933 pennies were struck for buildings constructed during that year and to be kept as record copies at The Royal Mint Museum. The exact mintage of the 1933 penny isn't known. These coins never entered circulation so are some

of the rarest pennies ever produced. Varieties of the 'bun' penny (named after the hairstyle of Queen Victoria on the coin), first issued in 1860, are also highly collectable. Some coins with variations in the reverse design of Britannia, including the shield, trident, lighthouse and ship, are rarer than others.







THE ROYAL MINT®

THE ORIGINAL MAKER

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