

## Jacob Momma and the Ecton Copper Mines

by J. Morton and J.A. Robey

### INTRODUCTION

'The Mine Ecton was worked several years by my Lord of Devon himself, Sir Richard Fleetwood and some Dutchmen - the veins lay from eight, to fifty yards deep, but all dipt North Easterly: that they broke the rocks with Gunpowder.'

This statement by Dr. Robert Plot in 1686 is one of the most often repeated, and most important, quotations on the metalliferous mines of the Peak District, as it is one of the earliest references to the use of explosives in mining in Britain. The identity of the 'Dutchmen' has aroused much speculation in the past. Bishop Watson's assumption in 1781 that Dutch or German miners had been brought over to Ecton by Prince Rupert is now known to be quite incorrect. The more recent discovery that the Ecton Copper mine and its smelting mill at Ellastone (on the River Dove, some four miles south-west of Ashbourne) were leased in August 1665 to a 'Mr. Mumma' has led to speculation that this was Jacob Momma who played an important role in the history of brassmaking in Britain (Robey, 1969). Now documentary evidence has confirmed the hitherto circumstantial evidence that Jacob Momma was the Dutchman reported by Plot.

### JACOB MOMMA

The Mommas were one of the leading families in the German brass-making centre of Aachen (Becker 1913) near the present border with Holland and Belgium, and were first mentioned in 1587. As a result of a combination of religious oppression and guild restrictions, many of the Protestant 'kupfermeister' left Aachen and set up their brass and copper works at nearby Stolberg, which quickly came to rival the older centre. (Discussion with Joan and Roy Day. There are many Momma graves still in the Stolberg Churchyard. Calamine was mined extensively in the area and there is a village of La Chalamine just in Belgium).

Some, like the Mommas, travelled even further afield. One branch of the family, led by a Jacob and a William Momma, played a leading part in establishing the Swedish brass industry. For this they were ennobled in the Swedish manner with the title 'Momma-Reenstierna', or 'Momma Reindeer Star' (Sonden, 1911). (This article gives a detailed account of the activities of the Swedish Mommas. It is clear from Sonden's account that the Swedish Jacob Momma could not have been the one who came to Esher and Ecton. In fact he was prospecting along the Finnish border at the time of the Ecton lease).

It was another Jacob Momma who came to England and became one of the main brass makers in Britain in the seventeenth century. Together with other European associates he set up a brass works at Esher in Surrey in 1649, and his efforts there continued for over 20 years. (Pettus, 1683; Houghton, 1697). Now documentary evidence has come to light which proves that Jacob Momma of Esher did in fact lease Ecton Mine at this time. In 1686, members of the Momma family were in dispute about the legacy of Jacob Momma the elder, who had died in 1679. Papers relating to the dispute have survived in the Chancery records at the Public Record office (PRO C7/225/51)\*. These contain statements made by Jacob's son and by his brother, Abraham Momma, which contain much interesting material about the family's business activities. Jacob leased the premises at Esher while still an alien and purchased the property outright as soon as he was naturalised in 1660. He built copper mills as well as a brass works, using imported copper for both. He also traded in calamine from the Mendips, which he used for his own brass works and also exported to the European manufacturers of brass.

Dependence on imported copper was the main problem facing Jacob Momma. Most of Europe's copper at this time came from Sweden and the brass and copper trade was in the hands of a few very powerful Dutch merchants. They systematically sought to undermine his business by dumping cheap brass on the London market and by cutting off his supply of copper. It was to overcome this problem that Jacob sought for a domestic source of copper which would make him independent of Sweden. This brought him to Staffordshire in 1665. He made his son (also Jacob) manager of the 'Ecton Hill copper mines' and the 'Elliston' smelting mill at a salary of £60 per year. Jacob (junior) laboured for two and a half years to make the project work, but eventually gave it up, having lost £300 in the process. His father brought him back to Esher to take charge of the copper mill, at the same salary of £60 per year. The problem with Ecton was that they found 'the ore rising in very small veins and very small quantities'. Unfortunately the Chancery statements give no other details of the operations there. Eventually the brass works at Esher were given up and even before Jacob the elder's death, the melting houses there had been demolished and dwellings built in their place. Jacob told his son that he had lost £6,000 in attempting to make the brass works pay.

\* This interesting document was discovered as a result of an extensive search of Chancery material by John Morton, undertaken during research for a PhD thesis in progress on the history of the copper and brass industry in Britain between 1690 and 1750.

#### THE USE OF GUNPOWDER AT ECTON

On first reading, Plot's statement implies that 'my Lord of Devon' (i.e. the 3rd Earl of Devonshire), Sir Richard Fleetwood and the Dutchman (i.e. Jacob Momma) worked the mines at Ecton in partnership and most writers have assumed this to have been the case. In fact these three people either worked different areas of ground, or at different times, and this is not inconsistent with Plot's quotation.

The mineral rights to the northern part of Ecton Hill were owned by the Duke of Devonshire and to the southern part by the Burgoyne family (see Robey and Porter, 1972, p5 for a plan showing the boundary). The duke re-opened the mines on the Devonshire royalty and built a smelting works at Ellastone in 1660, but leased the mines and smelting mill to Jacob Momma in August 1665, who worked them with his son for 2½ years.

Sir Richard Fleetwood appears to have worked only the mines on the Burgoyne royalty in the 1670s (he was involved in a dispute there in 1672, see Robey, 1975). It appears to be purely coincidental that the smelt mill was built at Ellastone, where the village was owned by Fleetwood and only about a mile from his home at Wootton Lodge. Possibly an informal agreement had been made between the Duke of Devonshire and Sir Richard Fleetwood, but there is no documentary evidence.

So there is no documentary evidence as to which of the three groups known to have worked Ecton at this period used gunpowder there - Plot is ambiguous on this point. Circumstantial evidence points to Jacob Momma - explosives had been in use on the Continent of Europe earlier in the seventeenth century and it is most likely that he introduced the technique to Ecton. The German method involved breaking out the rock and then blasting it with powder. His brass works at Esher was near to gunpowder works for ordnance, so he would have had contacts with explosives manufacturers as well.

Assuming that it was Momma who used gunpowder (as seems likely) then this must date from August 1665 to about February 1668, several years earlier than the earliest documented use in the Derbyshire lead mines (experimentally at Bailey Croft Sough in 1672 and in the Greatorex branch of Crawford Sough in 1676, (Rieuwerts, 1983)). This reinforces Ecton's case for being the earliest use of gunpowder in British mining.

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