

# On Her Majesty's Service

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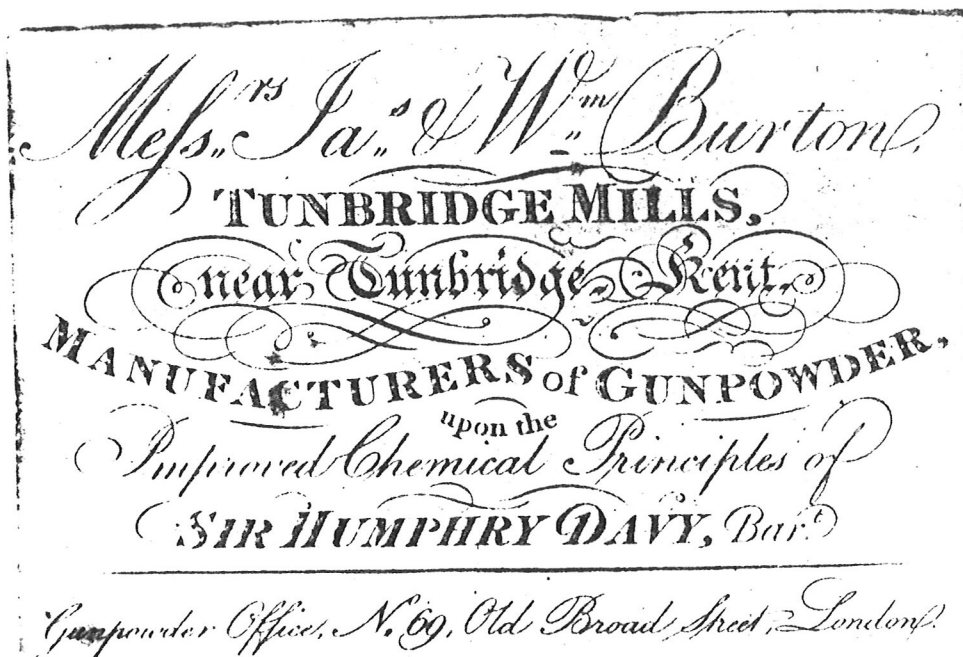
# Tunbridge Gunpowder Mills

by DAVID BACK

With the Napoleonic Wars in progress, the demand for gunpowder was immense, and in 1811 a licence was granted to build Ramhurst Powder Mills on the site of an old corn mill about one mile from Tunbridge, Kent. The applicants were George Children, his son John George, both of Ferox Hall, Tonbridge, James Burton and his son William Ford, both of Mabledon, Tonbridge, Sir Humphry Davy of Albemarle Street, London and Anthony Valle of the Haymarket, London.

Valle decided not to go further, but the others entered into a partnership for sixty years from 26 June 1811, and the factory was renamed Tunbridge Gunpowder Works. The Childrens put up £15,000 of capital and the Burtons a similar amount. Sir Humphry Davy did not contribute, and in 1812 he and George Children both retired from the partnership. By 1814 work on the buildings and equipment was complete and J. Monk was employed as clerk and assistant at a salary of £240 a year.

In 1820 J. G. Children sold his share in the business, estimated to be worth £16,740 to W. F. Burton for £6,000, and in 1824 James Burton also left, leaving W. F. Burton on his own. He continued the business until his death in 1856, and in 1859 it was sold to Charles Berwick Curtis and Thomas Curtis of Lombard Street, London. At the time of the sale, the works could produce 7,000 to 14,000 barrels of gunpowder annually, and showed an annual profit of £2,000 to £3,000. Barges belonging to the Medway Navigation Company carried the powder barrels to a magazine at Erith, charging 15s. per ton, and as well as this magazine the firm had a leasehold wharf in Tonbridge with a water frontage to the River Medway. The works covered an area of some fifty acres of pasture, plantation and water, and there was a house with offices for the manager and fifteen cottages for workmen. The buildings and equipment comprised a charcoal kiln and stoves,<sup>2</sup> grinding and mixing houses, salt-petre refinery and mill, four mills driving eight pairs



1. The trade card used between 1822 and 1824.

of stones by water power,<sup>3</sup> press house with an hydraulic press, corning house, glazing and dusting houses,<sup>4</sup> drying house, magazines, packing houses, proving houses and grounds, with stabling, cart sheds, cooperage, smithy and other offices. The brick-built magazine at Erith could hold two thousand barrels of powder and, with a cottage for the storekeeper, covered one acre of ground.

London trade directories show that Burton, Children & Co. had an office at 24 Birchen Lane from 1815 to 1821. J. and W. Burton were at 69 Old Broad Street in the directories for 1822 and 1823 (Plate 1). Then from 1824 to 1840 W. F. Burton was at the same address (Plate 2). The directory for 1842 gives the address as 25 Broad Street Buildings, and this entry continues until 1858 when it is noted that the business is in the hands of William Burton's executors.

*William F. Burton.*  
**TUNBRIDGE MILLS,**  
*near Tunbridge Kent.*  
 upon the Chemical principles of  
**SIR HUMPHRY DAVY BAR.<sup>T</sup>**  
*Direct to Gunpowder Office, No 69 Old Broad St. London.*

<i>Blast Gunpowder</i>	<i>a</i>	} <i>2. Barrel of 100 lbs.</i>
<i>C &amp; F</i>	<i>a</i>	
<i>Cannon</i>	<i>a</i>	
<i>F</i>	<i>a</i>	
<i>FF</i>	<i>a</i>	
<i>FFF</i>	<i>a</i>	
<i>T. Proof</i>	<i>a</i>	
<i>Sporting Gunpowders</i>		
<i>S.S in lb Papers</i>	<i>a</i>	
<i>D.S</i>	<i>d<sup>c</sup> a</i>	
<i>T.S</i>	<i>d<sup>c</sup> a</i>	
<i>Canister</i>	<i>a</i>	
<i>Percussion</i>	<i>d<sup>c</sup> a</i>	
<i>Extra fine</i>	<i>d<sup>c</sup> a</i>	

2. William Burton's trade card and price list used between 1824 and 1840.

NOTES

1. Wide dispersal of the plant was essential so that an explosion would cause the minimum of casualties and damage.
2. The production of high quality charcoal depended on the skill and experience of the workman in charge of burning. I remember watching the man in charge of the very last batch of charcoal made in this country for gunpowder. He powdered some in the palm of his hand, examined it and then threw a small quantity in the air, noting its colour against the bright light. He pronounced it good but not up to the standard needed for the best proof powder.
3. The pairs of heavy wheel-shaped stones were driven round for many hours in circular troughs which held the ingredients of the gunpowder, and this was the actual making of the powder. It was at this stage particularly that explosions occurred from time to time.
4. The corning, glazing and dusting houses were used to turn the caked powder into grains of varying sizes to polish them. Large sieves moving to and fro gave off clouds of explosive dust - another hazardous part of the manufacturing process.

ACKNOWLEDGEMENTS

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I am also grateful to the Trustees of the Victoria and Albert Museum for their permission to reproduce the two trade cards of the Burton family.