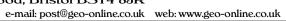
THE FUSSELL COUNTRY BUCKLAND DINHAM MURTRY APUEDUCT Vobster Great Elm Mells Wadbury Mells Park FROME WHATLEY Chantr NUNNEY 1 Upper Works - Mells 2 Lower Works - Mells 4 Railford Works 5 Chantry Works 3 Great Elm Works 6 Nunney Works ~~ Rivers = Roads Dorset and Somerset Canal Scale Miles.

Taken from Robin Atthill's 'Old Mendip'

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The Fussell ironworks at Wadbury, Mells An introduction



The Fussells of Mells



Vignette from a Nunney overmantel

The story of the Fussell ironmasters starts, so far as Mells is concerned, with the birth of James Fussell III in Stoke Lane on 18 February 1710/11. Having relocated a few miles east to Mells, it was he who obtained from John Horner in December 1744 a 99 year lease on a plot of ground with liberty to erect 'a good, firme and substantiall Mill or Mills for Grinding Edge Tools and forging Iron plates'. The lease describes the plot as 'over and in the River running between Wadbury and Heydon in the parish of Mells aforesaid at a place where a Mill formerly in possession of one Nailor stood'.

James III's sons Austin and James IV carried on and developed the business at Mells while his other son by his first wife, John I, established a factory at Nunney

at some date in the latter half of the 18_{th} century. James IV (1748-1832), in addition to running the ironworks, was heavily involved in the proposed Dorset & Somerset Canal and designed a patent balance lock for this. He also took out patents on a number of other inventions. In 1792 he acquired a 99 year lease on the site of what was to become the Great Elm works. Further ironworks at Stoney



Mells Lower Works from the south east in the 1880s

Lane, Chantry and at Railford were branches of the main Mells Lower Works, the Stoney Lane site certainly being operational by 1828. By 1791 Fussell edge tools were being exported to Europe and America and in 1813 James Fussell & Sons were recorded as doing their own banking business and issuing their own banknotes.



Mells Lower Works from entrance in the 1880s

From the mid-1820s considerable sometimes acrimonious negotiation took place between the Fussells and the Horners regarding renewal of the 1744 lease. Agreement was finally reached in 1841 when the Fussells 'obtained possession of lands at Wadbury and of the Lower Mill, with a renewed lease of the Upper Mill'. By this time, of course, later generations were in control. The most significant in the Mells

area were the sons of James IV, namely James V, who built The Chantry and its neighbouring church adjacent to the Stoney Lane works, John III, who later moved

The expensive 'shear steel' used for the cutting edges of edge tools was forge welded to the wrought iron backing, which often sandwiched the steel edge. For small tools this could be done on a hand forge, a large number of which are shown on the plan. Many of the bases of these hand forge can be seen on the site. For larger tools such as scythes the 'steeling' tilt hammer was used to weld the edge on. These would probably have been located in the tilt hammer shop shown on the plan close to the weir.



Water powered plating and steeling tilt hammers and shears at the Finch Foundry, Sticklepath

In the grinding shops, water powered grindstones were used to grind away the iron to expose a small area of the steel cutting edge along the length of the blade. Finer



'Nose to the grindstone' - sharpening an edge tool at the Finch Foundry, Sticklepath

grindstones were used to sharpen the blade. The expression 'nose to the grindstone' clearly derives from these processes!

Other water powered machinery would have included drop hammers for forging, polishing wheels, band saws and other workshop tools, and fans and/or bellows to provide air blast for the furnaces and hand forges. There was a gas retort on site, adjacent to the 'Coal House', and the bases

of two generations of gasholder may be seen; we do not know whether this gas was used for lighting, heating or both.

So far as is known, the Fussells did not smelt iron ore on site but bought in pig and scrap iron. There is reason to believe that steel was made, at least on an experimental or pilot scale. One aspect of the business which poses many questions is that of transport, both of raw materials in and finished products out. The sheer quantities and weights involved are astonishing in such a rural and relatively inaccessible location. The ironworks were major employers - there are indications that 250 men or more were employed at the Lower Works alone. There is much more to be learnt about the history of this fascinating enterprise.

For more information about the Fussells of Mells contact the Fussell Iron Industry Society via James Fussell (details overleaf) who can also supply details of sources and photographs used in this pamphlet.

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'Twisting passage' - a rope walk where straw rope was made in which the tools were wrapped for protection.

The main section of the plan is a 'snapshot' of the Mells Lower Works at a specific time. As would be expected in any factory operating over a period of 150 years, there were changes in the detailed layout over the working life of the site. However, many features shown on the plan can be recognised, both on the ground and with reference to the photographs reproduced here. Please note that the plan does not extend to the 'high level' areas occupied by later developments to the east and over



The 'office block' across the millpond - 1970s

and to the south of the river. These areas have not as yet been investigated at all. The same comment applies to the extensive ruins north of the river even further towards Great Elm, which are almost certainly also related to the ironworks.

There were nine water wheels on the site at the time the plan was drawn up, driving a variety of machinery. Many of the wheel pits can be located on the ground and the positions of the bearings identified. However, it is clear that the positions and orientation of some were

altered at a later date and the wheels shown on the plan represent only a proportion of those which existed on site at various periods of the factory's working life. The one wheel which can still be seen is believed to have been installed after the business had shut down, possibly to generate electricity for Wadbury House. This duty was later taken on by a turbine. The remains of the turbine which can be seen today are an even later installation, the original having been transported to the ironworks site downstream at Great Elm. The Great Elm site is the only one which does still have original water wheels in situ.

The water to drive the wheels was routed through a complex system of stone lined tunnels at different levels and emerges at the tailrace some 250m east of the weir.

The big tilt hammers in the arches at the east end of the site (seen in the photographs on page 3) would have been plating hammers used to draw out and flatten stock iron bar to the thicknesses and widths required. The wheels in the arches would almost certainly



Underground water channels at Lower Works also have powered shears used to cut the bar to appropriate lengths.

to Nunney Court, and Thomas, for whom Wadbury House was built. The principal player in the next generation was James VI (Rev. J G C Fussell). He owned the Mells business with its various branches and had a half share in the Nunney works.

He was also Vicar of Chantry and H M Inspector of Schools in the London area.

It may be that, due in part to his many other interests and his frequent absences from Mells, the slow decline of the Fussell empire began during James VI's time. However, there were other factors at work as well. The Fussells remained mainly dependent on water power for much longer than their rivals in other parts of the country, although they did use steam as well - in fact they owned



probably early 20th century

collieries at Vobster and Coleford and had interests in others including Huish near Radstock. It may be that the catastrophic collapse in English agriculture in the 1870s really spelt the end. The Fussells erected steam powered rolling mills at the Lower Works and tried diversification into non-agricultural products but perhaps it was a case of 'too little too late'. A company, James, Isaac and John Fussell Limited, was formed in 1882 to run the whole enterprise, but in 1894 this was adjudged bankrupt and liquidated. At this date it was taken over by Isaac Nash of Belbroughton, Worcestershire, who moved production of Fussell edge tools to Worcestershire and



Mells Lower Works from the south east - mid-1970s

presumably acquired the internationally known trademarks and goodwill after the bankruptcy.

The Mells Lower Works have been derelict for over 100 years. It is believed that virtually all the machinery was stripped from the site immediately after the works closed down but many features can be identified by the remaining structures. Very few documentary records are known to exist, although an undated

plan of the works is deposited in the Somerset Record Office. It is this plan, which was probably drawn up in the mid 19th century, which is reproduced at a reduced scale on pages 4-5 of this pamphlet.

The top part of the plan shows William Austin Fussell's 'Spade and shovel tree' factory, a separate business to the west of the Lower Works, where wooden handles were made for the tools produced at the ironworks. At the eastern end of this is a

