Congresbury's Mills and the Iron Industry

Gillian Bedingfield

According to Domesday Book Congresbury had two mills in 1086. It is believed that one of these was at Iwood, where there was definitely a mill in 1228[1], and the other one was in the village. Probably neither remained on exactly the same site but there is sufficient evidence from the fourteenth century on to make it likely that both mills were in continuous use until Iwood Mill burnt down in 1892.[2] Congresbury Mill (ST 441 636) was burnt down in 1928 but, unlike Iwood Mill, was rebuilt and continued in use until 1962, although it had long since ceased to operate under water power.

Until 1997 both mills were thought to have been grist or flour mills throughout almost their entire history. There was a suggestion in the early nineteenth century that Iwood Mill could be adapted for use in the production of cloth as a fulling mill[3], but there is no evidence that that occurred. Apparently the only change came in the early twentieth century when Congresbury Mill began producing cattle feed.

A chance enquiry about Congresbury in Somerset Record Office made in 1997 by Peter King, then researching the iron industry of eighteenth century Bristol, led to the information about the contribution of Congresbury Mill to the iron industry.

In the early eighteenth century Graffn Prankard, one of Bristol's merchants, traded in a variety of commodities, among them iron and steel. A reference to Congresbury in Prankard's iron trading records appears under a William Donne's account dated 27 July 1734:

'*Iron sent to Combsbury* [Congresbury][4] *... to be stild* [sic] *into Rodds for my account - Barrs 333 Barrs 112cwt 1qtr 0lbs* [less] *brk* [brokerage] *3qtrs 4lbs* '[5]

Two further entries in Prankard's records, in 1736, under payments against William Donne's account confirm what Donne was doing:

'*May 18 By slitting 5tons 15cwt 2q roods £6 0s 9d*'[6]

And on 22 June Prankard sent William Donne 247 barrs of Gothenburg & Swedish Iron, nett weight 24cwt 0q 24lbs:

'*to be slit into Rods for my account*'[7]

The process called *slitting* was introduced into England in the 1590s and tumed iron bars or plates into rods, for nail-making. This process increased the production of nails enormously, as they were previously cut from iron by hand using chisel and hammer. Prankard was sending iron to William Donne in Congresbury and a Mr Dunn (or Donne) is clearly shown as owner of Congresbury mill on the maps of Congresbury Manor of 1736 and 1739.[8]

Donne regularly bought iron from Prankard from at least 1728 until 1736, the period covered by Prankard's records. Donne's sons William junior and Joshua also traded with Prankard but to a much more limited extent. The iron came from Russia and Sweden and Donne's most frequent purchases were bars of different sizes and quality, with some 'narrow flats'. In comparison with some of Prankard's customers his purchases were not large.

Prankard's records contain two other items directly relating to William Donne's iron processing. In 1735, under payments against Donne's account was:

'*Jan 31 By amt* [amount] *of nails for export £175 7s 2.75d*'[9]

Unfortunately there is no indication of the number or weight of these nails.

And on 17 November 1736, in the last significant sale to Donne, Prankard sent 352 barrs of 'Spread Eagle mark' or Russian iron weighing just over 210 cwts together with about 21cwts of some more expensive iron, all of which was:

'*Put on board his own vessel for Congresbury*'[10]

Presumably this was Donne's not Prankard's boat.

From these few entries it is clear that William Donne was both slitting rods and producing nails. Peter King has said that Donne did not buy sufficient iron from Prankard to keep a slitting mill going but has found, in Bristol's port records, that Donne imported iron on his own account as well. Certainly by 1732 Donne had a significant share in an iron foundry in Bristol.[11] The slitting of iron bars into rods was however clearly done at Congresbury but there is no evidence to show whether nails were also made there.

The iron was carried to Congresbury by boat up the river Yeo as close to the mill as possible, a distinct advantage with such a heavy cargo. There is supporting evidence for this use of the river on the 1736 and 1739 maps of Congresbury, mentioned previously, which both show a wide roadway leading directly from the river to Dunn's mill (Fig 1).

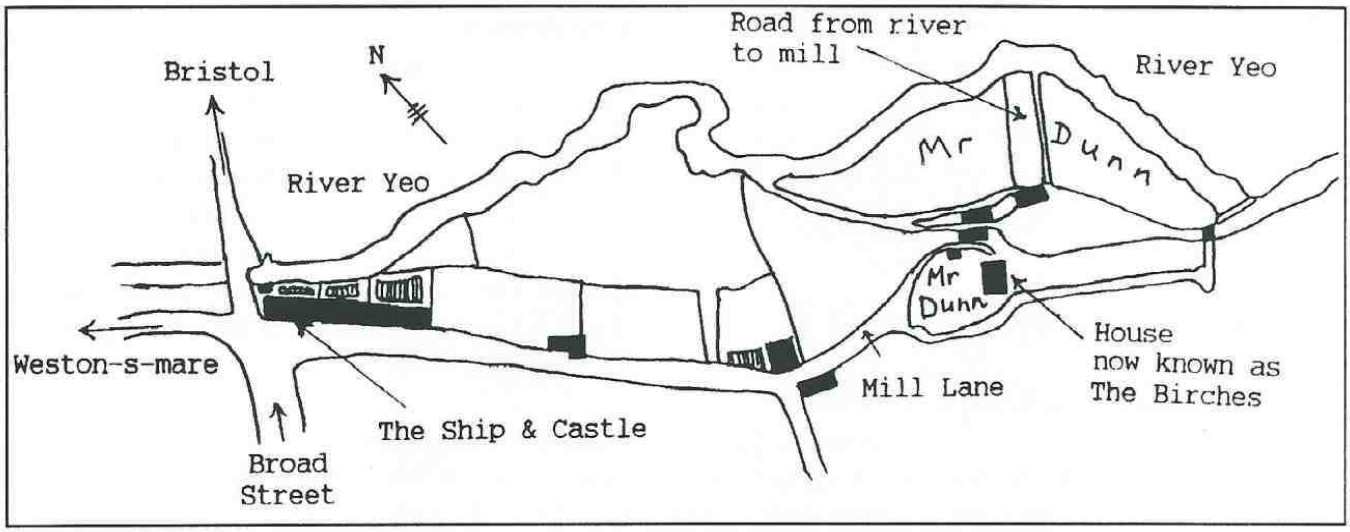

Fig 1 A tracing of part of the 1736 map of Congesbury showing Dunn's Mill[20] **Courtesy of Bristol Record Office**
The two buildings south of the words River Yeo are Dunn's (or Donne's) mills. There is clearly a wide road leading from the river to the more easterly building of the two. (The 1739 map also includes this area but is slightly different; in particular it is labelled 'Dunn's Mill' and the road is narrower.)

The process called slitting

The raw material was pieces of iron, plates or bars of different sizes, which were first heated in a furnace. The red hot iron was passed between two smooth cylinders to make a thin, or thinner, plate which was then passed between two cylinders with teeth which cut the iron into rods - the end product of the slitting mill. This required two water wheels to provide power to turn the cylinders - see the diagram of a 1758 version[12] (Fig 2). The cutting cylinders could be removed and replaced with others to cut rods to different sizes.

Charcoal would probably have been needed to heat the iron for slitting and by this period charcoal supplies were becoming difficult to obtain.[13] Charcoal could not however be transported any great distance without disintegrating. Anecdotal evidence points to the presence of charcoal makers in Kingswood just north of Congresbury village. Although the eastern part of the wood is now a modern plantation the western part still includes many trees that were at one time coppiced. It therefore seems likely that the presence of woodland close to the mill was an added incentive to adapt Congresbury's mill to produce iron rods.

Were such mills common?

Quite simply - no. H.R. Schubert suggests:

> '*In the early eighteenth century probably not more than 20 slitting mills as a maximum were operating simultaneously in England and in 1785 only 16.*'[14]

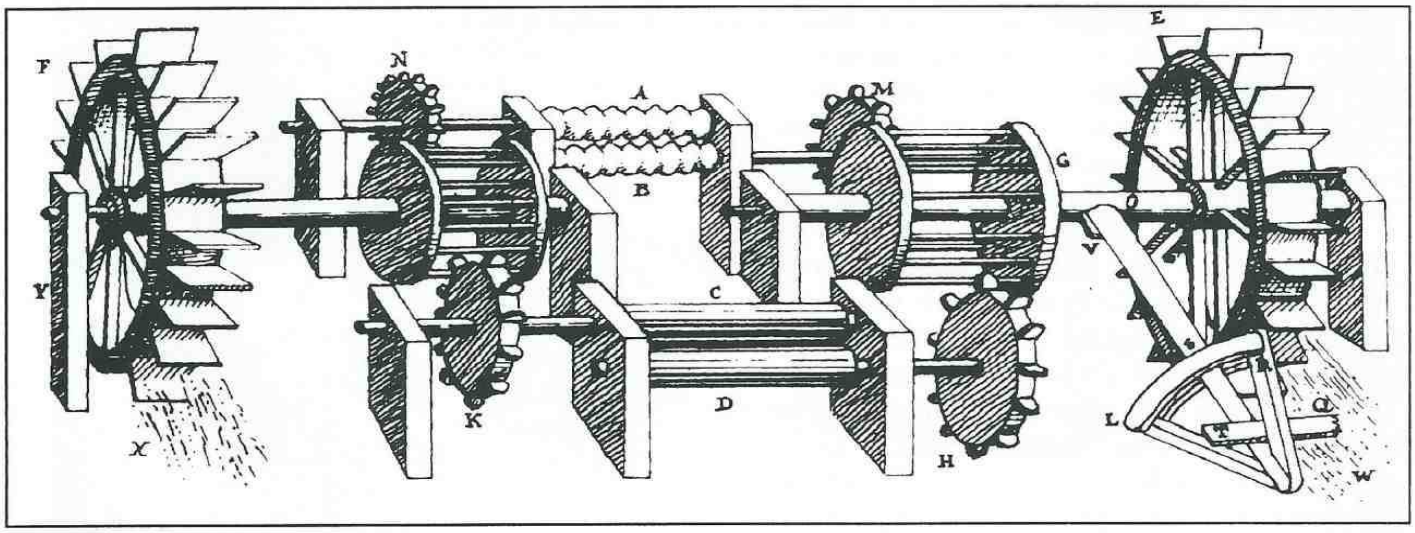

Fig 2 Diagram of a slitting mill
Taken from William Emerson's *The Principle of Mechanicks* (2nd edn) 1758 and included in H.R. Schubert's *History of the British Iron & Steel Industry from c450BC to AD1775* (1957) from which this is taken, courtesy of Routledge & Kegan Paul. The plan of Dunn's mill, Figure 1, shows that this arrangement could have been set up in Congresbury, as one building is shown as having water on either side of it. The red hot iron was passed through the rollers C & D and then through the corrugated rollers A & B.

It is unlikely, however, that Congresbury's slitting mill was included in these figures. Schubert also mentions a slitting mill made in 1765 as having a wheel of 18 ft diameter and 4 ft 4 ins wide - rather large for Congresbury's river Yeo even allowing for the fact that much of the water is now extracted by Bristol Water PLC.

For how long did Donne's slitting mill operate?

In 1725 Thomas Richardson, of Iwood Manor, which included both Iwood and Congresbury mills, and William Donne of Bristol were involved in a property transaction, of which only a partial transcript is known to exist. [15] Unfortunately, although it deals with related land this transcript does not specifically mention Congresbury Mill, but it seems likely that it was in 1725 that William Donne bought the mill and adapted it into a slitting mill. In 1736 Donne also owned the nearby elegant three-storeyed Georgian house now called 'The Birches', which, possibly, he had had built. It seems unlikely that Richardson, with his own manor house, would have built such a house only to sell it off a few years later.

William Donne senior had four known children, the eldest of whom, William, was born in 1703 in Bristol. William junior also had four children, among them Hester born in 1731 and Elizabeth born in 1732.[16] All of them were Quakers and for the period 1700 to 1750 it has been calculated that Quakers owned between 50 and 75 per cent of the English and Welsh iron industry.[17] William junior died in 1766 and left his property in Congresbury to his daughters Hester and Elizabeth.[18]

Since William junior made his will in 1754 it would appear that his father had died sometime before then. In 1767 the two sisters sold the property, including:

> '*all that messuage or tenement orchard and garden and two water grist mills in Congresbury... part and parcel of the said Iwood manor*'.[19]

Clearly by 1767 the mill was no longer a slitting mill but the necessary two mill wheels were still there, further supporting the evidence for the slitting mill's existence. (No evidence has been found to show that there were two mill wheels at Congresbury mill at any other date.) Thus the period from 1725 to 1754 is the most likely extent for the operation of Congresbury's slitting mill, with the possibility that it continued to function to circa 1766, but that late date seems unlikely.

Conclusion

The site of Congresbury Mill is now covered by a factory producing temporary buildings and the area has not been investigated. Considerable work on the river Yeo in the 1920s and after the 1968 floods may well have destroyed any remaining evidence. It is clear, however from the documentary evidence that Congresbury, a rural agricultural parish, has been found, most unexpectedly, to have been part of the early eighteenth-century iron industry.

Acknowledgement

Peter King of Stourbridge, West Midlands, without whose help this would not have been written.

References

1. *Calendar of Charter Rolls* Vol 1 1226-57 (1903)
2. Bedingfield, G.M., 'Iwood - How long has it existed as a discrete settled unit and how did this affect its economy? Appendix 4' Unpublished MA Dissertation (1996) (copy deposited in Somerset Record Office (SRO) PAM 1997)
3. *Felix Farleys ' Bristol Journal* 9 May 1829
4. Even today some people, but not those living in the village, still refer to 'Congresbury' as 'Combsbury'.
5. SRO Waste Book DD/DN 438 27 July 1734
6. SRO DD/DN 433 f6
7. SRO Waste book DD/DN 439 fl64
8. Bristol Record Office (BRO) 33041 BMC/4/PL/1 & 2
9. SRO Ledger 2 1732-1737/8 DD/DN 434 fl97
10. SRO DD/DN 439 f177
11. BRO 09458(26)
12. Schubert, H.R. . *History of the British Iron & Steel Industry from c450BC to AD 1775* (1957) 311
13. Roepke, H.G., *Movements of the British Iron and Steel Industry 1720-1751* (Illinois 1957) 4-5
14. Schubert, note 12
15. A partial transcript of the indenture is among Prebendary Cran's notes in Weston-Super-Mare Local Studies Library
16. BRO Society of Friends Index to births FCSF/R1/1(a)2
17. Walvin, J., *The Quakers: Money & Morals*, (1997) 88
18. BRO Copy will of Wm. Donne junior made 1754 proved 1766 440736(F)3
19. Deeds of The Plough Inn now standing on part of what was Donne's property.
20. BRO 33041 BMC/4/PL/1