

Planning Application 2022/1507/FUL

Land at Well Lane, Doultong

Doultong Edge Tool Works

Report on Archaeological Watching Brief

Interim Report 1 - Investigations up to end of March 2024

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Douling Edge Tool Works - Report on Documentary & Physical Research

Introduction

Just to the west of the village of Douling, near Shepton Mallet, is a steep sided wooded valley formed by the headwaters of the River Sheppey. There is an ancient well, St Aldhelm's Well, and a series of springs, ponds and ruined buildings which are the remains of the edge tool works run by the Coombs family for much of the nineteenth century and into the twentieth century. The location of the site in relation to Douling village, the River Sheppey, and Shepton Mallet, is shown in *Figure 1*.

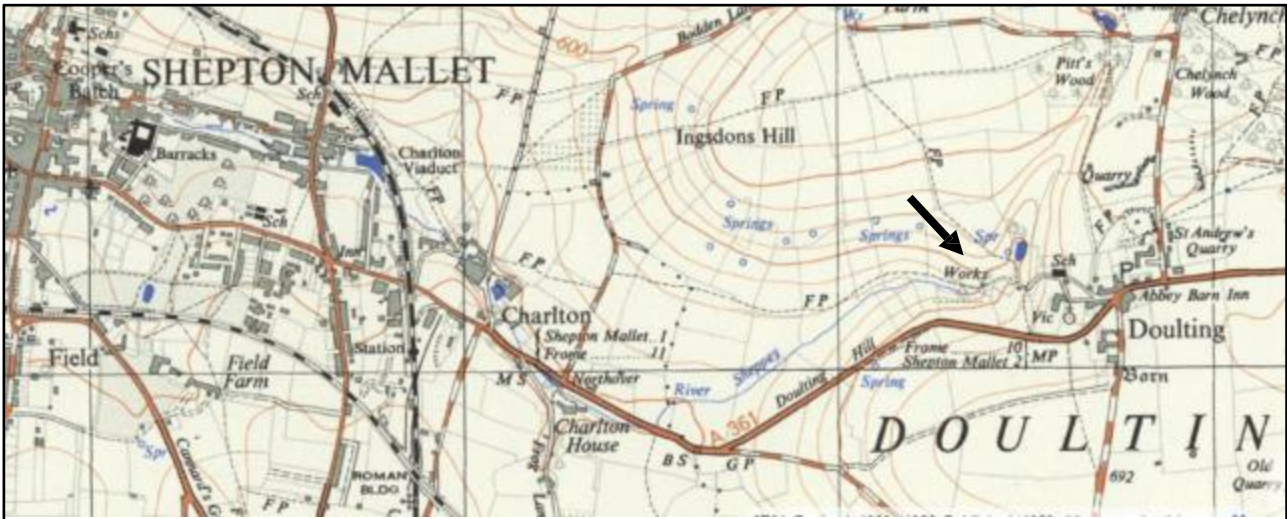


Figure 1. Extract from Ordnance Survey 1/25000 map published 1958. The Edge Tool Works at Douling is still labelled 'works', and is marked by the arrow. (Map courtesy National Library of Scotland)

Edge tool works manufactured tools with cutting edges such as billhooks, scythes, agricultural and craftsmen's knives. They also, in many cases, made more general tools, such as shovels. Several processes were involved including welding the steel edge onto the iron body, shaping, grinding, and fitting of handles. In most cases water wheels were used to power trip-hammers, shears, grindstones, and saws. Edge tool works were widespread in the nineteenth century and a typical example can still be seen in working order at Finch's Foundry at Sticklepath, near Okehampton (National Trust).¹

Within Somerset most of the edge tool works were situated around the Mendips or the Brendon Hills/Exmoor where there was plenty of water to power waterwheels. Examples include Blade Mill at Nettlecombe, Town Marsh Smithy at Dulverton, Gurney Slade Ironworks, and Padfield's Edge Tool Works at Chilcompton. The biggest and most widely known was the firm of Fussells which had works at Mells, Nunney, Great Elm and Whatley. The Lower Works at Mells is a Scheduled Monument.²

The works at Douling has long been recognised. Robin Atthill in his book 'Old Mendip' of 1964 referred to it, and the same author in his book 'Mendip, a new study' mentioned that the edge tool works of the Coombs family had continued well into the twentieth century.³ It is, of course, readily visible on the 1st and 2nd edition Ordnance Survey maps of 1886 and 1904 and labelled as Edge Tool Works.⁴ However, apart from cursory examinations of the site, there has been little research on it until recently.

A change in ownership in 2014 has enabled more access and Somerset Industrial Archaeological Society (SIAS) is grateful to Mr David Entwisle for the opportunity to investigate the site more fully; this has given the impetus to follow up other documentary sources.

Documentary Research

Within SIAS publications there have been two previous articles which referenced the site. In 2000 the late Derrick Warren described various water supply features in the vicinity (included as *Appendix 1* to this report).⁵ The second article was the late Martin Bodman's Mills on the Sheppey (the relevant part is included as *Appendix 2* to this report). This also lists some other edge tool works around the Mendips.⁶

As far as is known there are no primary resources relating to the Edge Tool Works at Doultling, there are no company records or family histories. The only documentary evidence is from secondary sources such as Trade Directories, Censuses, and maps.

In the 1841 census, Robert Coombs lived in a house in Doultling village, and gave his occupation as Edge Tool Maker. He was aged 50, his wife Rebecca was aged 45 and he had five children living at home. The eldest was Sarah, 20, and the next was John, 19, who was also described as an Edge Tool Maker. Of course, there may well have been other children who had already left home, and that seems to have been the case as we shall see.⁷



Figure 2. Extract from the Doultling Tithe Map of 1843. The Edge Tool Works is plot 391. The water-wheel at the upper buildings is shown rather diagrammatically, and the three mill ponds. (Map courtesy of Know Your Place - West of England)

The edge tool works was in the valley below Doultling village, about 200 yards from where Robert Coombs lived. The Tithe map of 1843 provides information on the works as it then was. (*Figure 2*)⁸ Plot 391 was described as a Smith's shop, mill and premises, occupier Robert Coombs. It was owned by William Melliar Foster Melliar, the Lord of the Manor. The plot size was only 0 acres, 1 rod, 18 perches and did not include any of the adjacent land at that stage; plot 392 was described as pasture and was occupied by William Davis. As can be seen in *Figure 2* there were three millponds at that time. There was a water-wheel shown diagrammatically beside the main L-shaped building, below the middle pond. The lower

building and pond existed but no wheel was shown; was this because it was inside or because there was no wheel there?

In the 1851 census Robert was described as an edge tool maker employing three men. Three adult daughters were living at home but John Coombs, aged 29, was living in the village (next entry, so may be next door), was married and had a son, and was described as a journeyman edge tool maker. Also living with Robert was a grandson, Alfred Webb, aged 8 and born in Croscombe. Turning to the Croscombe census we can find Charlotte Webb, aged 34, born Croscombe. She had four children, aged 12, 10, 7 and 3, the eldest two were employed. In the 1841 Croscombe census Charlotte was married to Henry Webb, a coal carrier. It seems almost certain that Charlotte Webb had been an elder daughter of Robert Coombs but that her husband, Henry, had died between 1848 and 1851 leaving her with five children. The elder two were working and it looks as if the grand-parents took in the next child, Alfred Webb, to make life more manageable for their widowed daughter, Charlotte.

There is no information on when Robert Coombs took over the mill site at Doultling and turned it into an edge tool works. Martin Bodman suggests it is an old mill site as indicated by the 'mill' field names around it.⁹ From Census details we know that Robert was born at North Wootton, west of Shepton Mallet; John, Robert's eldest son, was born at Doultling in c. 1822, but the daughter Charlotte was born at Croscombe in c. 1817. It seems likely, therefore, that Robert moved to Doultling from Croscombe to take over the old mill site as an edge tool works in about 1820, when he would have been about 30 years old.

In the 1861 census Robert was still described as an edge tool maker, employing one man and one boy. These may have been his son John, aged 39, living next door and described as an edge tool maker, and Robert's live-in grandson, Alfred Webb, aged 18 also described as an edge tool maker. This would be consistent with the entry in the 1861 Kelly's Trade Directory which lists Robert Coombs and Son as Edge Tool Manufacturers in Doultling.¹⁰

By 1871, Robert had died, although his widow Rebecca was still living in the village aged 77. The firm was now run by Robert's son, John, who was employing four men. One of these would have been his son, another Robert, then aged 22 and listed as an edge tool maker. Another would have been old Robert's grandson Alfred Webb. There are no other edge tool makers listed in the parish and presumably the rest of the workforce walked in from elsewhere; Charlton and Shepton Mallet are less than two miles to the west. In Kelly's trade directories for 1872 and 1875 the firm is described as John Coombs, Edge Tool Maker.

In 1881 John Coombs was described as Master Edge Tool Maker and was employing 6 men and a boy. This seems to have been the maximum size of the firm. Robert Coombs and Alfred Webb were still edge tool makers. Again, there were no others in the parish. By 1883 trade directories were listing the firm as Robert Coombs, Edge Tool Maker, and this description lasted through until 1906. It seems likely that John Coombs died or retired in the early 1880s and his son Robert took over.

In 1891 Robert Coombs was aged 41 and was described as edge tool manufacturer. Alfred Webb, aged 47, was still there and two of his sons, Herbert aged 21, and Barry, aged 16, were also working as edge tool makers. The 1901 census showed a similar situation except that by now Barry Webb was working as a steam crane driver, most likely in one of the many quarries in the area.

It is not clear why or when but in the early years of the twentieth century Robert Coombs left the firm. In 1911 he was working as an agent for cattle feeding staff. For a brief period the firm seems to have been run by Alfred Webb and it was described as such in the 1910 trade directory. In 1910, Alfred would have been 67 and it may be that he died or retired around this time. By 1911, his son, Herbert Webb, aged 40, was running the firm. The 1914 Kelly's trade directory lists Herbert Webb, Edge Tool Maker. His brother, Barry, was working as a blacksmith. Albert James Hill, aged 17, was employed as an edge tool maker and lived in the village. Herbert Webb, who was the last person to run the firm, was the great-grandson of the founder, Robert Coombs.

Kelly's trade directory of 1914 is the last time the firm appears, there is no entry in the 1919 directory. It appears the firm ceased trading at around the time of the first World War. Mass produced tools were taking over by that time and hand production must have had a declining market. Call up or volunteering for the war by the remaining workers may have been the final impetus to closure.

Map Evidence

The layout of the site as it was in 1886 is shown in **Figure 3**.¹¹ From the documentary research above, this appears to be around the time that the firm was at its maximum size. As on the Tithe Map of 1843 (**Figure 2**) the edge tool works contained two sets of buildings – the main complex just below the middle pond and another building below the lower pond. The lower building appears to have remained the same size as in 1843 but with a rectangle wall on the south-west side which may have been a waterwheel and pit. There was an expansion with additional buildings in the main complex. In particular, the 1843 map shows an external waterwheel (albeit diagrammatically) whereas the 1886 map shows it roofed over. There is also a small building in the south-east corner of the site.

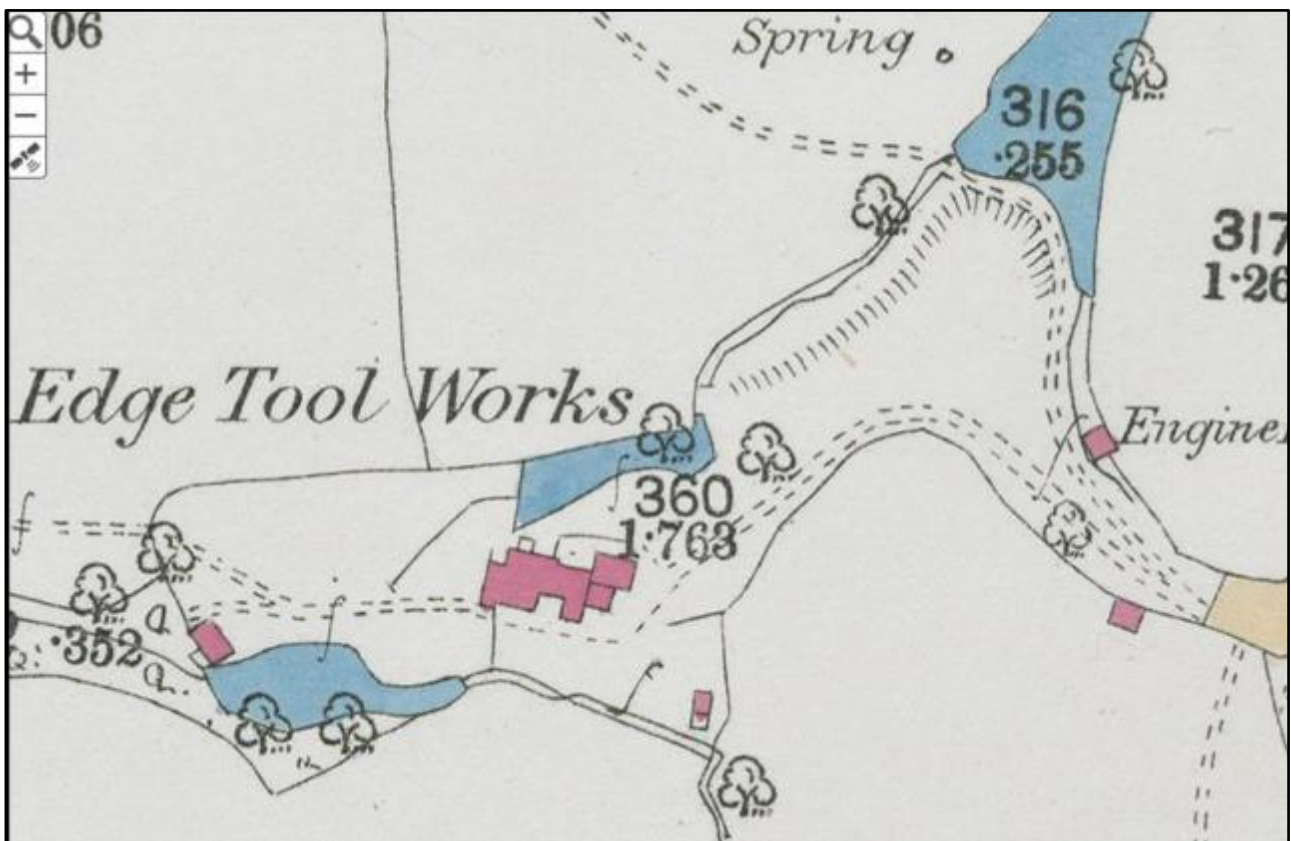


Figure 3. Extract from the OS 1/2500 map of 1886. The three ponds then in existence are clearly shown. The waterwheel in the upper set of buildings is at the western end and is roofed over. (Map extract courtesy National Library of Scotland)

The 1903 Ordnance Survey map in **Figure 4** shows no substantial change. The lower building has an additional roofed area to the south-west; it may well have been another under-cover waterwheel. The small building in the south-east corner was roofless, and there were some very minor changes to the main buildings. Sluices are noted at the two lower ponds indicating control mechanisms for waterwheels. There were still three ponds. It is likely that the 1903 layout continued until closure which, as noted above, was around the time of World War One.

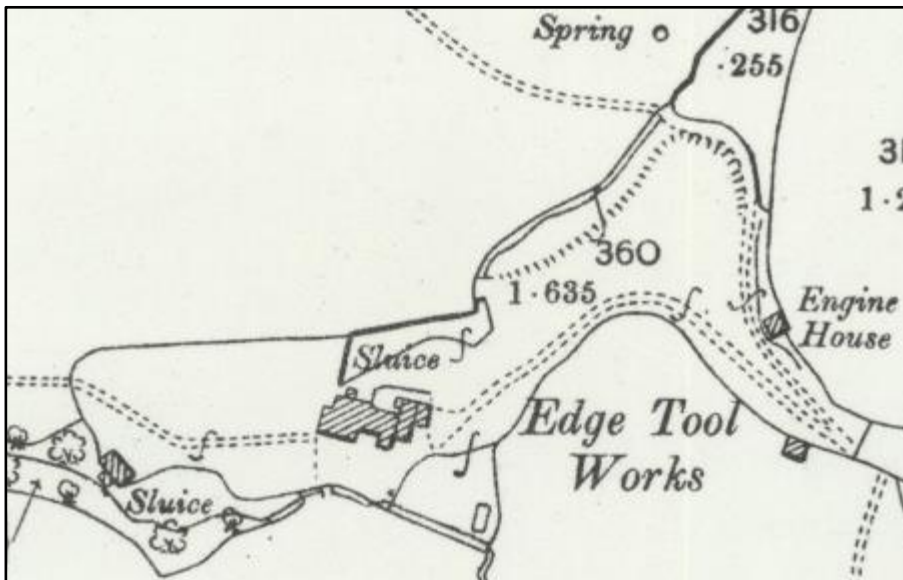


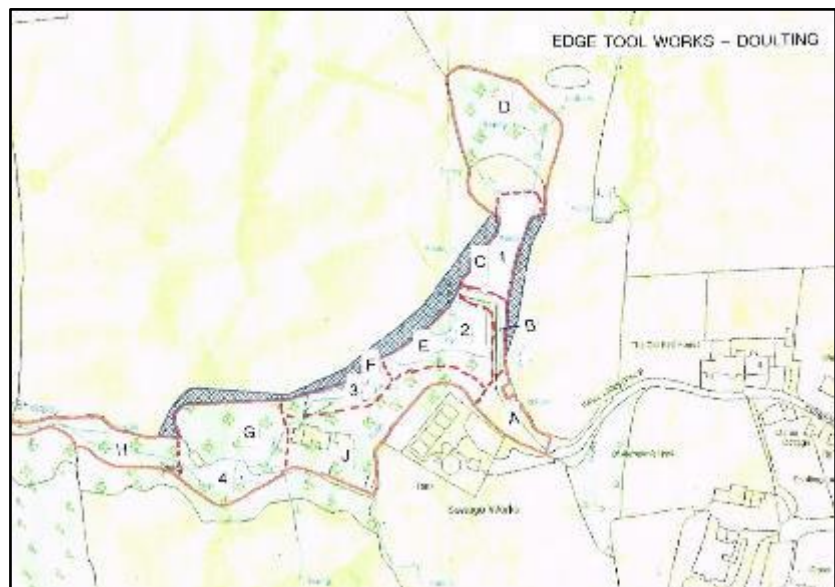
Figure 4. Extract from OS 1/2500 map of 1903. Note the specific references to sluices at each of the wheel locations. (map courtesy National Library of Scotland)

The engine house on the right hand side of the map is for water-supply and was nothing to do with the edge tool works. It is described in Derrick Warren's article in reference 5.

Through the subsequent decades the buildings deteriorated and the site became overgrown and forgotten. A new pond (pond 2 in **Figure 5**) was created by the Keevil family when they owned it, although the date is uncertain. It was not shown on the OS 1/10,000 scale map of 1972.¹²

Figure 5. Plan of site with letters identifying areas for land management purposes.

The ponds are identified by the numbers 1 to 4.



Physical evidence on site

The site has been visited on two occasions, so far, as part of the assessment of the site by Somerset Industrial Archaeological Society. The first occasion was in July 2016 when vegetation clearance of the ruins was only just started. Intermediate visits had been planned but were cancelled due to covid restrictions. Nevertheless, Peter Daniel of SIAS has maintained regular contact with David Entwisle, the site owner, as work has progressed. There have regular updates with photos (see **Appendix 3**). A topographical survey of the site has been undertaken on behalf of the owner by South West Surveys and is shown in **Figure 6**. The survey was carried out by drone and the annotation for the trees is incorrect.

The most recent visit was on 10th April 2023 when clearance allowed the wheelpit by the main buildings to be inspected and key dimensions taken of surviving features. This is located at A in **Figure 6**. The pit is still partially overgrown and has not been excavated, as can be seen in the photograph in **Figure 7**, but the shape of the wheelpit is clear, including the typical curved rear face and base. It would have been an overshoot wheel although all trace of the launder has gone. The head (the height difference between pond water level and the base of the pit) is approximately fifteen feet (4.6m) and the length of the wheelpit is about fifteen foot 6 inches (4.8m). The wheel was therefore about fifteen feet (4.6m) in diameter. A rough sketch of the profile of the wheelpit is shown in **Figure 8**. The width of the pit is just over 48 inches (1.22m), that is, it was a four foot wide wheel.

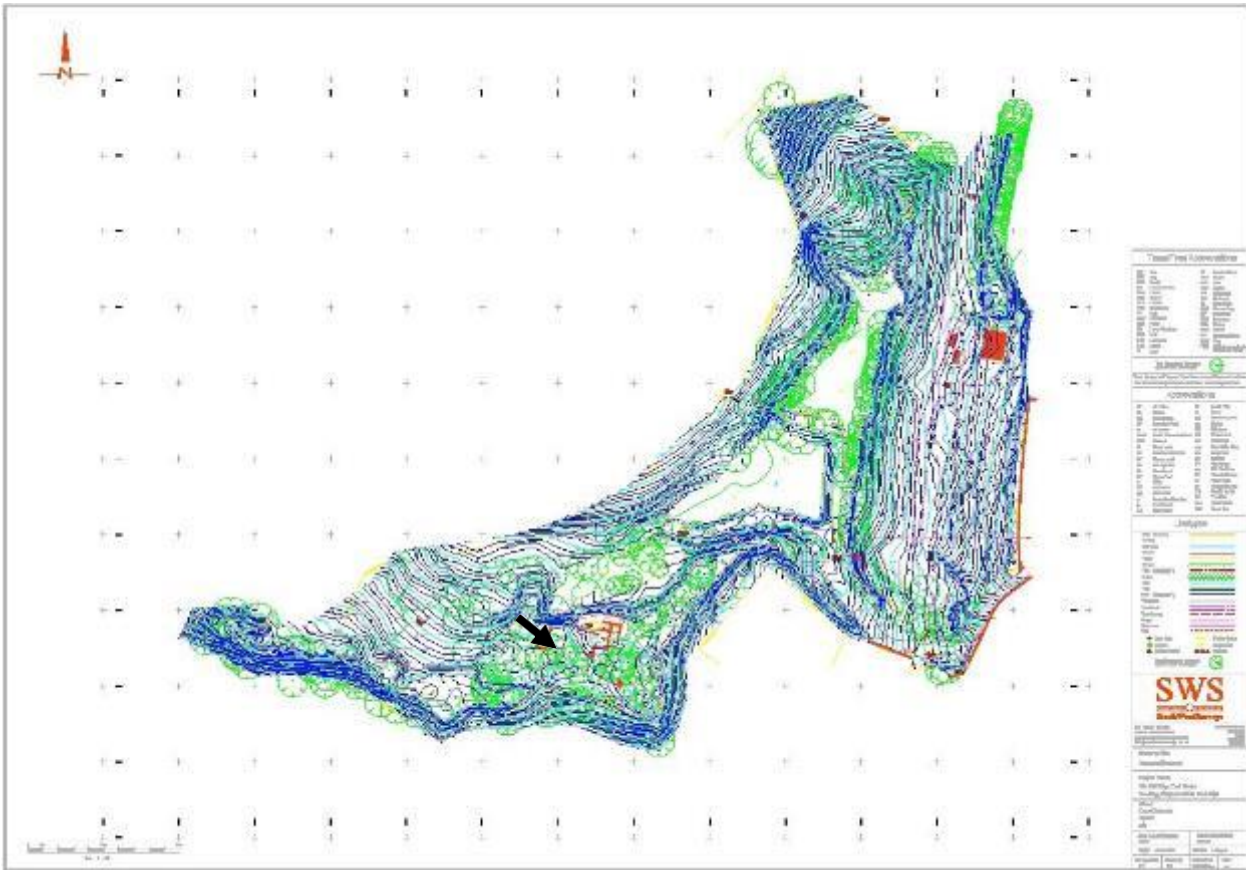


Figure 6. A drone survey of the site with the contours showing the valley nature of the site and the ponds showing up as areas with no contours.

There are some metal items within the pit. One is obviously the hub plate at the centre of the wheel; this had a diameter of 21 inches (0.53m). The number of holes in this indicates that there were eight arms to the wheel. The fact that nothing else survives suggests that the wheel was entirely wooden, including the arms, shrouds, and buckets. In the pit there are also two metal hoops with a diameter of 27 inches (0.69m). These were probably strengthening bands around what would have been a substantial wooden axle tree. These features can all be seen in the photograph **Figure 9**. The axle has mostly rotted away but a remnant of it can be seen in the picture. Beyond the pit is an arch that leads into the main buildings. Based on the head available and what is known about water flows it is possible that this waterwheel would generate about 12 hp, which would be sufficient to operate trip hammers, and suggests that this upper building was the forge/hammer room. Further investigation of the building itself, and the flow available over the weir, will be carried out in due course.



Figure 7 showing the shaped rear face of the wheelpit and its current overgrown state.

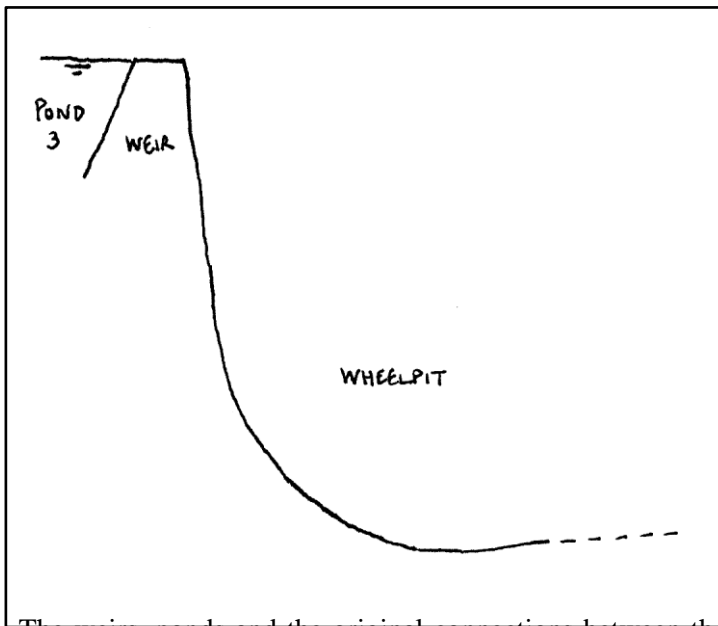


Figure 8. Sketch section through wheelpit at the upper buildings showing the typical curved rear face of the wheelpit.

The lower building is still very overgrown and little clearance has been done in this area. There are several puzzling features which will repay more detailed investigation in due course, these include the weir, the head available, the rear wall with its arch, and the other wall openings. Given the lower head on this weir it is assumed, at this stage, that this was the grinding house since a wheel to operate grindstones would require less power. But this remains to be confirmed.

The weirs, ponds and the original connections between them, would also benefit from further investigation, particularly the remains of any original sluices. Opportunities to examine these will arise as part of the programme of stabilisation and desilting being carried out by the site owner.

Discussion

Apart from ruinous remains of the two buildings, a wheelpit and the millponds, there is little definite evidence of how the edge tool works was organised or operated. It is useful, therefore, to draw some comparisons with similar works in the south-west. Fussell's, with its several sites, was on a different scale altogether; the lower works at Mells alone had nine waterwheels, and the combined workforce at the different sites was around 250.¹³ Some others were very small or have little surviving. A good comparison would have been the site at Gurney Slade, near Binegar, on the Mendips. This was similar size to Doultong, with a workforce up to 13 men, had two waterwheels, and continued in operation by the Steeds family until it closed in about 1930.

Figure 9 . The base of the wheelpit by the upper buildings. The remnants of the wooden axle can be seen in the arch through to the main buildings. There are also two hoops, which are taken to be strengthening bands around the axle. The end plate of the axle can also be seen with holes suggesting eight arms to the wheel.



Unfortunately, by 1933 the works had been destroyed to make way for a water treatment plant and apart from Dr Reid's photographs of the early 1930s there is no surviving evidence.¹⁴

However, the most useful site for comparison might be Finch's Foundry at Sticklepath, near Okehampton. Finch's was a slightly larger works, with a workforce of up to 20 men, but of a broadly similar nature in its products and operation, with power provided by waterwheels. It also has the distinct advantage of having been restored to working order and, being owned by the National Trust, is readily accessible.

Despite its name Finch's Foundry was never a foundry producing castings. It operated purely as an edge tool manufactory over a period from 1814 to 1960. It had three waterwheels, one driving two trip hammers and power shears, one operating grindstones, and a later wheel which powered fans for the hearths. It also had a saw mill where the handles for the tools were made, although the equipment in this part of the works no longer survives.¹⁵

Finch's Foundry, therefore, has many similarities with edge tool works at Doultong and it will be useful as a comparator as investigations proceed. There will be some differences; for instance, there is no indication of another waterwheel site at Doultong so it is unlikely that there was a separate fan arrangement and any mechanical blowing power would have been created by the main wheel. The presence, or otherwise, of a saw mill element at Doultong remains to be determined. Many of the other Mendip edge tool works were supplied by specialist handle manufacturers such as the Ashmans of Leigh-on-Mendip and it has been suggested that they also supplied the works at Doultong and Gurney Slade.¹⁶ On the other hand, there are a lot of ash trees on the site at Doultong, and this was the wood of choice for handles.

This report summarises the research and investigations of the Doultong edge tool works that have taken place so far. Further investigations, and a watching brief on site clearance and stabilisation, are planned and will be reported in future.



Figure 10.

Spar Hook made by Coombs. Marked 'Coombs', the marking is upside down. Some other manufacturers, including Finch's, did this. See <https://www.theluddite.com/south-west-bills.html>

References

1. A useful website giving information on edge tools and their manufacture is <https://www.billhooks.co.uk>
2. See Somerset Historic Environment Record (SHER) & Exmoor Historic Environment Record (EHER). Edge Tool Works in the record can be found by searching for edge tool works in the menu. For Fussell's see SHER entry 23853 and [Robin Thornes, Men of Iron, The Fussells of Mells, 2010](#).

3. Robin Atthill, *Old Mendip*, 1964, p68; Robin Atthill, *Mendip: A New Study*, 1976, p167 & 229.
4. *Ordnance Survey 1/2500 scale maps of 1886 and 1904 available on the National Library of Scotland website* <https://maps.nls.uk/os/25inch-england-and-wales>
5. Derrick Warren, *Doultling Water*, *Somerset Industrial Archaeological Society, Bulletin 84*, August 2000.
6. Martin Bodman, *Mills on the Sheppey – Part 3, Draycott to Doultling*, *Somerset Industrial Archaeological Society, Bulletin 111*, August 2009.
7. See [Ancestry.co.uk](https://ancestry.co.uk) for Census information 1841 to 1911.
8. See the map and the plot descriptions on the *Somerset Historic Environment website* www.somersetheritage.org.uk The map is also on the *Know Your Place West of England website* <https://maps.bristol.gov.uk/kyp/?edition=som>
9. Martin Bodman, *Mills on the Sheppey – Part 3, Draycott to Doultling*, *Somerset Industrial Archaeological Society, Bulletin 111*, August 2009.
10. See [Ancestry.co.uk](https://ancestry.co.uk) for Census information 1841 to 1911, and for some trade directories. Other trade directories are available on <https://le.ac.uk/library/special-collections/explore/historical-directories>.
11. *Ordnance Survey 1/2500 scale maps of 1886 and 1904 available on the National Library of Scotland website* <https://maps.nls.uk/os/25inch-england-and-wales>
12. Email from David Entwisle, 20 October 2020; OS map 1/10,000 published 1972 available on the *National Library of Scotland website*.
13. *Robin Thornes, Men of Iron, The Fussells of Mells, 2010, p93*; and *Scheduled Monument list entry 1019796*.
14. For the Gurney Slade works see *SHER 23156*; and *Robin Thornes, Men of Iron, The Fussells of Mells, 2010, p xi and 183-4*; *Dr R D Reid, A Water Hammer, in Somerset Year Book 1935, p43-4*.
15. *B A Fyfield-Shayler and C P Norton, Finch Brothers' Foundry, Industrial Archaeology, Volume 12, No 2, 1975; reproduced as a guide to the works in the late 1970s*.
16. *Robin Thornes, Men of Iron, The Fussells of Mells, 2010, p135-138*.

Appendix 1

***Derrick Warren, Doultong Water,
Somerset Industrial Archaeological Society,
Bulletin 84, August 2000.***

DOULTING WATER

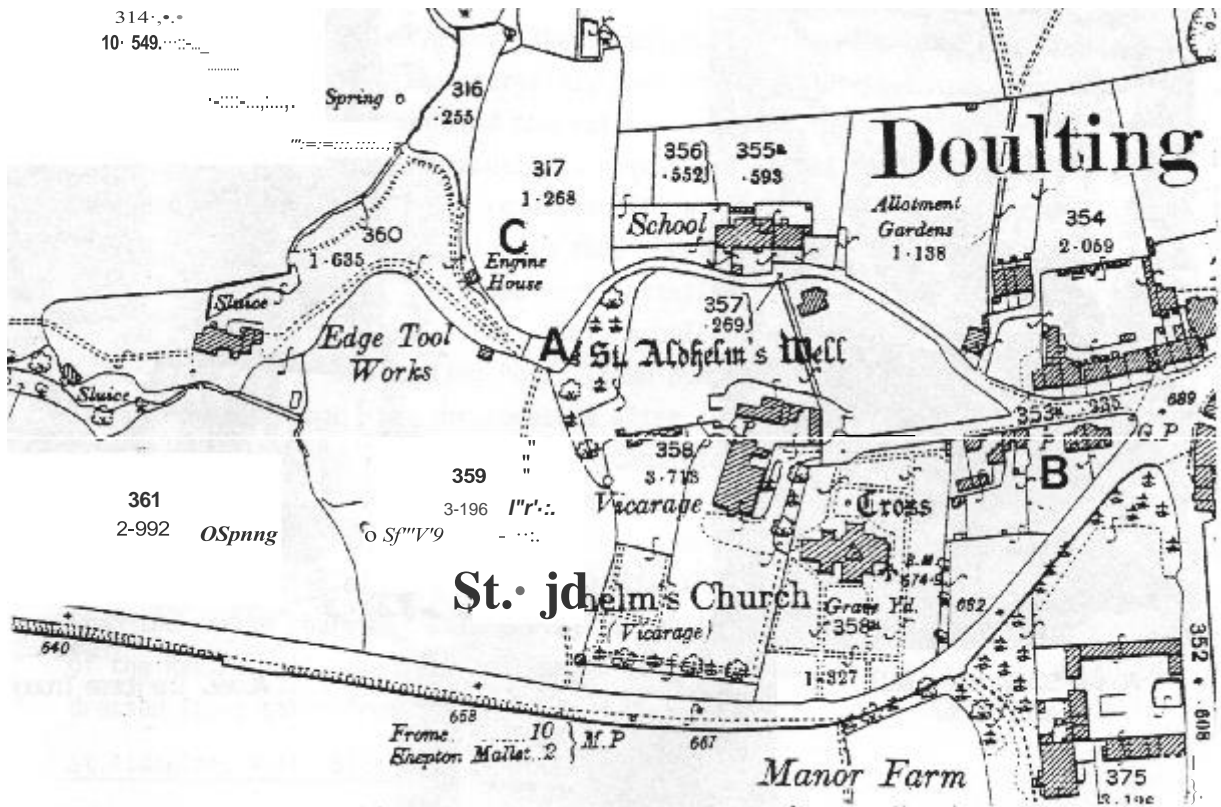
SIAS was asked by Penny Stokes, Countryside Officer, Mendip D.C., if we could help with conserving a wall around St.Aldhelm's Well at Doultling, a village near Shepton Mallet. Not the sort of thing we undertake, but whilst looking at it this is what was found.



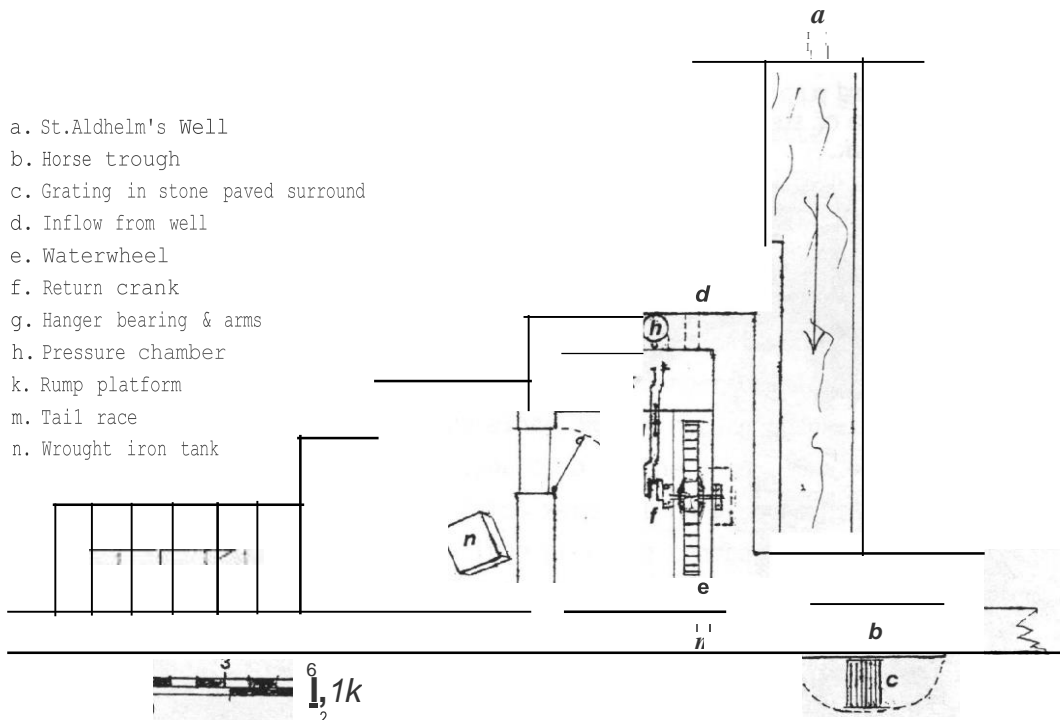
.Engraving by J.E.Farbrother for his book 'Shepton Mallet'. First published in 1860.

Background and General Description

Some three hundred yards down the steep lane leading to the site of the corn mill and edge tool works is a strong spring of clear water, known since the 8th century as St.Aldhelm's Well (A) this also being the source of the River Sheppy, one of Somerset's 'Holy Wells'. From time immemorial local people would have used this spring as their supply of pure water, but it had to be carried laboriously up the hill and in time most villagers would have used their own shallow draw wells. During the mid 19th century the educated classes came to understand that many diseases, notably cholera, came from drinking polluted water, and draw wells could be easily fouled, not only by surface water, but by seepage from



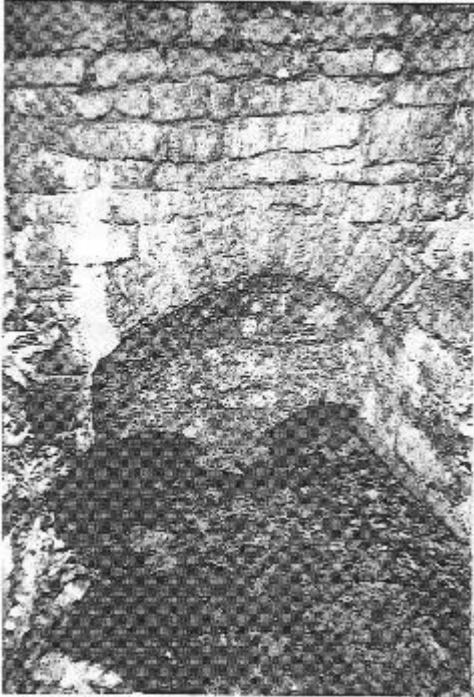
From 2nd. Edn. O.S. 25" County Series XLII 9, 1903.



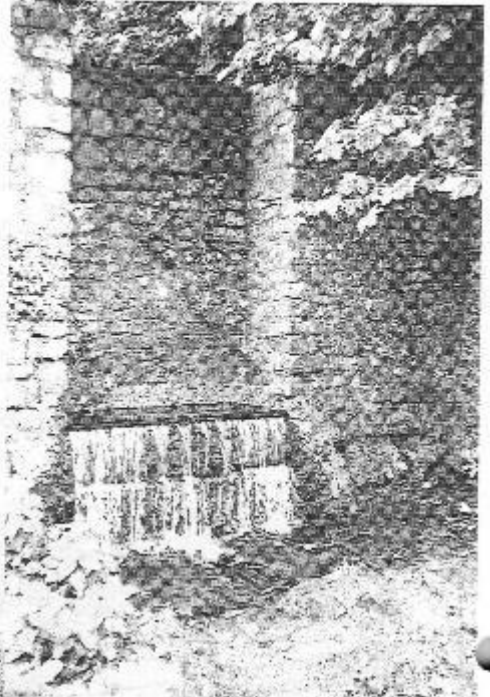
- a. St. Aldhelm's Well
- b. Horse trough
- c. Grating in stone paved surround
- d. Inflow from well
- e. Waterwheel
- f. Return crank
- g. Hanger bearing & arms
- h. Pressure chamber
- k. Rump platform
- m. Tail race
- n. Wrought iron tank

7

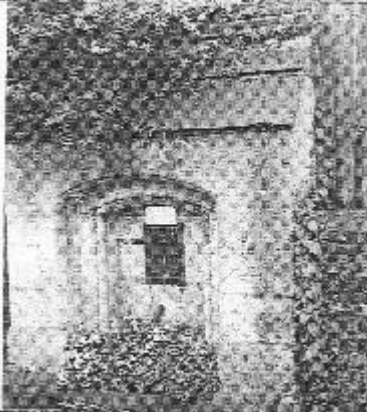
Fig. 1 . General site plan of St. Aldhelm's Well;



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after c1ffi7



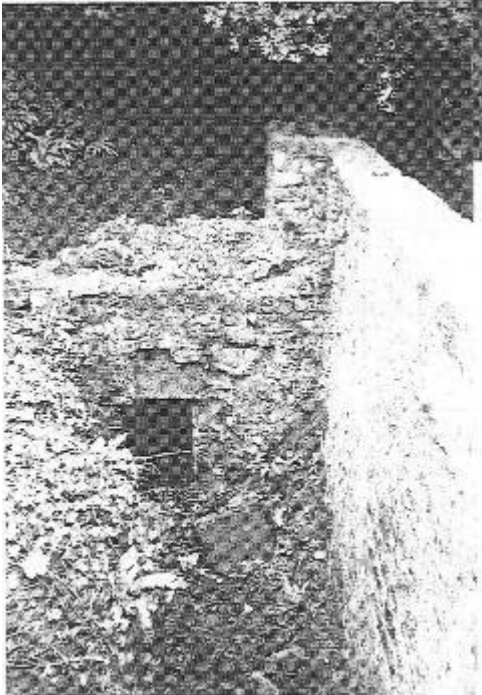
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privies, pig styes, byres, etc. The local Lord of the Manor, William Melliar Foster Melliar, would almost certainly have known all about this, and sometime between 1840, when he inherited the estate, and 1866, by which time it had passed to John Paget, a small waterwheel and pumps were installed near the spring and the water taken up to a small reservoir (8) where it was easily accessible to the villagers. At some period prior to 1886 the supply must have proved inadequate and a larger waterwheel and pumps were installed 100 yards downstream from the spring in an 'Engine House'. (C). This supplied not only the village but two large farms, Manor and Hurling Pot. These pumps must, in time, have worn out or in turn proved inadequate, for sometime after 1920 they were replaced by two twin-piston pumps made by Godwin, of Quenington, Gloucestershire, although when Doultong came on the mains, only Hurling Pot Farm continued to use water from this source. The Godwin pumps worked successfully until about 1960 when the waterwheel became unservicable and an electric pump set was put in. As a footnote to all this, when the parish church of St. Aldhelm was rebuilt in 1867, during the incumbancy of the Rev. Fussell, the well and the water trough were 'prettified' by using the dressed stone taken from the old church.

St. Aldhelm's Well. Site A

Ten feet from the outfall of the spring is a small stone chamber built against the wall abutting the lane (Fig.1). In the chamber is a 6ft diameter overshot water-wheel with 32 4in wide buckets (Figs.2,3). This has four pairs of arms, held on the 2in square shaft by sleeves, each pair being twisted and forged into one before being attached to the wheel. On the single arm sections are what can only be described as iron weights - but whether these were the better to secure the arms to the wheel or as an afterthought to improve the performance of the wheel cannot be determined. Certainly they are most unusual, if not unique. The trough taking the water to the wheel has now gone (rotted away) although an iron support survives on the wall. On the inner end of the shaft, beyond the wheel bearing, is bolted a return crank (Fig.4) which worked two vertical rods attached to two rocker arms suspended from the stone ceiling by a hanger bearing (Fig.5). The big end bearing of the inner arm is retained on the return crank. At the other end of these arms two rods were once connected to the pumps, the return crank giving them a three inch throw. The pumps were set on a stone platform, behind which and within the back wall, is an iron pressure chamber 40" X 8", its top protruding through the roof and a short length of lead pipe still at the bottom, which connected to the pumps. Both the water to work the wheel and to supply the pumps came from a pipe leading directly to the spring and is still flowing now, the water escaping down the old tail race pipe. All the iron-work, including the 6'2" X 2'6" door to the chamber, is of forged wrought iron and is clearly the work of a local craftsman. As the edge tool works of Robert Coombs & Sons

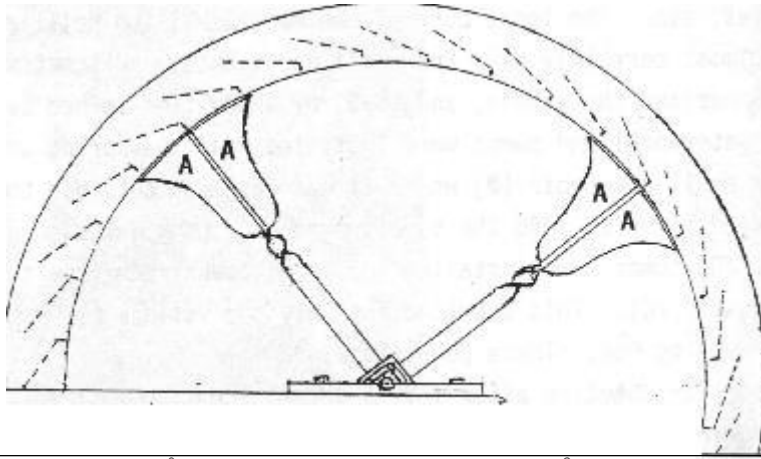


Fig. 2

0 3 6
0 --- 1 --- 2 --- 3 --- 4 --- 5 --- 6

Wheel showing iron weights • A

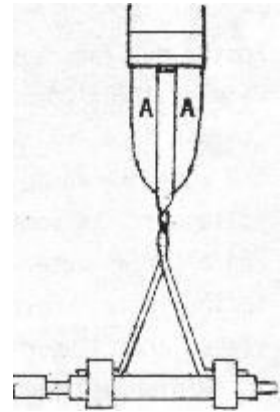


Fig. 3

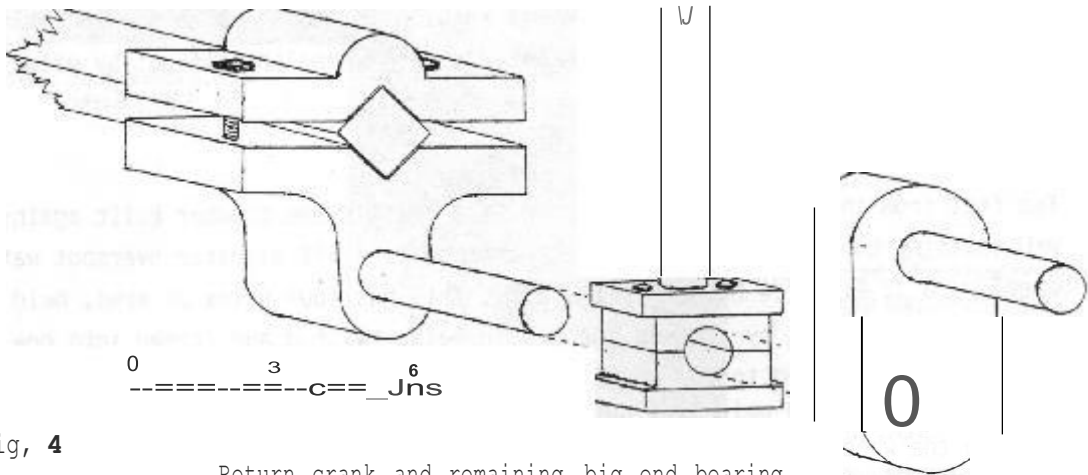


Fig. 4

Return crank and remaining big end bearing

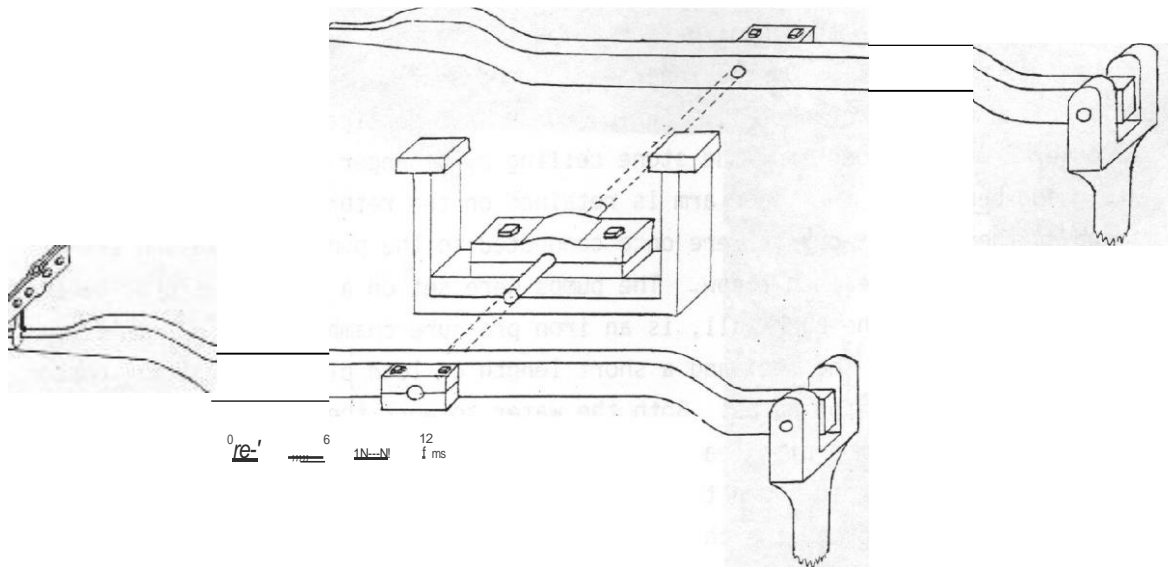


Fig. 5

N". "ti

Hanger bearing and curved rocker arms. What purpose the attachment at the end of the near arm served is unclear, nor is it known if there was a similar one on the other arm.

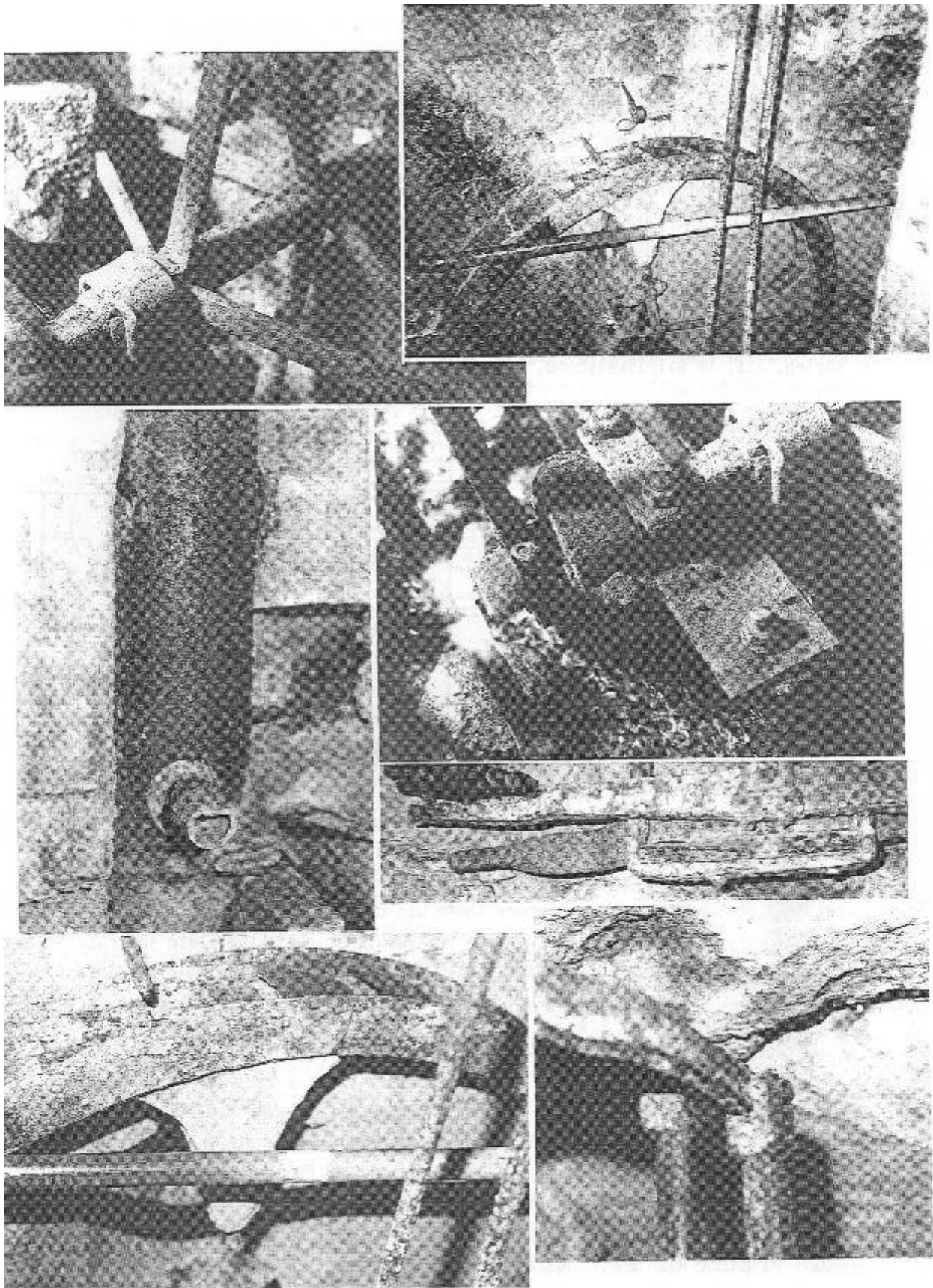
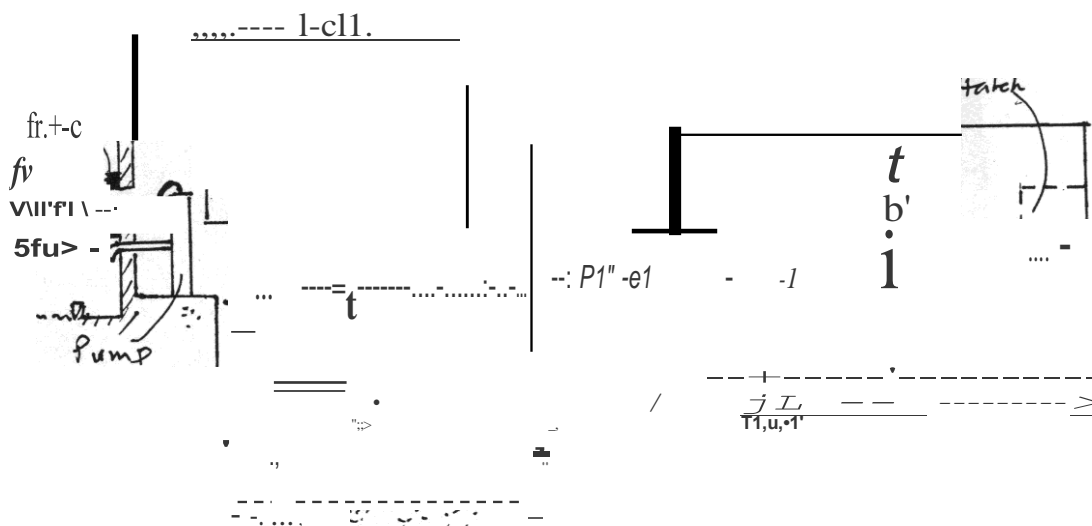


Figure 1. Return crane, roots. arm; 200 harg: r ooarir:; J an: l pressure cmter. ne mrizootaJ. rrrr:rn
 pi(E sw, in frmt of tie \b:el in OO pictures rDl takes tie water fran tie spring to tie electric
 ilJTP at C.

was only a few hundred yards down the lane it is more than likely that they were the makers, for it would have been well within their competence. In the early 1970s the whole system was complete and it is likely that the pump and bearings were removed for their scrap value. Outside the door is a tank of linch thick rivetted wrought iron plate, 36" X 24" X 20", which is obviously of the same period; it is too heavy to have been simply dumped there, so presumably it had a function connected with either the wheel or the pumps - a header tank perhaps?

The Reservoir. Site B

The water was pumped up 200 yards to the reservoir, approximately 75ft above the spring, via, in all likelihood, a lead pipe (then widely used for that purpose).



Diagrammatic sketches of the reservoir.

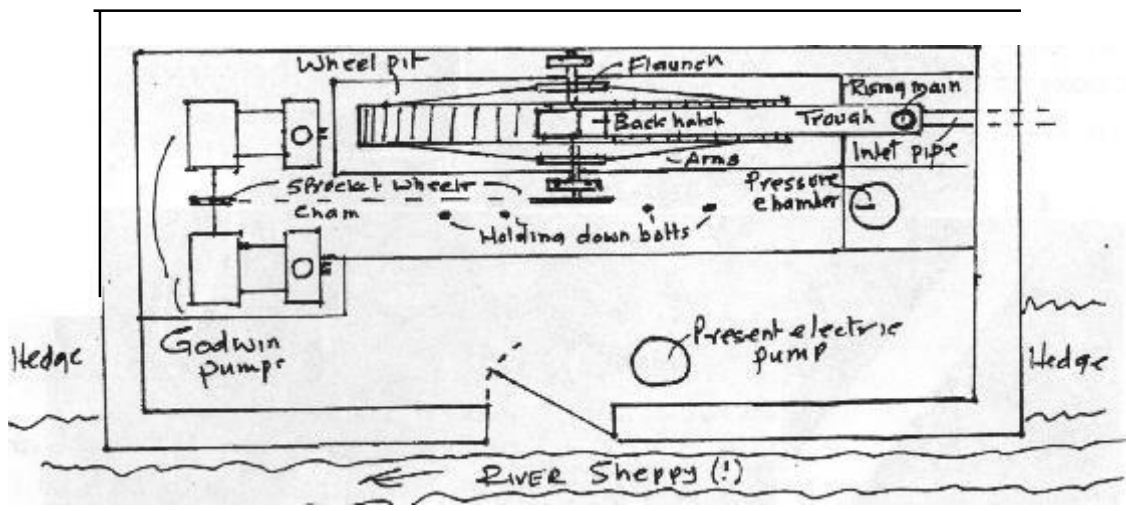
The brick built reservoir measures 30' X 6' with a depth of water of 5' and is some 4' underground. At the road end is a force pump, its handle protruding through a dressed stone wall above an iron spout. The handle, which is lockable, is set in a cast iron plate bearing the letters 'WMFM'. The whole frontage is set in a dressed stone recess where there was once a shallow trough and, in all probability, a grating and drain. The initials cast on to the plate indicate without doubt that the whole water system was put in by William Melliar during his time as Lord of the Manor and, from the evidence of the surviving artifacts the date of the installation would be earlier rather than later during that period - 1850 at the latest.

The 'Engine House'. Site C

Some time before 1886 (the 'Engine House' was shown on the 1st Edn. O.S. 25" County Series Map of that date) the little wheel and pumps at St. Aldhelm's Well must have proved inadequate for the needs of the village so alternative pumping

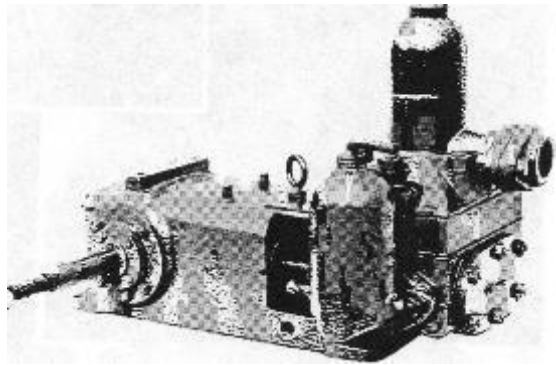
facilities were required. Within the 'Engine House', which is a simple field-stone structure with a corrugated iron roof, is a 12ft diameter waterwheel which

drove two horizontal reciprocating pumps from a crank on the end of the wheel-shaft, and although the pumps have gone, their holding down bolts survive, as does the pressure chamber with its adjustable pressure arm and weights. The water to work the wheel entered the house in a pipe, then up 5ft in a rising main on, to the trough where it was fed on to the wheel through a back hatch, making the wheel a backshot. The wheel itself is typical of those manufactured for farm use during the third quarter of the 19th century although there is no makers name. It's six flat, iron arms are fixed on to the 3inch diameter round shaft with 15inch diameter flaunches, 3ft apart on the shaft. The arms narrow inwards to hold the cast iron shrouds with their 15inch wide buckets of which there are 48. The pumps not only supplied the village but Manor Farm and Hurling Pot Farm as well,



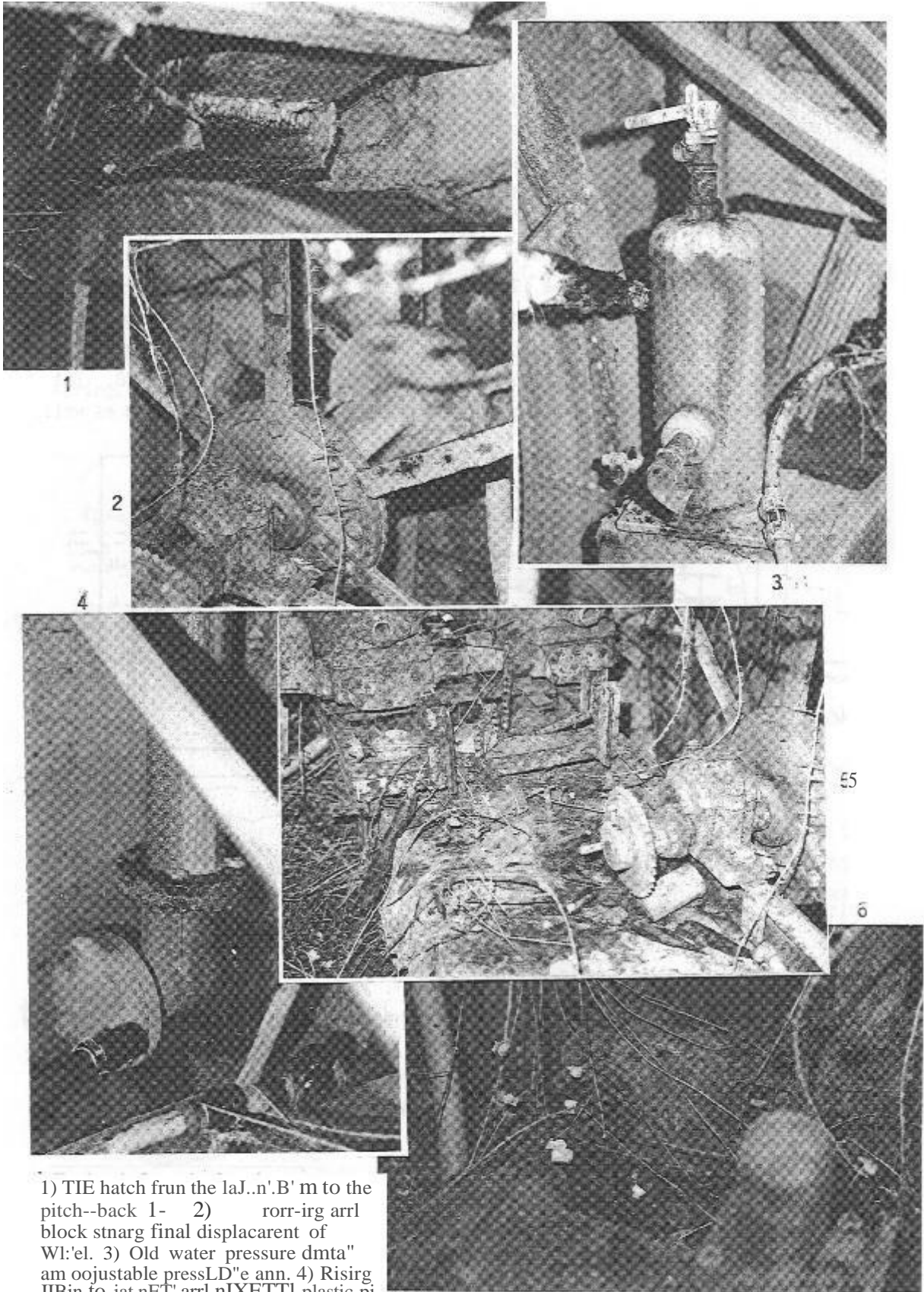
Diagrammatic sketch of the 'Engine House'.

This first set of pumps were eventually replaced by a pair of horizontal piston pattern pumps with twin double-acting cylinders, each with its own pressure chamber, made by H.J. Godwin, Quenington, Glos. Both pairs were on the same drive shaft which had a sprocket wheel driven by a roller chain from a similar sprocket fitted to the near side of the waterwheel shaft. This system worked until about 1960 when the bearing on the sprocket



The two Godwin pumps in situ are similar to this -one, s;own in a 1965 Godwin cata-

logue. They must have been a good design. side of the waterwheel shaft was allowed to run dry, wearing through not only the brass plumber block but the cast iron bearing block as well! By this date only Hurling Pot Farm was taking its water



1) TIE hatch frun the laJ..n'.B' m to the pitch--back 1- 2) rorr-irg arll block stnarg final displacarent of Wl:el. 3) Old water pressure dmta" am oojustable pressLD"e ann. 4) Risirg IIBin to iat.nET" arll nIXETTl plastic pi .

5) Sprocket gaars rn 1 arll JUTPS, roller chain, roldirg cbfl oolts of first JUTPS arll ems of di91i3!ltled fa:Min JUTPS. 6) TIE 4" strd<e pistrn in far p'.Jlp can rE SEB1 l:alind pressure c:harber of near IUTD.

supply from St.Aldhelm's Well an, the then owners installed an electric pump unit, which is still working. It cannot now be seen where the water to work the wheel was taken from the stream, but it seems probable it was where the stream issues from it's culvert. The water for the farm is piped directly from the spring, the 1 inch iron pipe assing through the entre of.the chamber at Site **A**, then down to the electric ump. Although the 'Engine House' now has a new metal door, the old iron plate one lies on the floor inside, as does the hooked weight used on the old pressure chamber.

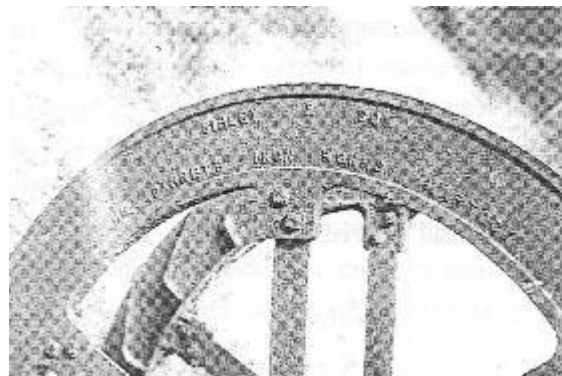
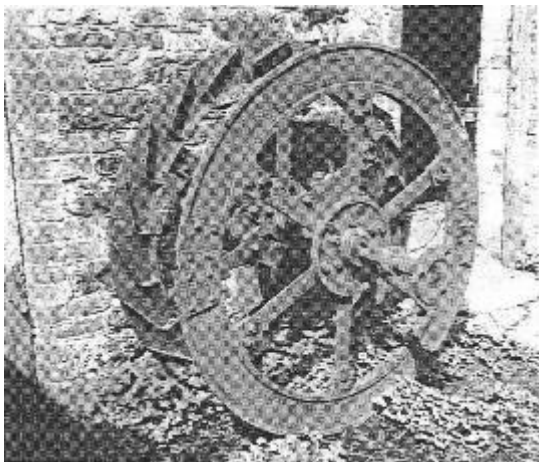
Conclusions

Not only do the methods of supply show the advances in technology over the past 150 years, but the whole complex is a wonderful illustration of a village water supply provided by private benefactors long before the advent of public utilities. The little waterwheel and surviving machinery to work the pumps provide an exce tional example of local craftsmanship and is probably the finest of it's class in the whole county, as it almost certainly dates fro 1840 - c1850.

Derrick Warren

R E D I S C O V E R E D

M3rtin Bodman has sent in a nice oicture (left) of a little 4ft diameter water-wheel made by Sibley & Son, The Parrett Works, Martock. This was found at Bridoe Farm, Bridgerule, Devon, between Holsworthy and Bude. The same wheel was seen (right) and photographed by the Editor in 1973 at Knight's Farm, Fitzhead, near Milverton, where it had been used to pump water, after it had been taken out and was awaiting disposal. It is interesting to compare this with the one at Doulting, for both were used for the same purpose.



Appendix 2

***Extract from - Martin Bodman, Mills on the Sheppey – Part 3,
Draycott to Doultong,
Somerset Industrial Archaeological Society,
Bulletin 111, August 2009.***

Edge Tool Mliis, Doultng
ST6434 4332

Doultng had a corn mill in the eleventh century, worth a mere nine pence. ¹ It may well have been located here, near St Aldhelm's Well - the source of the Doultng Water, now known as the river Sheppey. The tithe map and apportionment of 1843 provide the adjoining field names: Mill Lane Mead, Mill Oose Mead and Millhams, which imply a pre-existing site before the edge tool works was established.

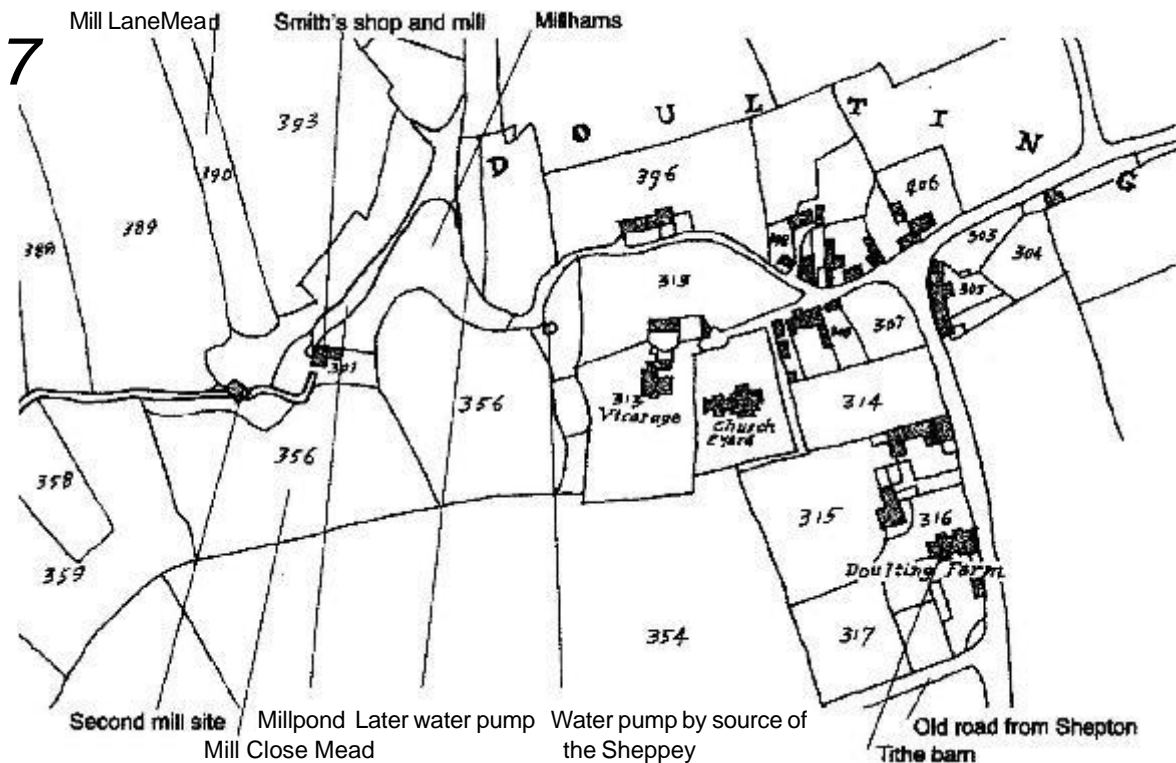
Today two small ruinous buildings survive in the valley below the A371 highway. A reservoir and two smaller millponds provided the power for the waterwheels. In 1843 the site was described as 'Smith's Shop, Mill and Premises Oa lr 18p'. It was owned by WM Foster Melliar, Esq, the lord of the manor, and occupied by Robert Coombs. ²

The Coombs family manufactured edge tools here for much of the 19th century. Their works was one of several on and around Mendip at that time or earlier: there were the well-known Fussells water-powered sites at Mells, Nunney, Great Elm and Whatley ³ but there were also other edge tool makers at Ashwick, ⁴ Batcombe, ⁵ Chew Magna, ⁶ Chilcompton, ⁷ Evercreech, ⁸ Gurney Slade, ⁹ Pilton ¹⁰ Pitcombe ¹¹ and Stoke St Michael. ¹²

Coombs was 60 in 1851; in that year he was employ- ing three men at the Doultng works. ¹³

Sources

- 1 Caroline and Frank Thorne, eds. Domesday, Somerset. Phillimore, 1980
- 2 SRO - Doultng tithe map and apportionment of 1843, DID/Rt 392 and 392.A, item 391
- 3 Robin Attbill, Old Mendip. Bran's Head Books, Frome, 1984,82
- 4 Robin Attbill, The Nettlebridge Valley, BIAS Journal 3, 1970, 9. [Jimmy Moon's Hole: ST 645 489]
- 5 Bath and Cheltenham Gazette 1 March 1815 p 1 col 4 [Church Bridge: ST 6812 3912]
- 6 Peter Addison, pers. comm. 1988 [Portbridge Mill: ST 561 634]
- 7 Chilcompton census 1871- RG10 2473 f 114 p 1 [Padfield's Edge Tool Works: ST 6485 5170]
- 8 Extant in 1798. Release and assignment of estates, 1819- Document in possession of Brian Shingler, Gant's Mill [Edge Tool Mill, Albion Vale: ST 65853771J]
- 9 Elsie Green, 120 Years of Tool Making. Five Arches 15, Winter 1992. [Gurney Slade Ironworks: ST 6321 4958]
- 10 Robin Attbill, ed. Mendip-A New Study. David & Charles, 1976, 167 [Samuel Dunkerton's edge tool works]
- 11 Sberbome Mercury 15 April 1811 [Cole House edge tool mill, aka Cole Mill: ST 668 336]
- 12 Michael McGarvie, The Iron Industry in Mells and Nunney. Somerset and Dorset Notes and Queries, XXX.II September 1987, 623 [Edge Tool Works, Three Ashes: ST 652 479] Elsie Green, op cit. [Stoke Lane Ironworks: ST 668 473]
- 13 Doultng census 1851- HO107 1933 f 440 p 22



Doultng in 1843. From the tithe map, with extra annotations showing the location of the water pumps. The names of the pastures Mill Close Mead, Mill Lane Mead and Millhams may well elate from earlier centuries and imply the existence of a medieval mill site before the nineteenth century edge tool works was established here