

**AT** MICROFICHE  
REFERENCE  
LIBRARY

A project of Volunteers in Asia

Mill Drawings

by: W. Foreman

Published by:

Society for the Protection of Ancient  
Buildings  
55 Great Ormond Street  
London WC1  
England

Available from:

Society for the Protection of Ancient  
Buildings  
55 Great Ormond Street  
London WC1  
England

Reproduced by permission of the Society for the  
Protection of Ancient Buildings.

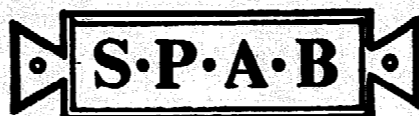
Reproduction of this microfiche document in any  
form is subject to the same restrictions as those  
of the original document.

# MILL DRAWINGS

**Measured Drawings and Details**

**by**

**W. FOREMAN**

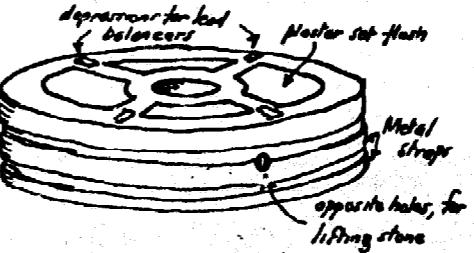
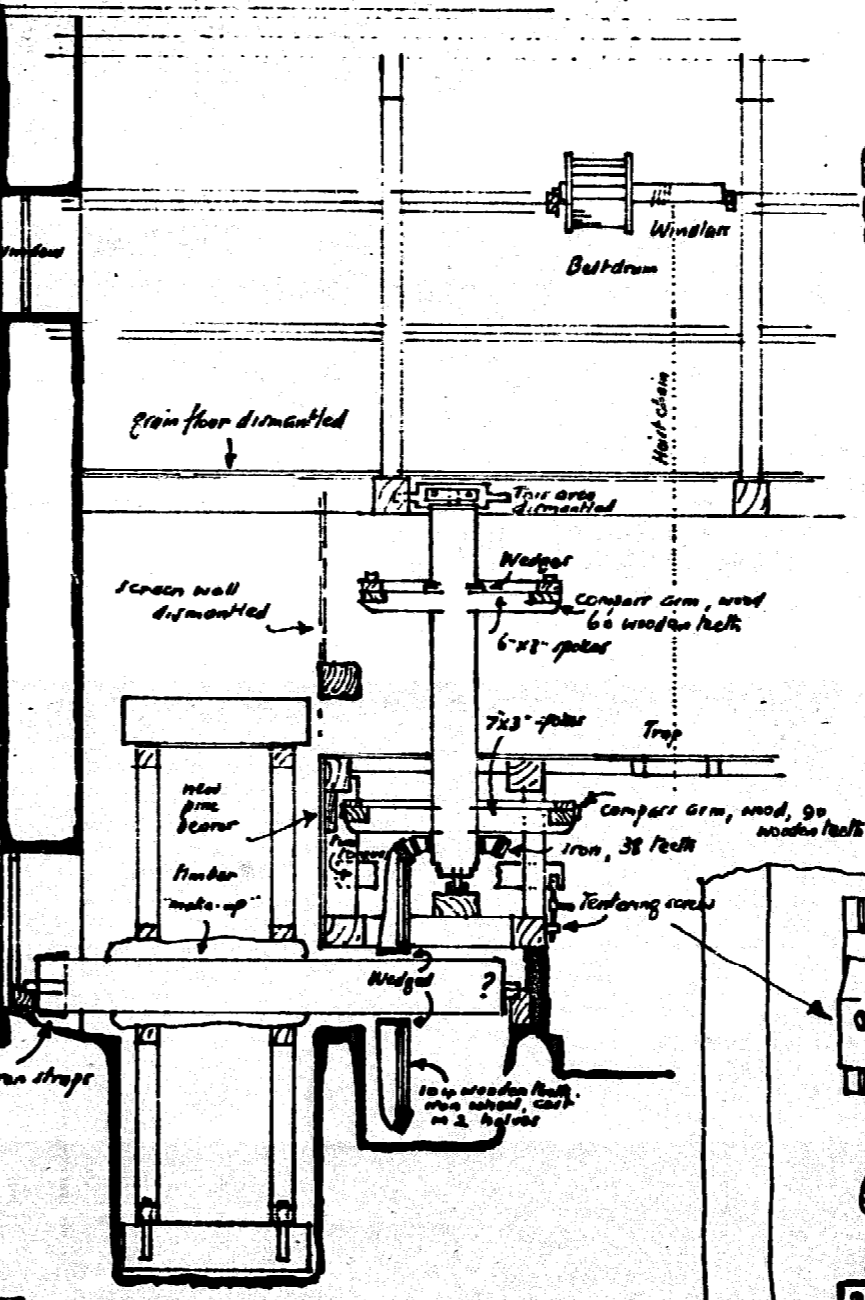
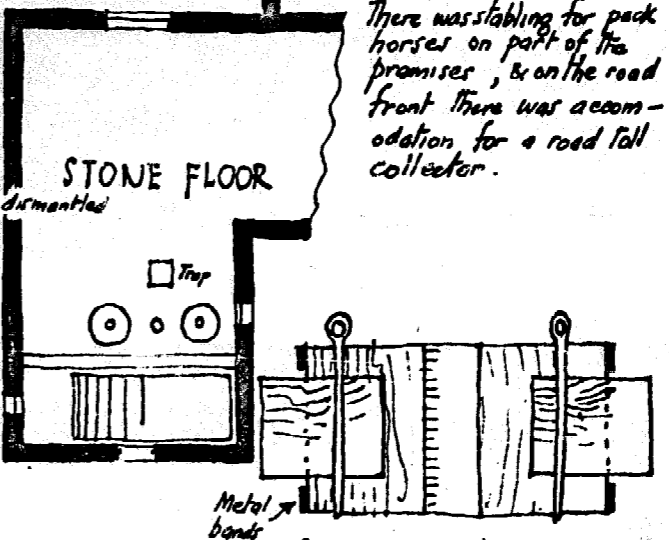
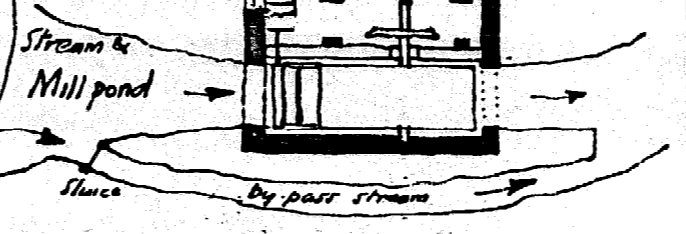
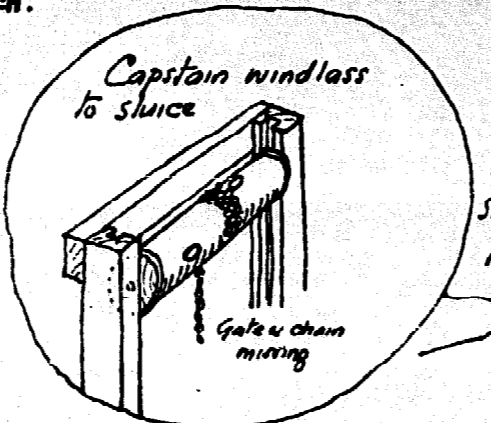
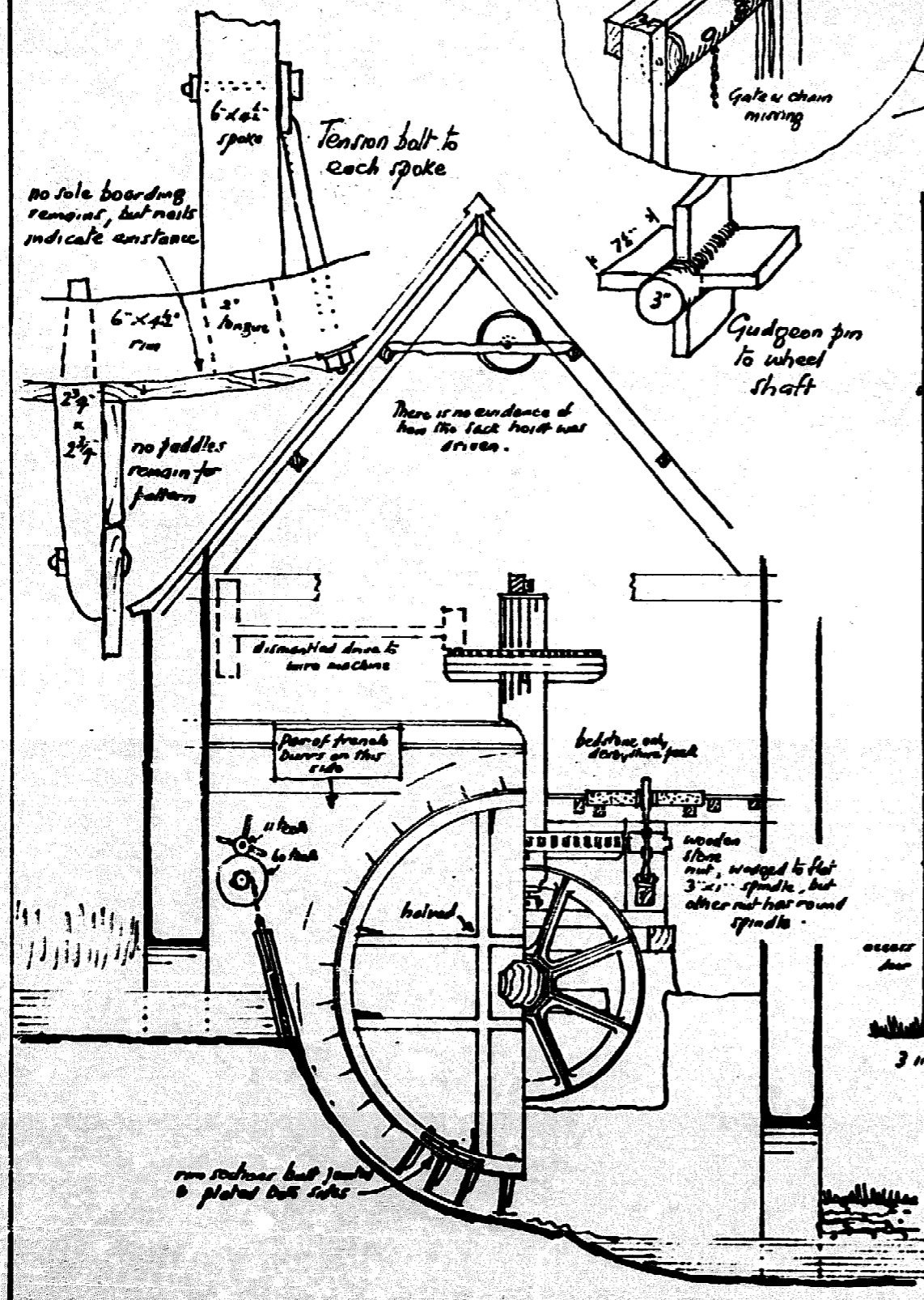


# MILL AT BROUGHTON POGGES, OXON.

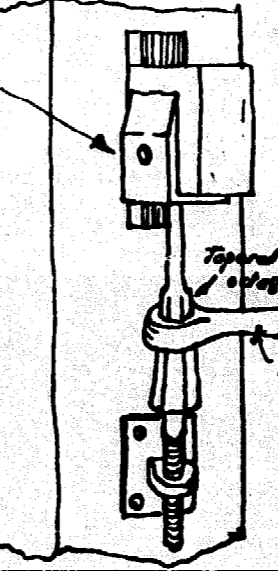
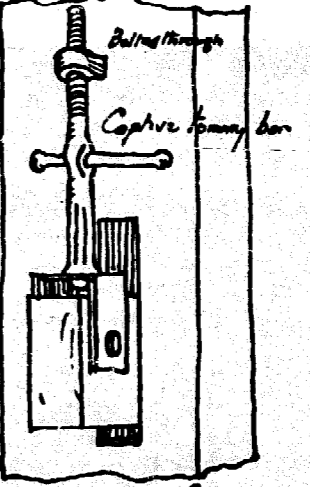
BY KIND PERMISSION OF MR. & MRS. MARCH.

O.S. REF. SHEET 157 236. 204.

SCALE. 1/4" TO ONE FOOT.



Heavy iron "foundation" frame to both runner & bed stones (trench burrs)

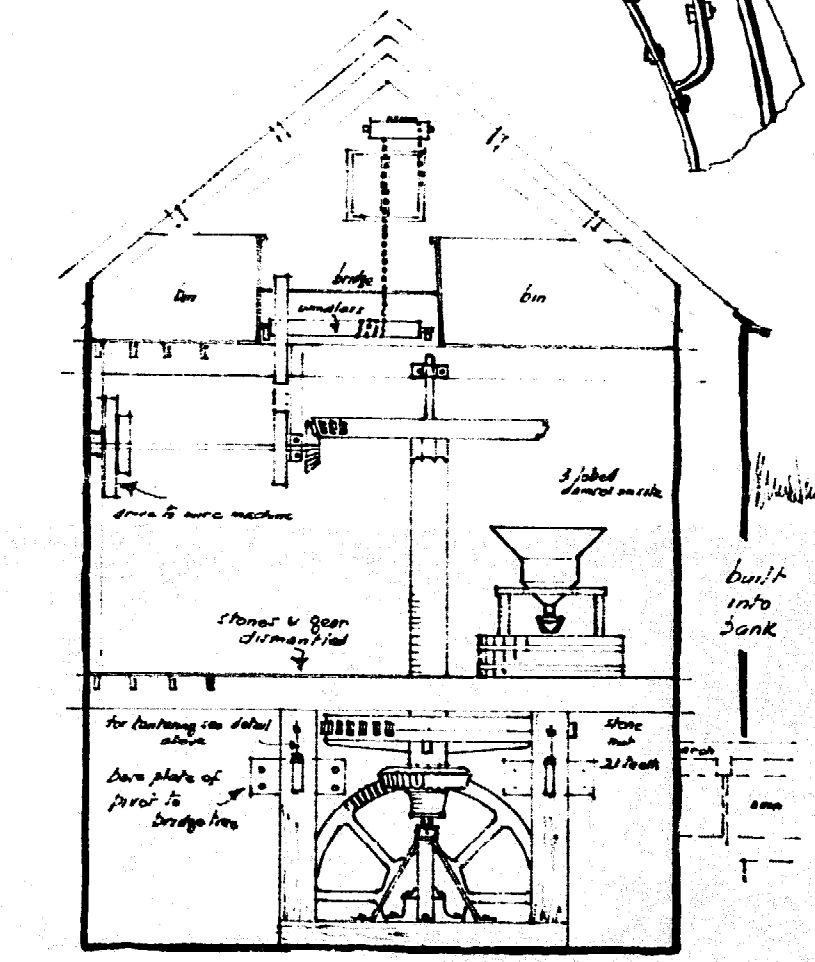
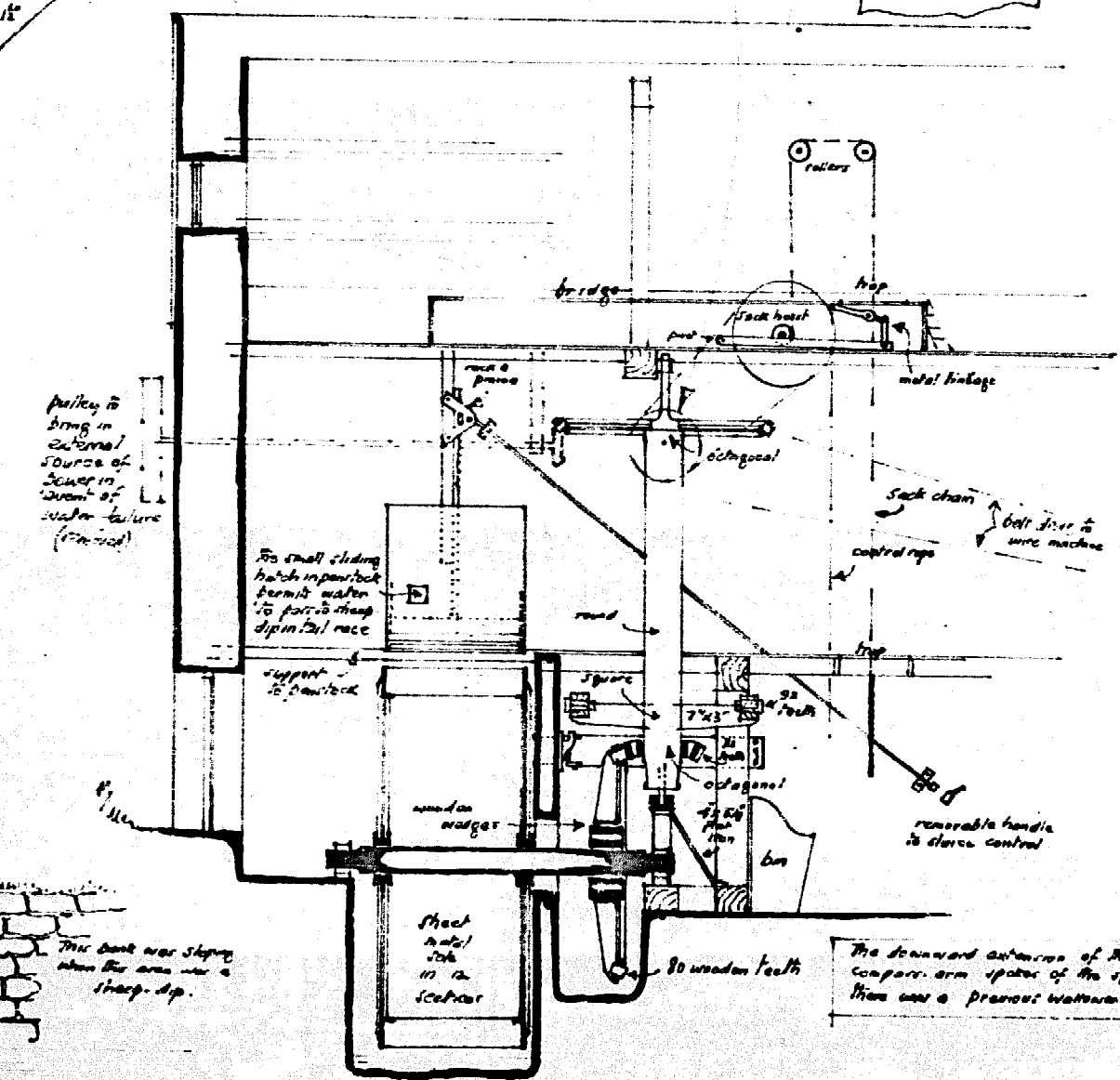
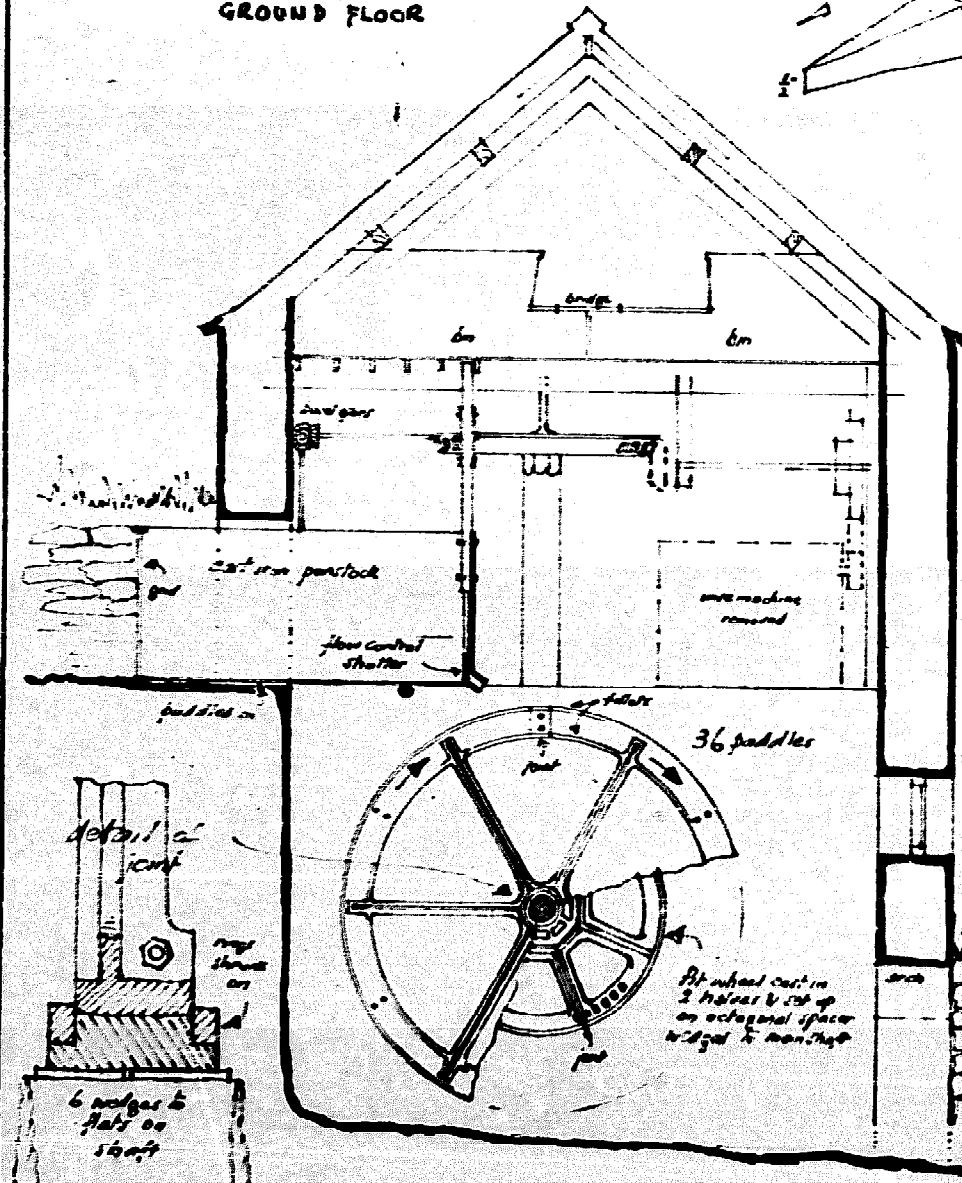
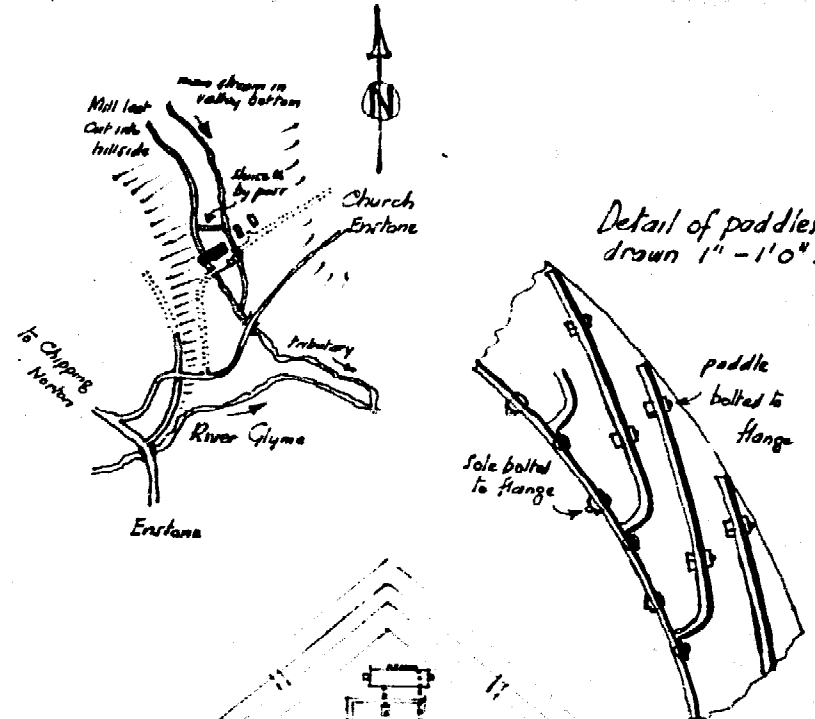
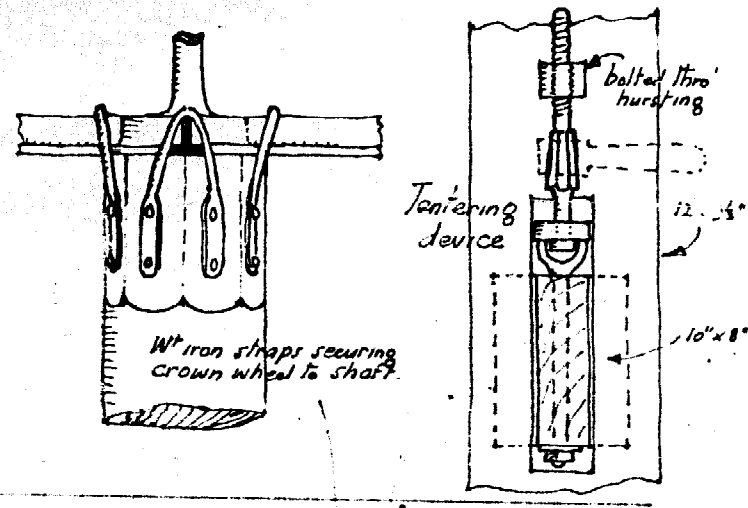
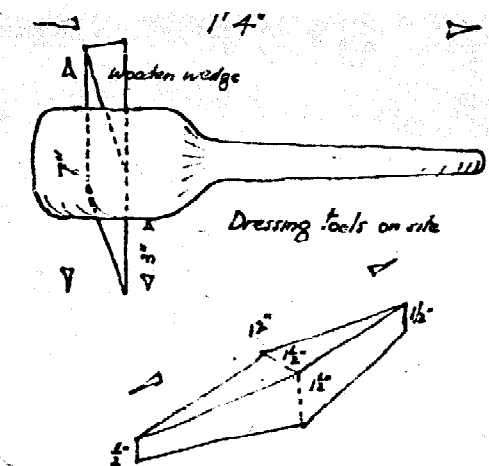
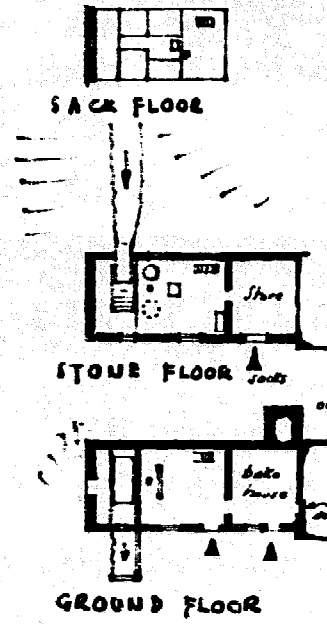
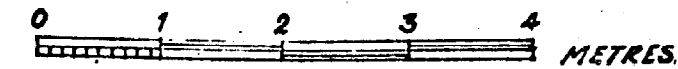
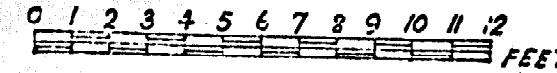


Two forms of tentering screws

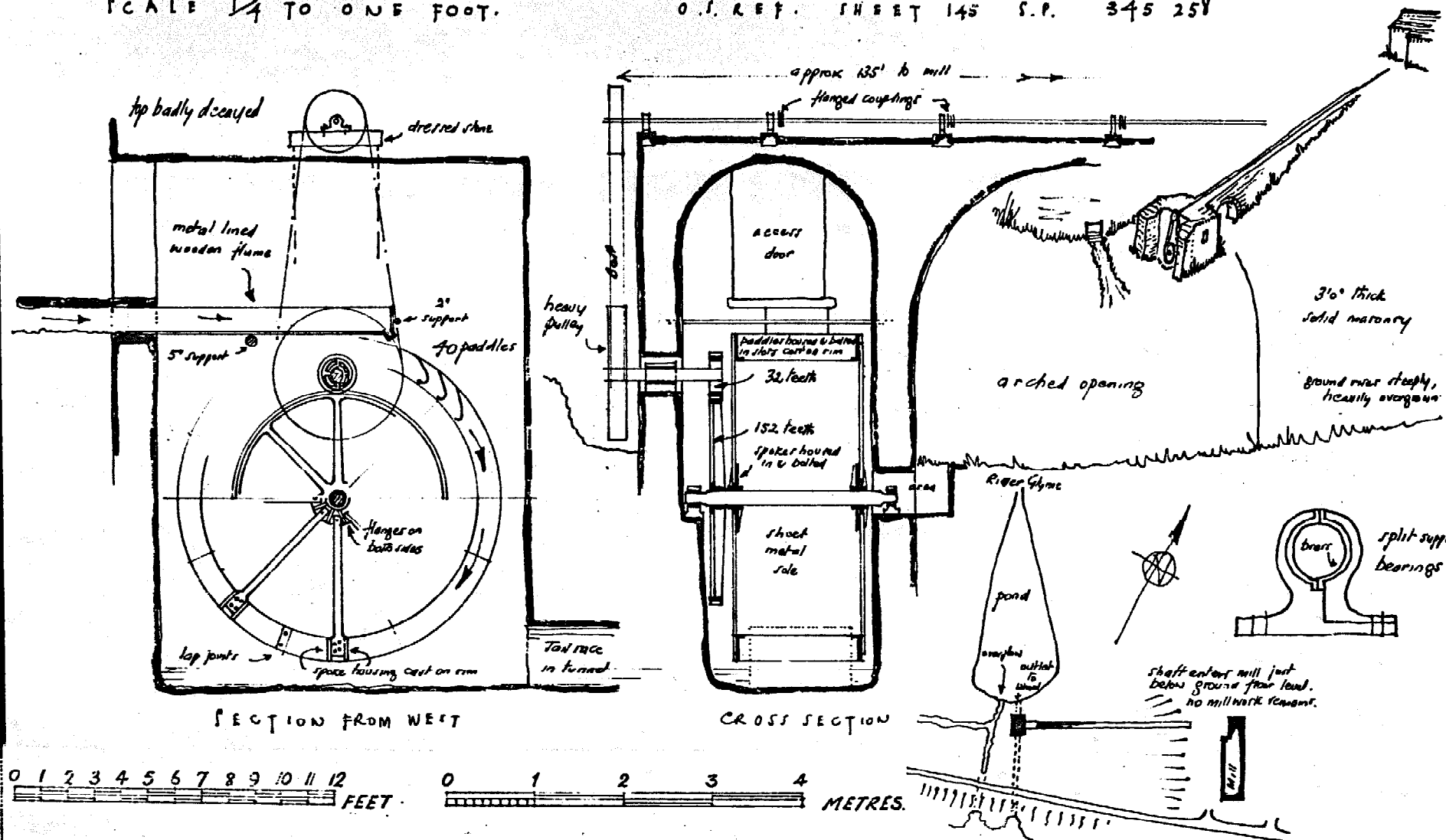
# CHURCH ENSTONE MILL . OXON .

BY KIND PERMISSION OF MR IVINGS. OWNER.

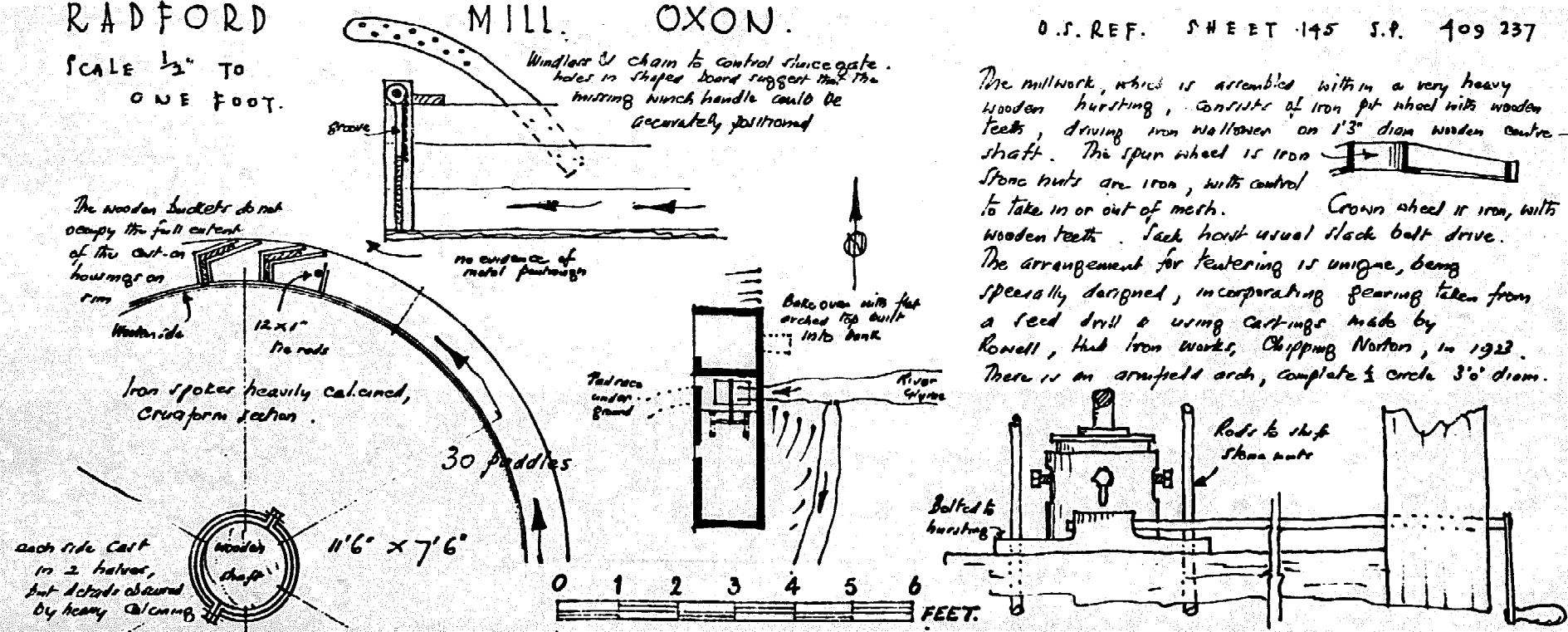
SECTIONS DRAWN AT SCALE OF  $\frac{1}{4}$ " TO 1'0".  
BLOCK PLANS ~ ~  $\frac{1}{32}$ " TO 1'0".



OLD CHALFORD. OXON. WATER WHEEL & SHAFT DRIVE.  
 SCALE 1/4" TO ONE FOOT. O.S. REF. SHEET 145 S.P. 345 259



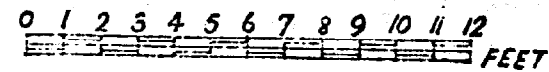
RADFORD MILL. OXON.  
 SCALE 1/2" TO ONE FOOT. O.S. REF. SHEET 145 S.P. 109 237



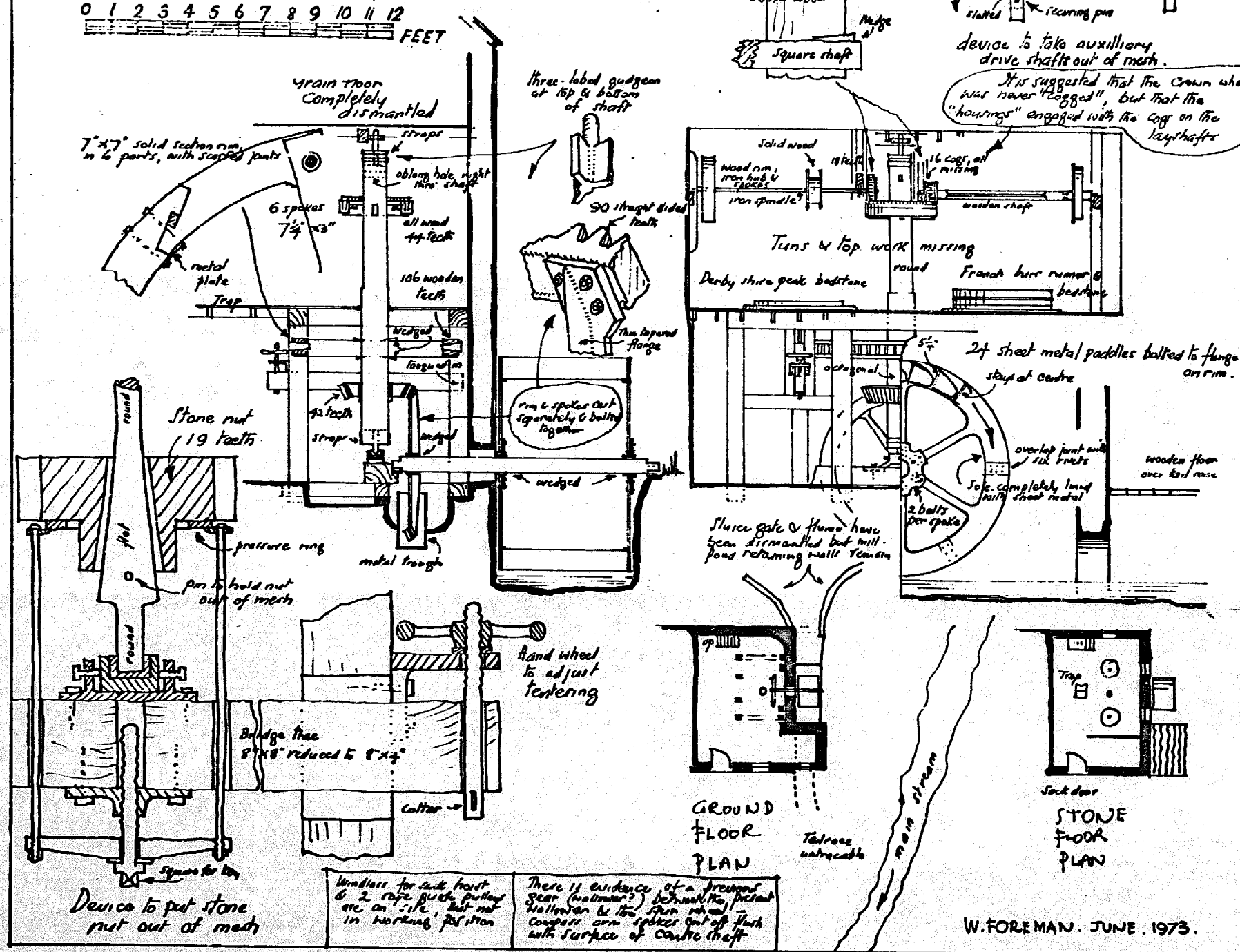
# STADHAMPTON MILL, OXON.

O.S. REF. SHEET 158. SU 604 986

BY KIND PERMISSION OF MR & MRS PEET.



Because of the flat countryside the mill stream was taken off the main stream some distance away, & the mill pond area was considerable.



device to take auxiliary drive shafts out of mesh.  
It is suggested that the crown wheel was never "flogged", but that the "hourings" engaged with the cog on the keyshafts.

Stone gate & flume have been dismantled but mill pond retaining walls remain.

7"x7" solid teak on in 6 parts, with scuffed joints

grain roof completely dismantled

three lead gudgeons at top & bottom of shaft

solid wood, metal straps, square shaft, wooden shaft, iron spindle, wood rim, iron hub & spokes, 16 cog on shaft, Derby three peak bedstone, round, French burr runner & bedstone

Tuns & top work missing

24 sheet metal paddles bolted to fange on rim, stop at centre, overlap joint with six teeth, wooden floor over test race, sole completely lined with sheet metal, 2 balls per spoke

stone nut 19 teeth

rim & spokes cut separately & bolted together

GROUND FLOOR PLAN

STONE FLOOR PLAN

Device to put stone nut out of mesh

Windlass for sink hoist & 2 rope blocks pulley etc on site, but not in working position

There is evidence of a freemount gear (holman?) between the hollow in the spur wheel - compass arm splines cut off flush with surface of crown shaft

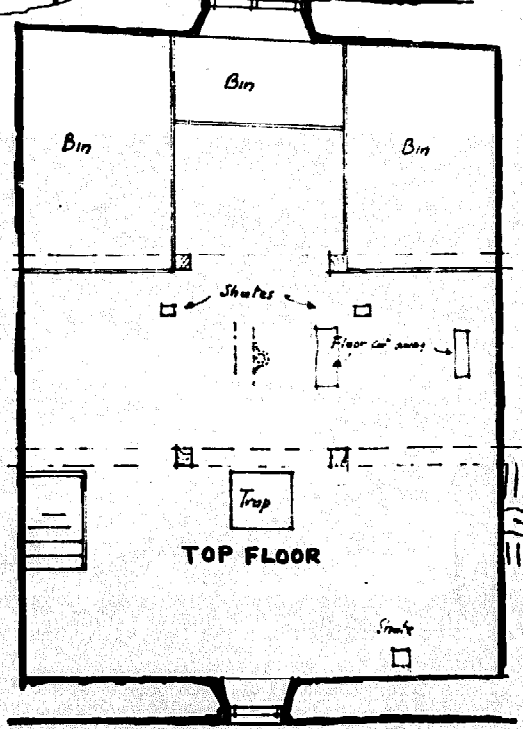
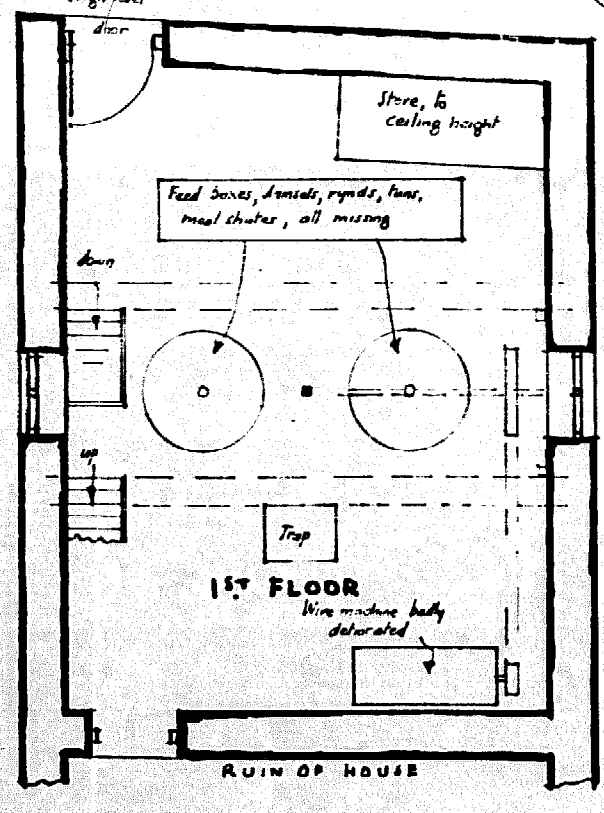
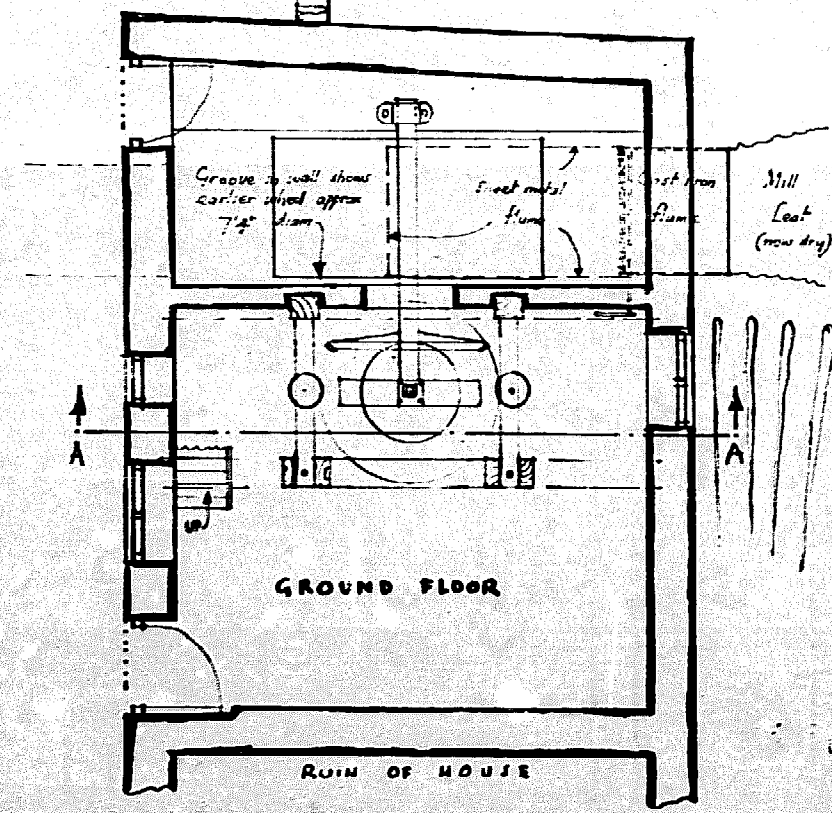
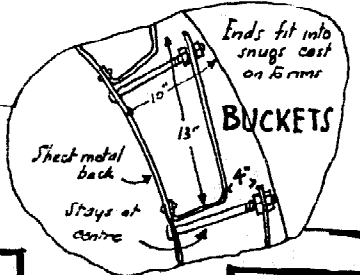
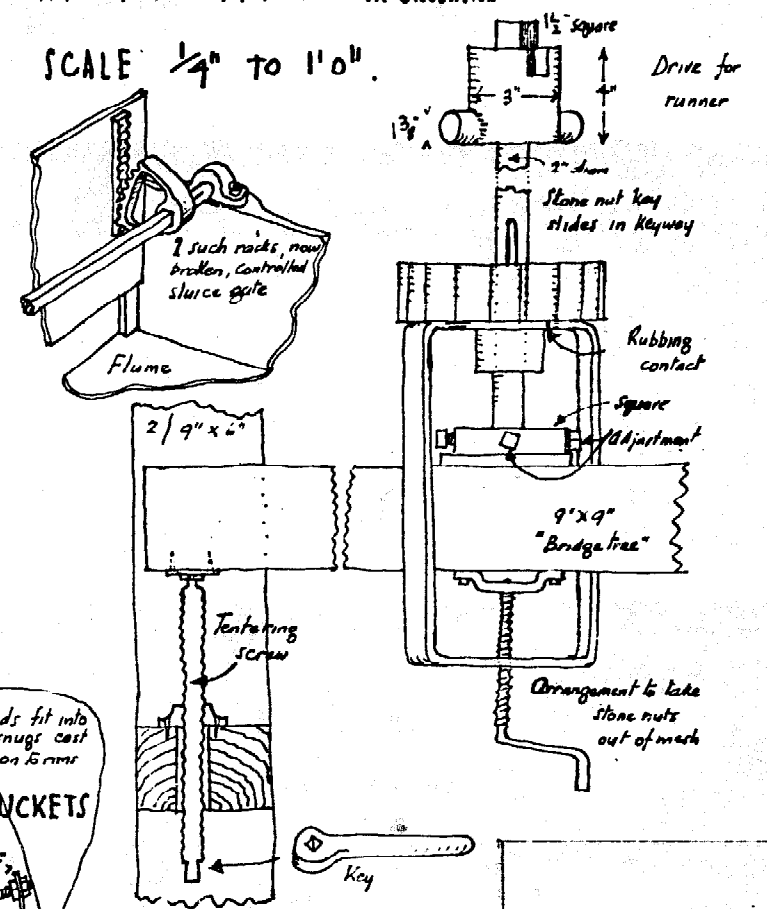
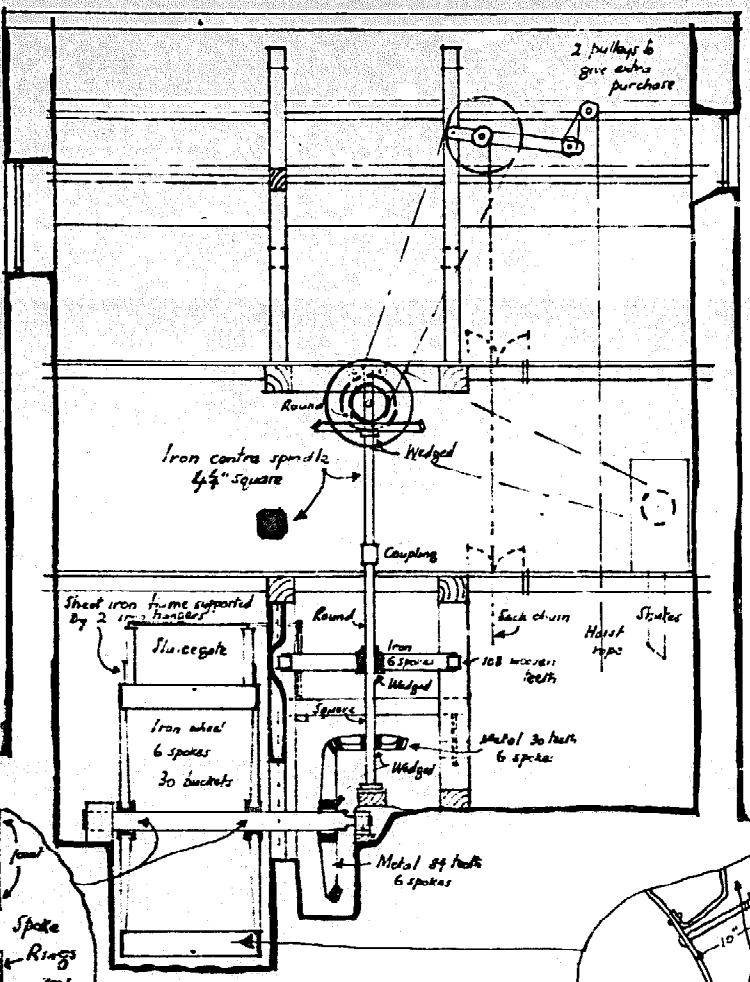
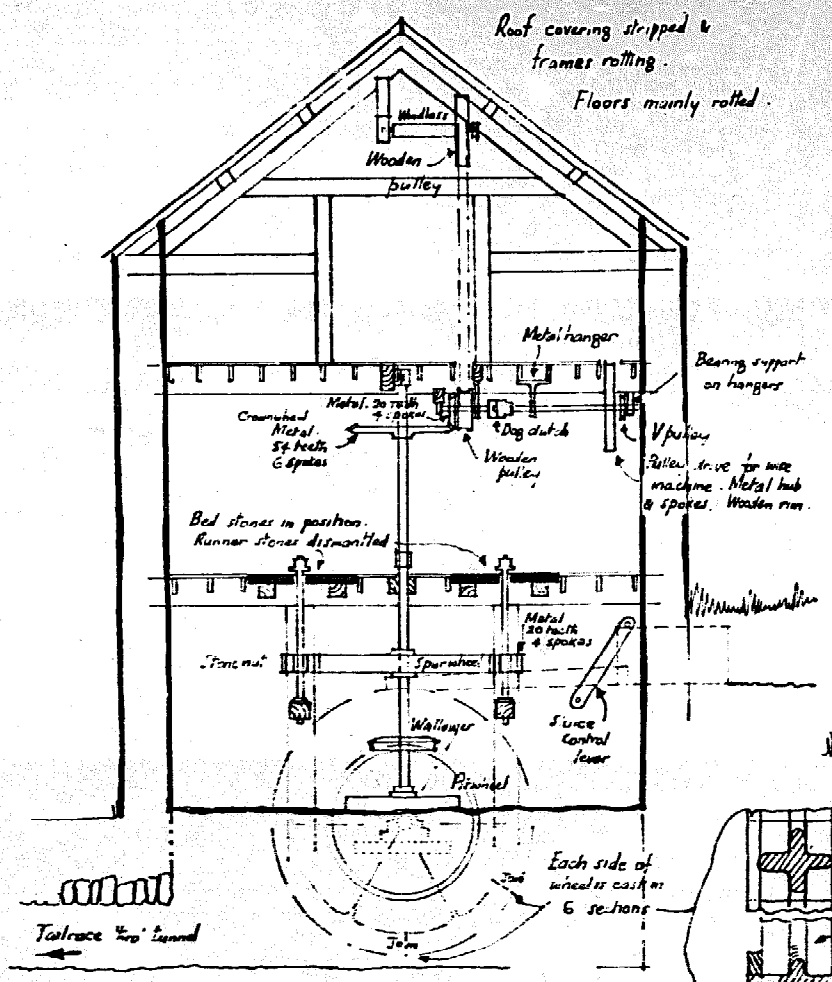
W. FOREMAN. JUNE. 1973.

# WATER MILL

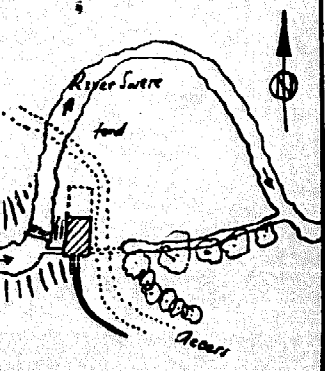
REF. SHEET 145.  
S.P. 433 328

AT BARFORD ST MICHAEL OXFORDSHIRE

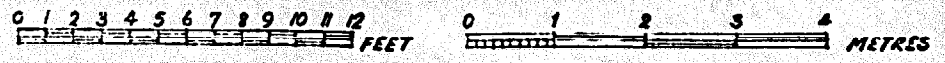
SCALE 1/4" TO 1'0"



THOUGH SHOWN AS BEING COMPLETE, THE STRUCTURE IS DECAYED & FALLING DOWN IN SOME AREAS.

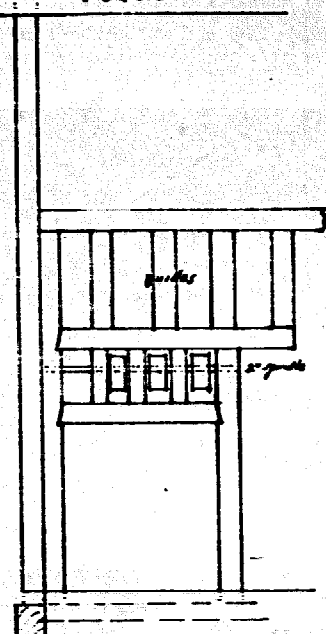
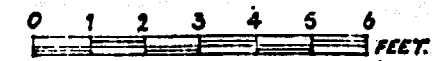


W. FOREMAN 26 1/2 71



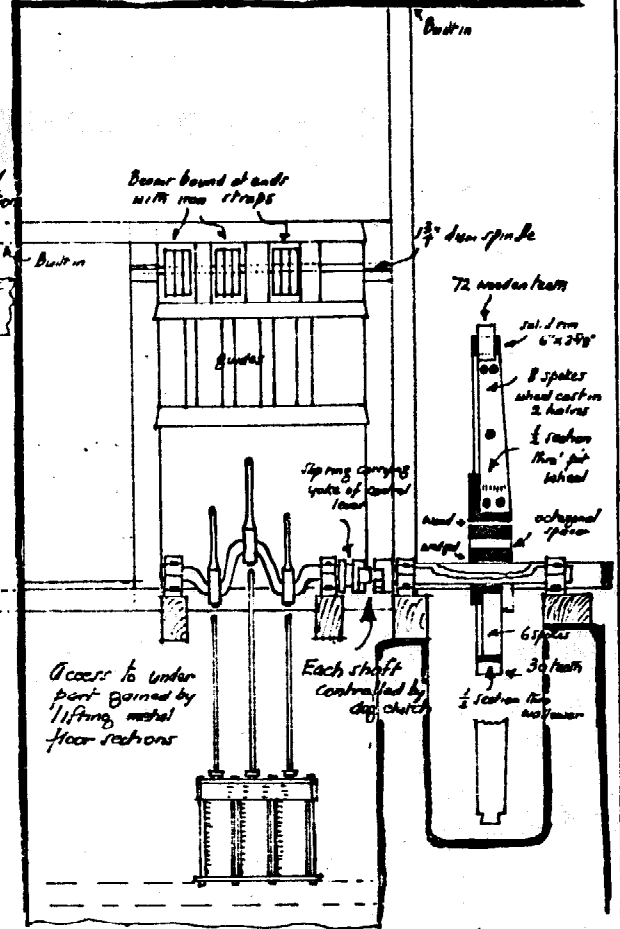
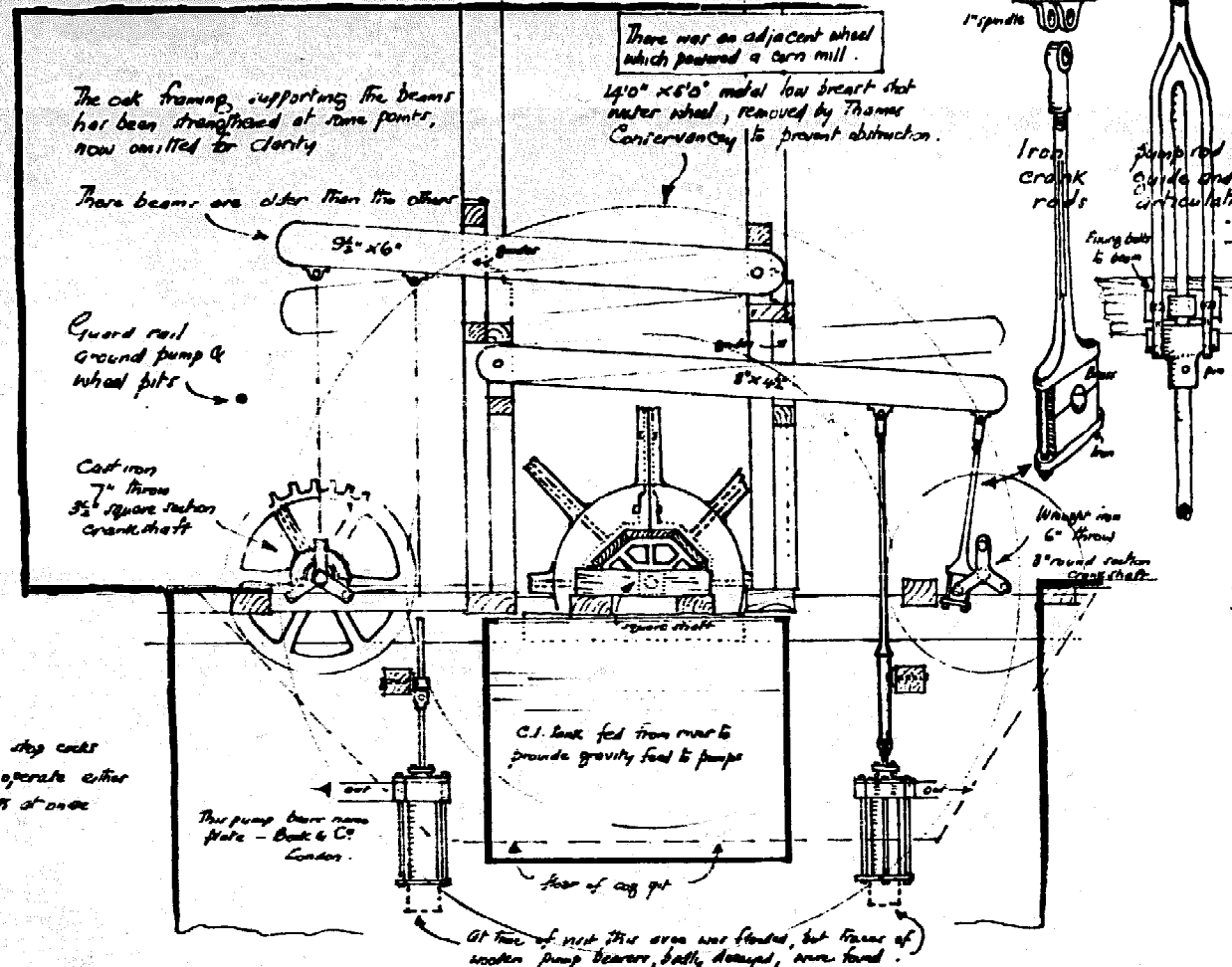
# WATER PUMPS AT OLD WOODSTOCK . OXON .

SCALE 1/2" TO ONE FOOT.

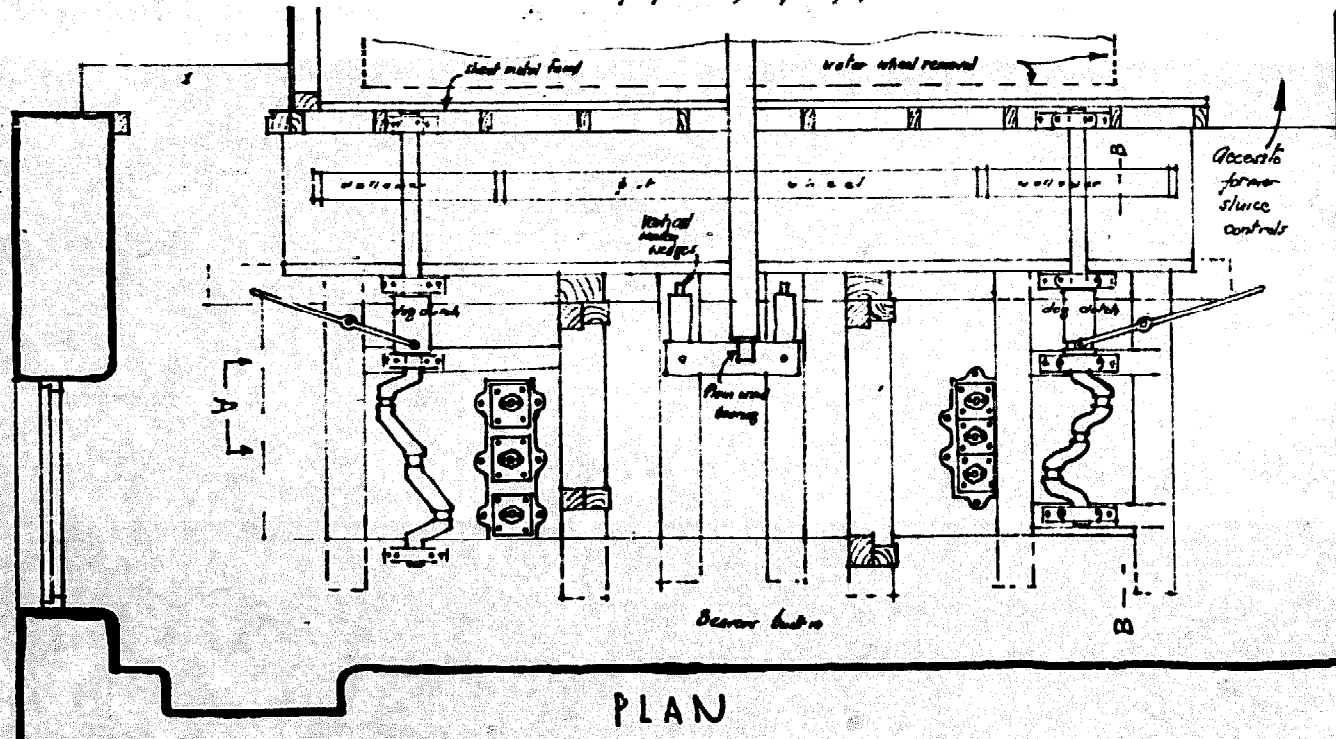


END VIEW "A"

By means of valves & stop cocks it was possible to operate either set of pumps, or both at once.



SECTION ON "B-B"



PLAN

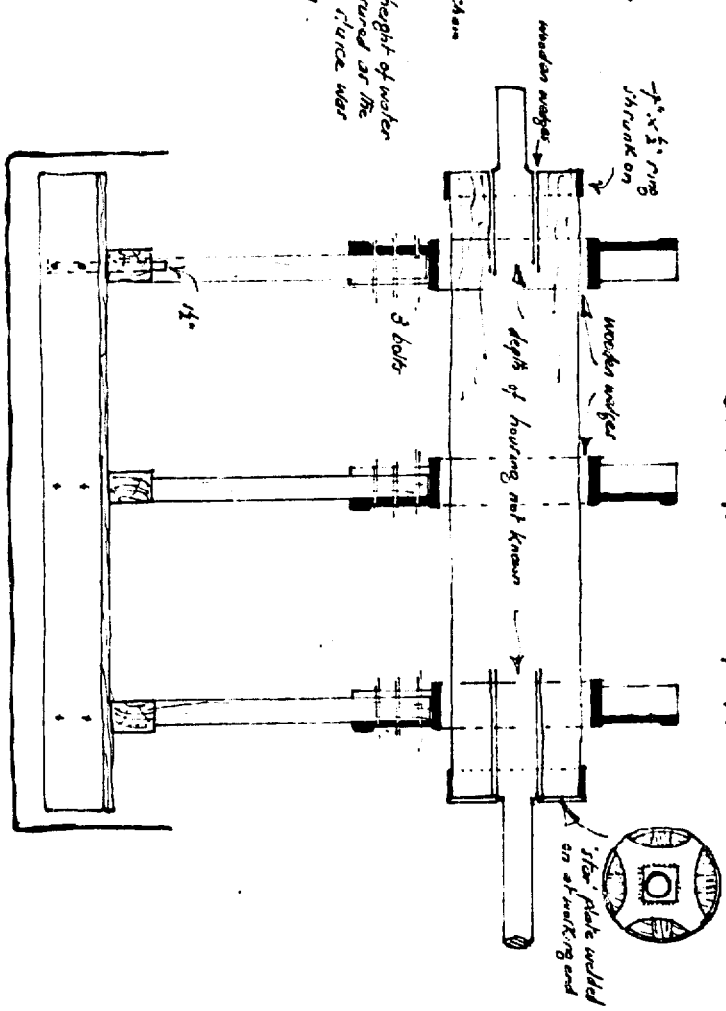
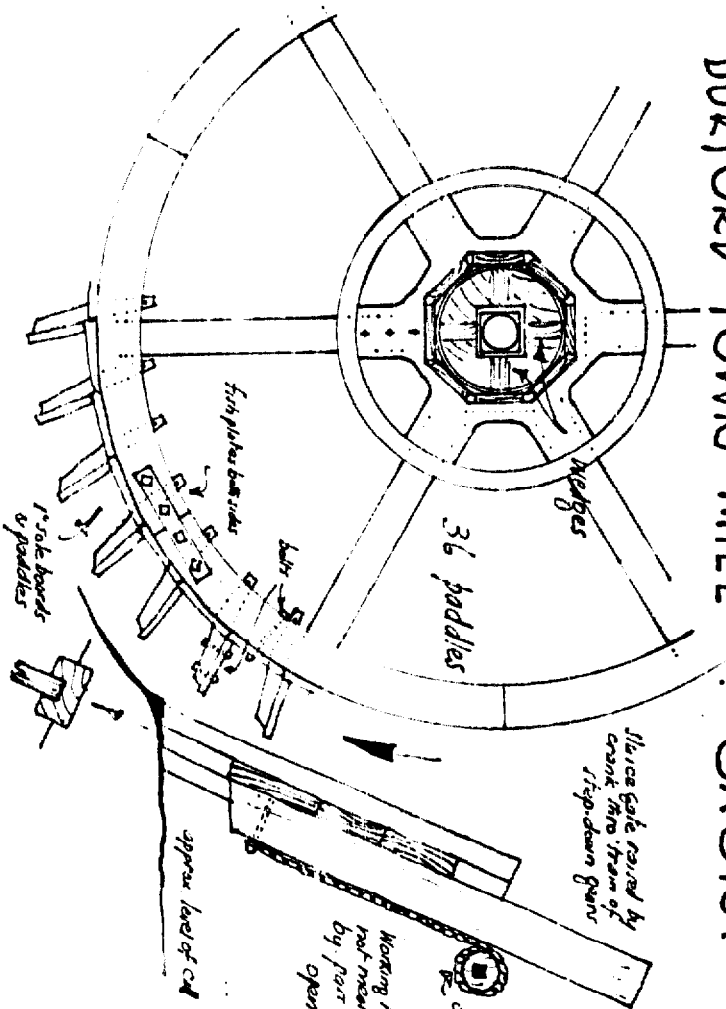
These pumps were originally designed by an engineer named Blaxter, in 1716, & were erected under the great bridge at Bisham Park. Contemporary prints show the water wheels fixed directly at opposite ends of what would be the 2nd cast-iron crank shown on these drawings, which drove 3 beams, with two pumps at each end of each beam. The water was gravity fed from Fair Farmstead's Mill. When the lake was made, in 1769, the apparatus was moved to Elizabeth's Island, then to the Pleasure Gardens, & finally to this site on the River Glyve. This could well have been in 1872, for at that time Duck & Co, London, show name plate is now on the pumps, engraved at the water supply by installing a water-turbine driven pump housed near the Pleasure Gardens.

The supply was further augmented in 1890, by another turbine driven pump, installed by Gilbert Gilkes, of Hants. The two turbine pumps are still in use, but this installation has been covered with, possibly in the 1920's, perhaps at this time the river was polluted.



# BURFORD TOWN MILL OXON.

O.S. REF. SHEET 144. 252 126

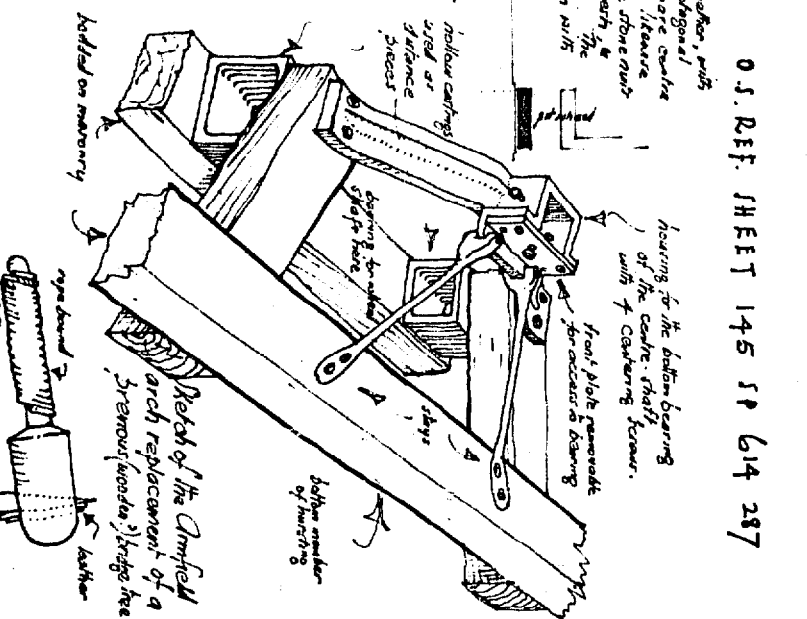
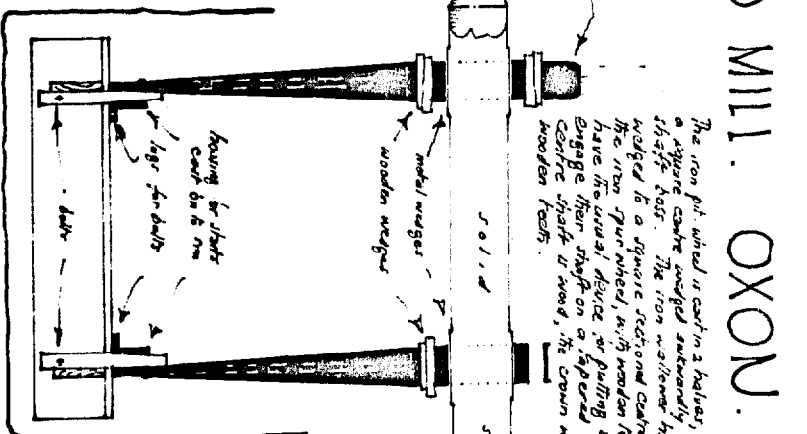
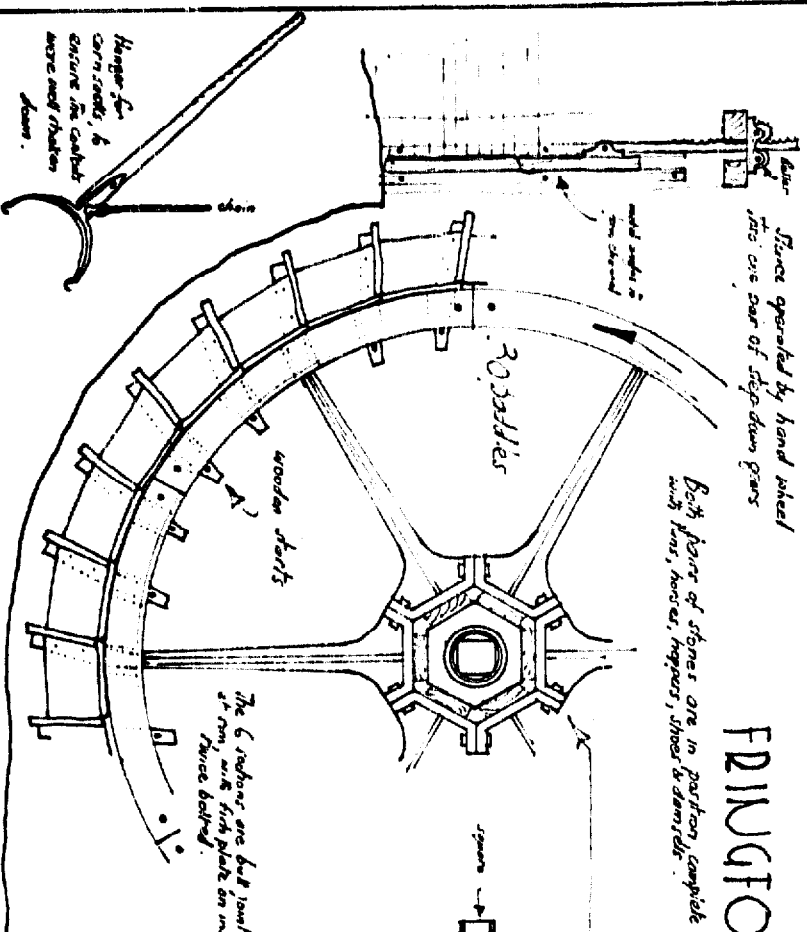


0 1 2 3 4 5 6 FEET.

0 1 2 METRES VIEWED FROM UPSTREAM  
0 10 20 30 40 50 60 70 80 90 100 CMS.

# FINUGFORD MILL. OXON.

O.S. REF. SHEET 145 5 P 614 287



BOTH WHEELS DRAWN TO SCALE OF 1/2" TO 1'0"

by kind permission of the owner, Mark Waghorn.

W. FOREMAN. EN. 1974.

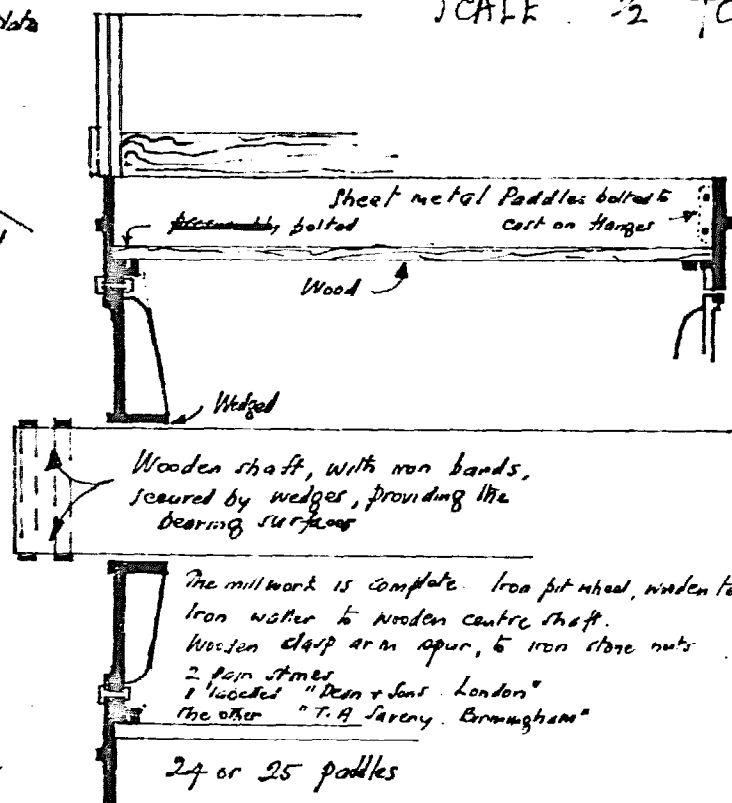
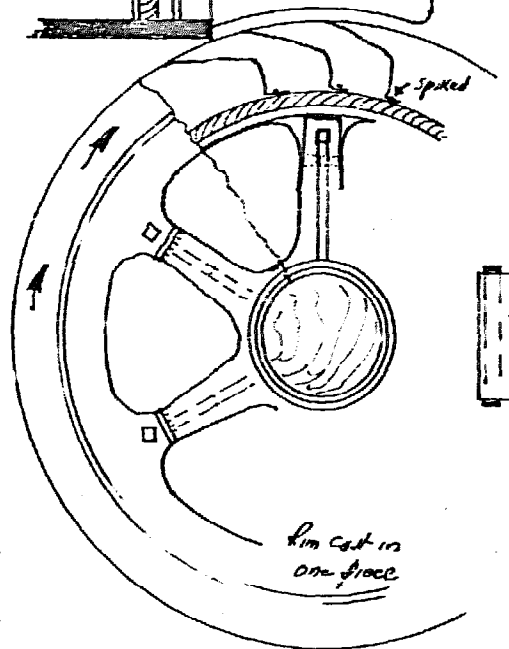
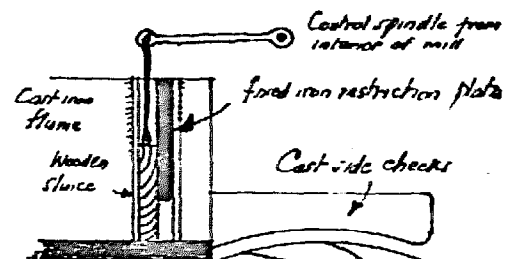
BROADWELL MILL. OXON.

SHEET 157 270.015

LITTLE CLANFIELD MILL.

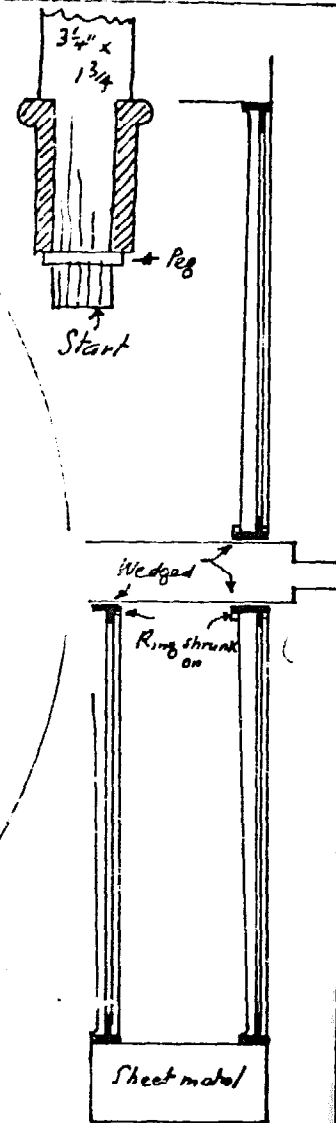
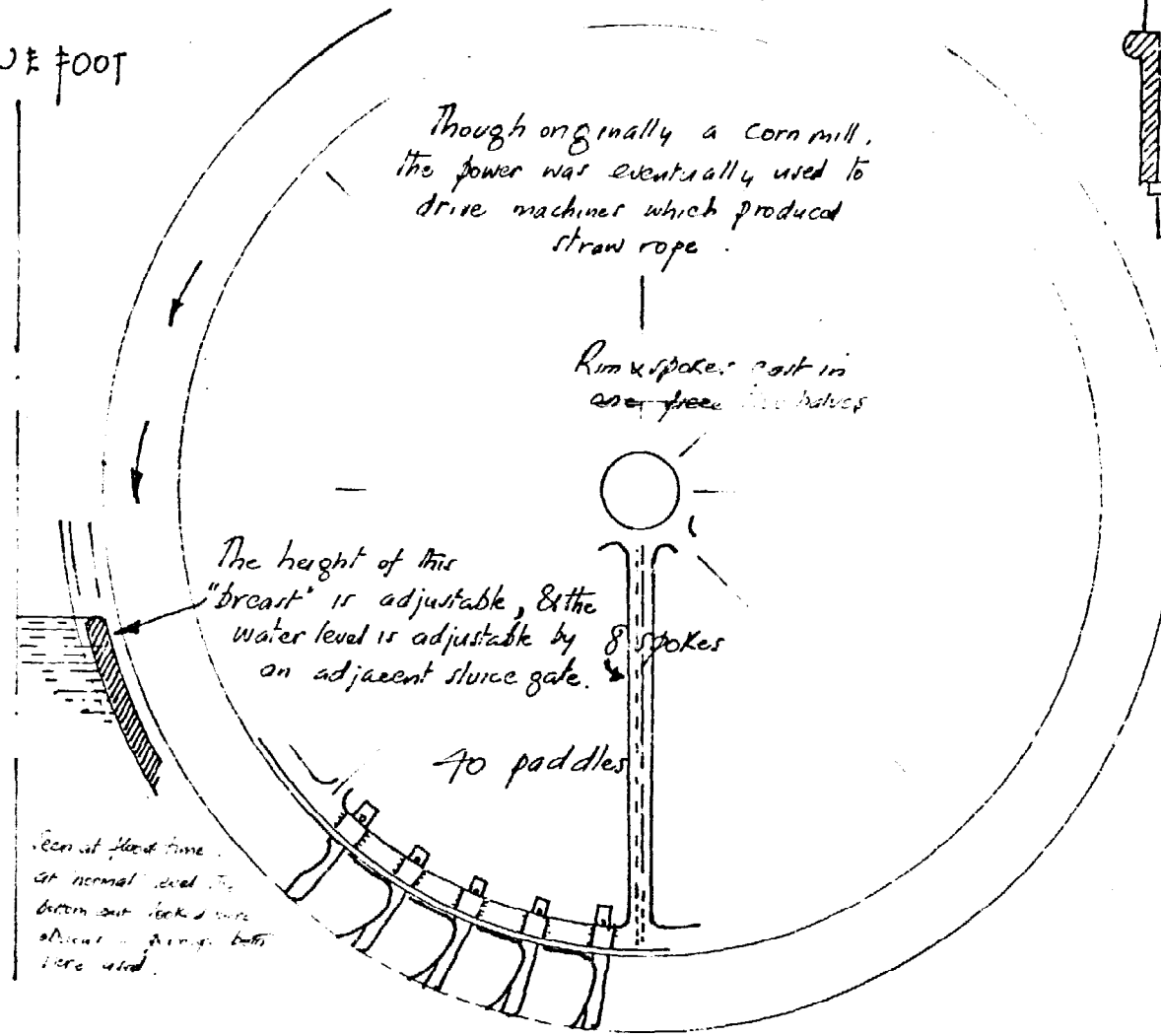
SHEET 157 256 025

SCALE 1/2" TO ONE FOOT



This is a fairly accurate representation, but the interior is impossible to reach - There may be eight spokes. Correction - 6.

THIS MILL RETAINS COMPLETE MILLWORK - USUAL 2 PAIR STONES ARRANGEMENT



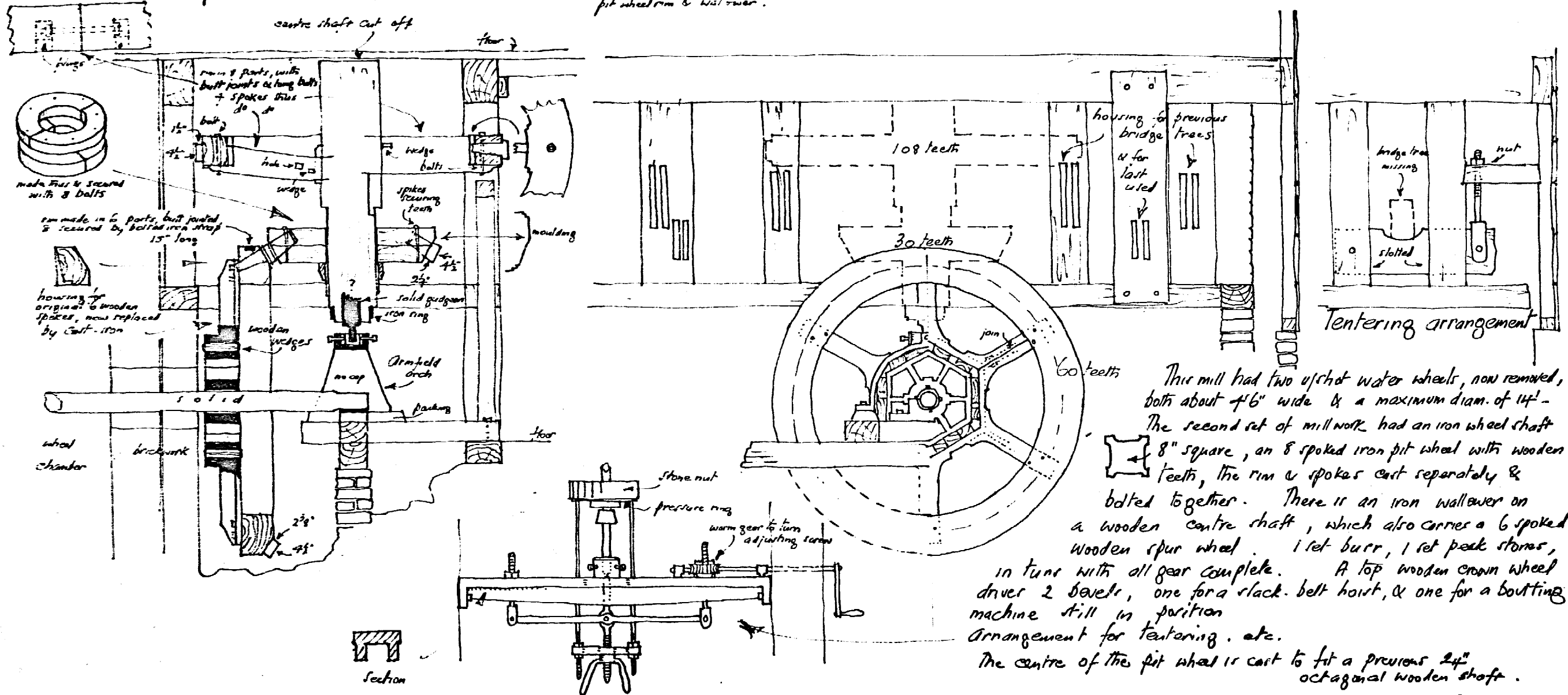
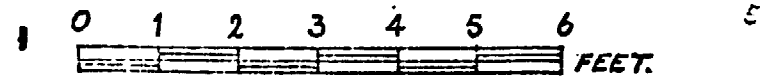
W. FOREMAN. MARCH 1973

# OVERY MILL . DORCHESTER . OXON .

SCALE  $\frac{1}{2}$ " TO ONE FOOT .

ORIGINAL WOODEN MILLWORK .

fit wheel rim & wallower .



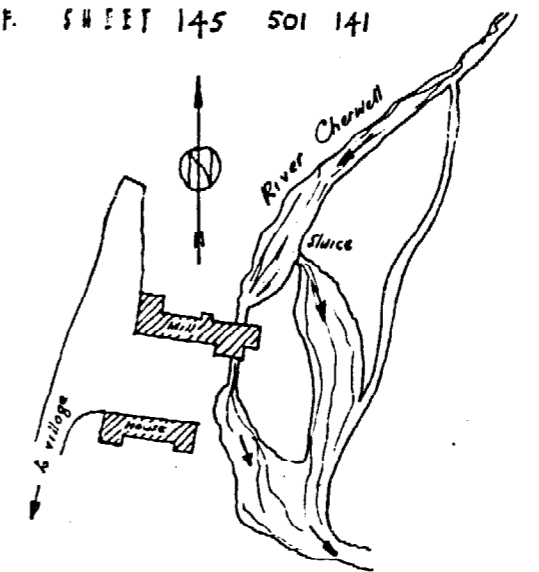
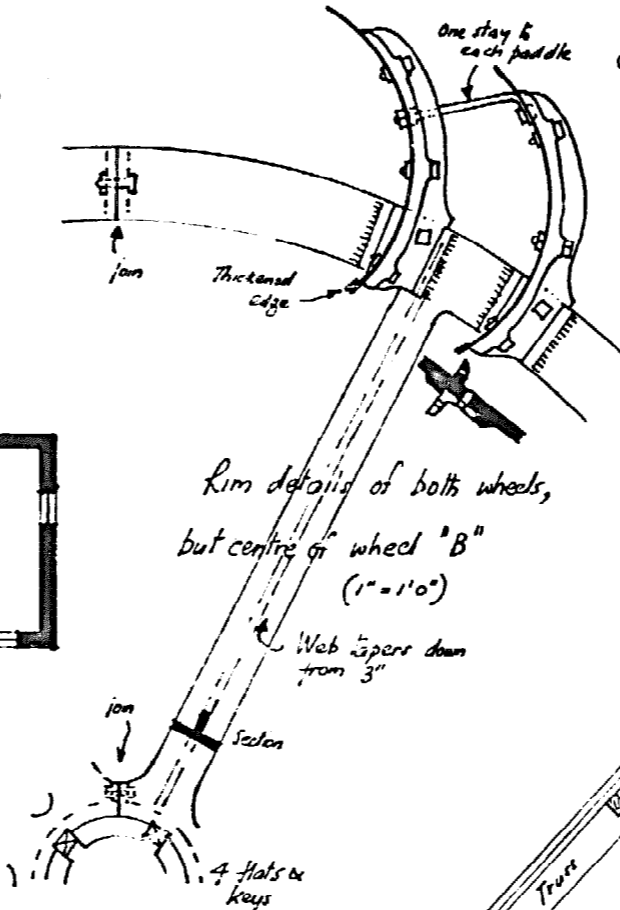
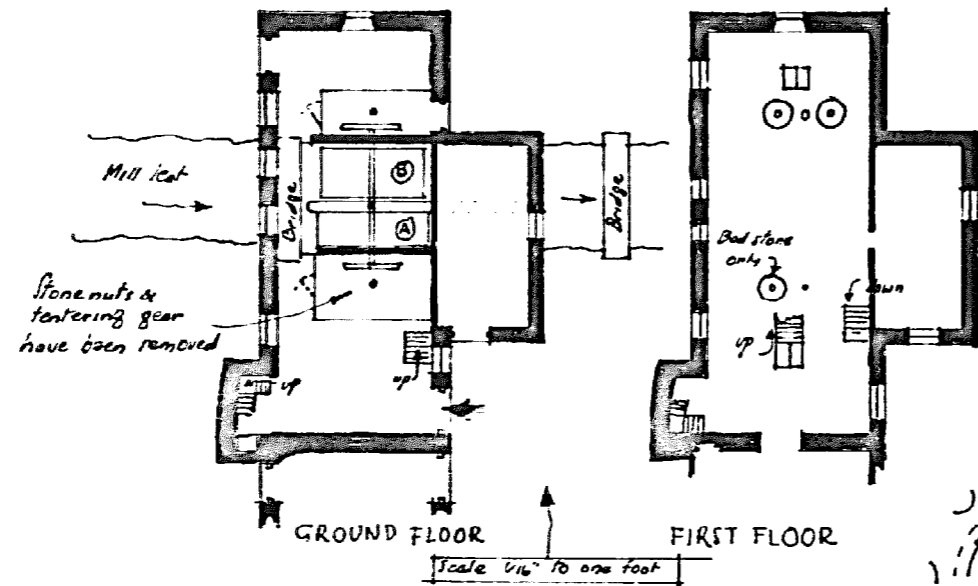
This mill had two upshot water wheels, now removed, both about 4'6" wide & a maximum diam. of 14' - The second set of millwork had an iron wheel shaft 8" square, an 8 spoked iron pit wheel with wooden teeth, the rim & spokes cast separately & bolted together. There is an iron wallower on a wooden centre shaft, which also carries a 6 spoked wooden spur wheel. 1 set burr, 1 set peak stones, in tune with all gear complete. A top wooden crown wheel driver 2 bevels, one for a slack belt hoist, & one for a botting machine still in position. Arrangement for tentering, etc. The centre of the pit wheel is cast to fit a previous 2 1/2" octagonal wooden shaft.

W. FOREMAN. JUNE. 1974.

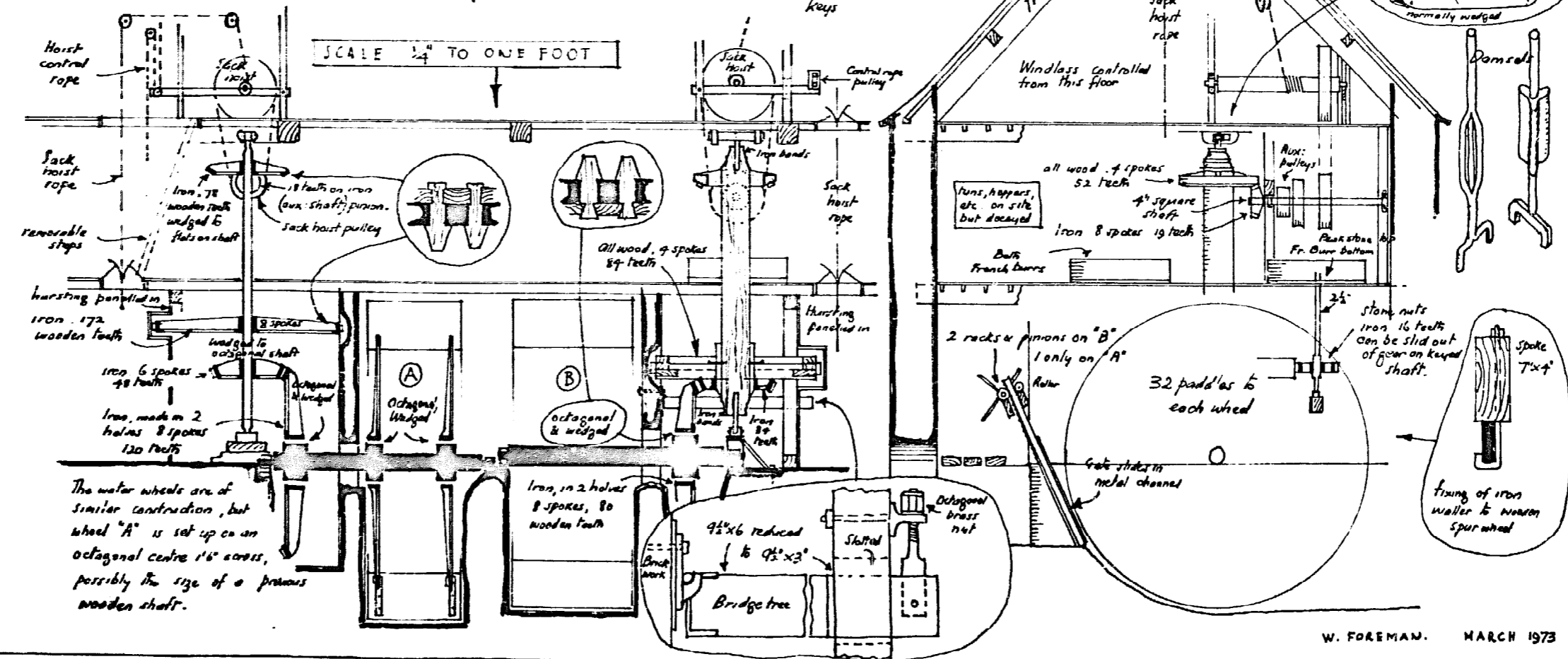
# KIDLINGTON MILL . OXON .

BY KIND PERMISSION OF THE OWNER . DR J. R. BAKER.

ORD. REF. SHEET 145 501 141



The grain storage areas were right thro' roof space, but all grain bins have been dismantled



The water wheels are of similar construction, but wheel "A" is set up on an octagonal centre 16" across, possibly the size of a previous wooden shaft.

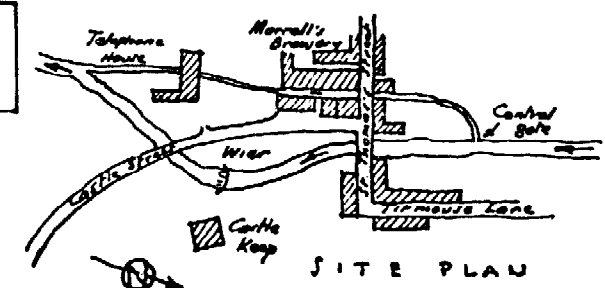
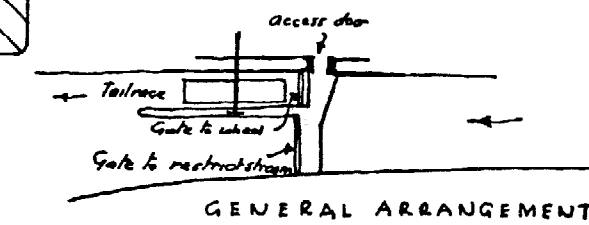
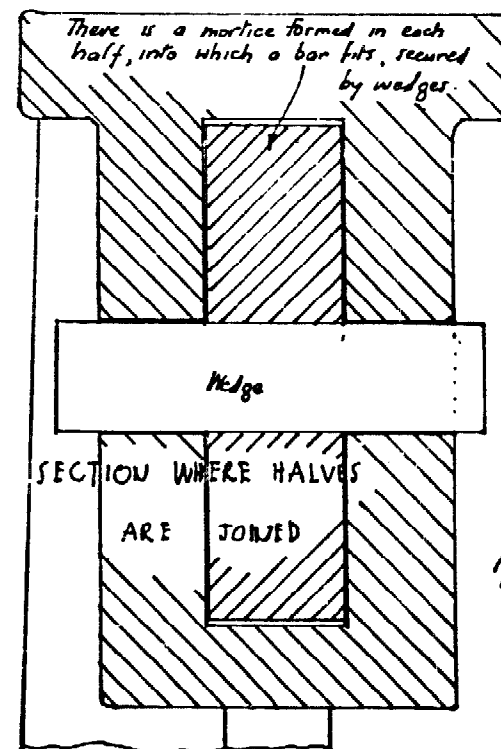
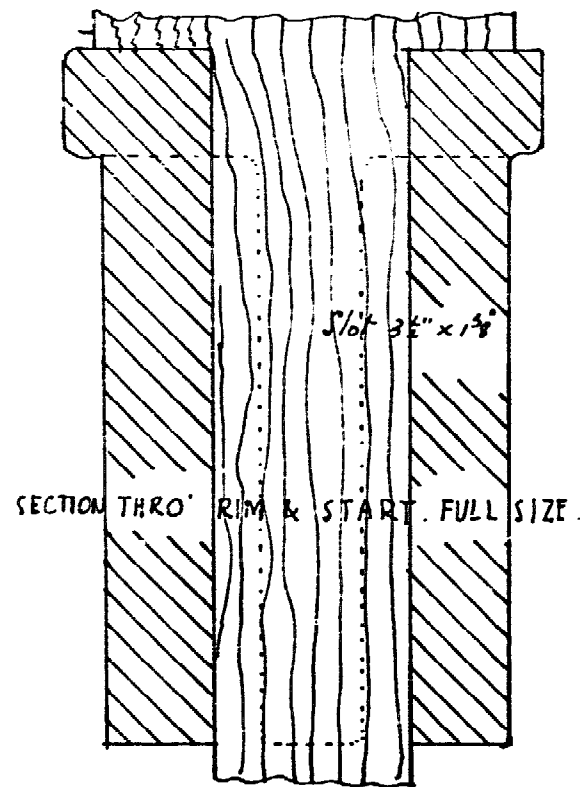
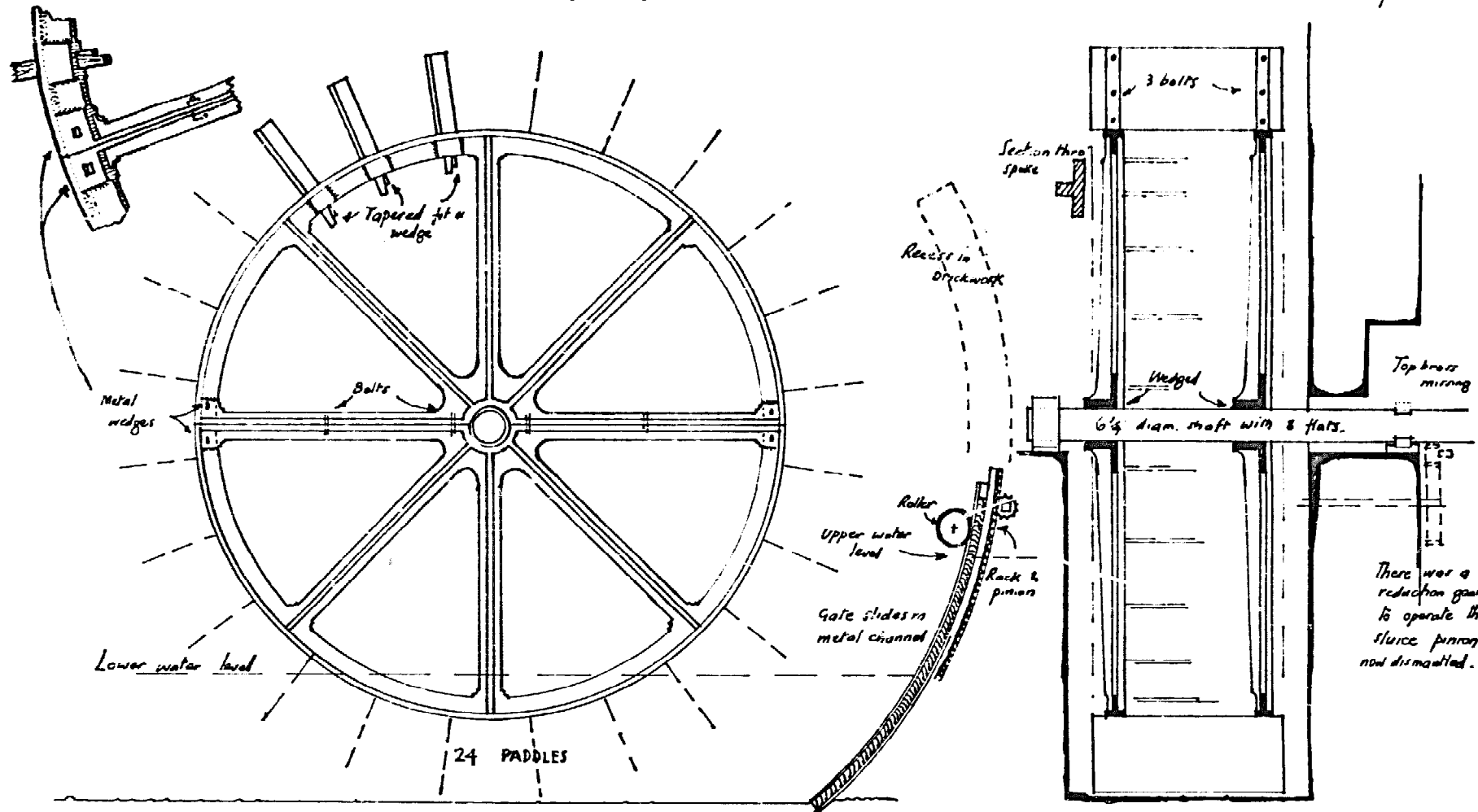
# WATER WHEEL .

# MORRELL'S BREWERY .

# OXFORD

SCALE . HALF INCH TO ONE FOOT.

Cast iron frame with wooden starts and paddles



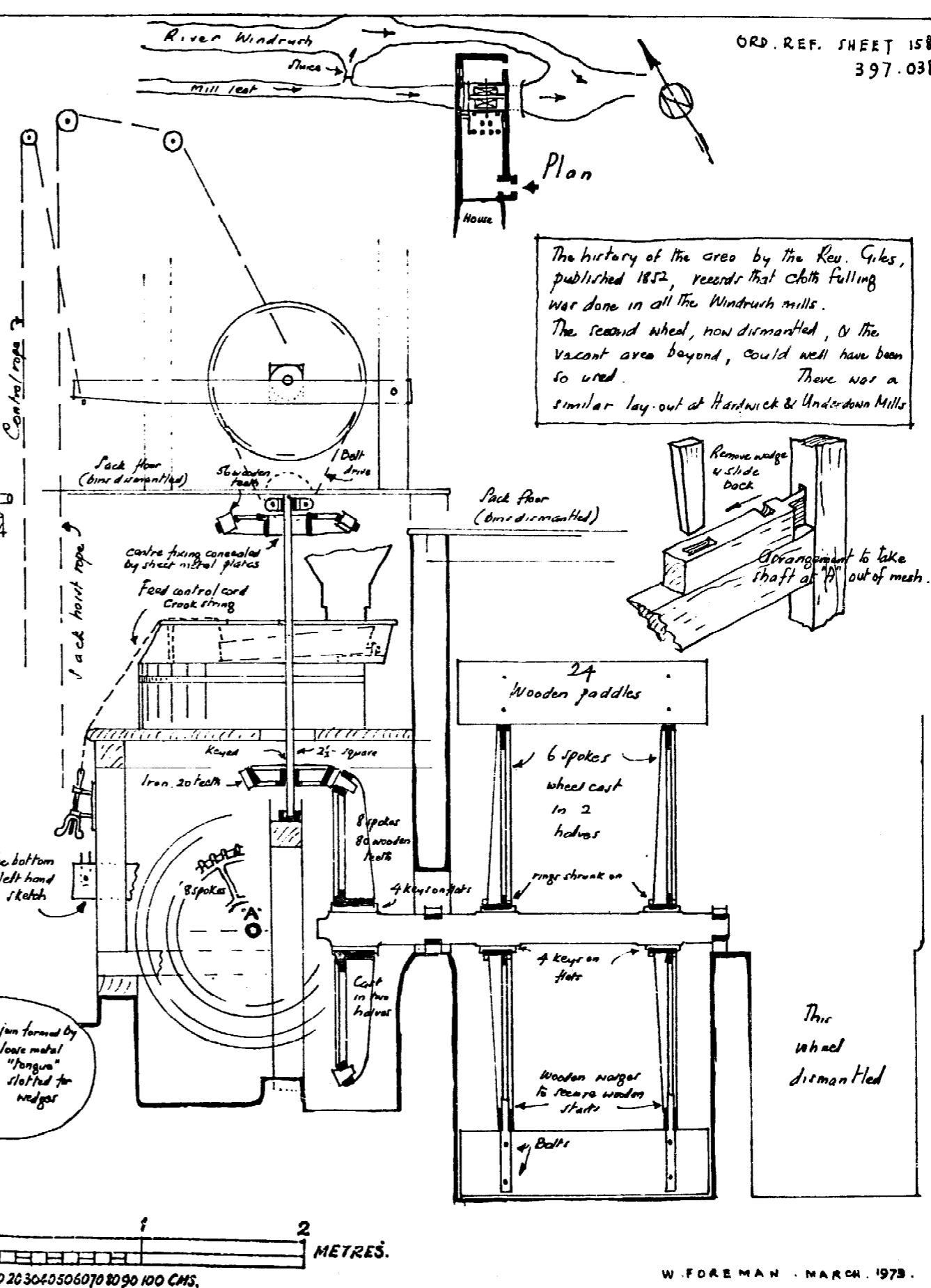
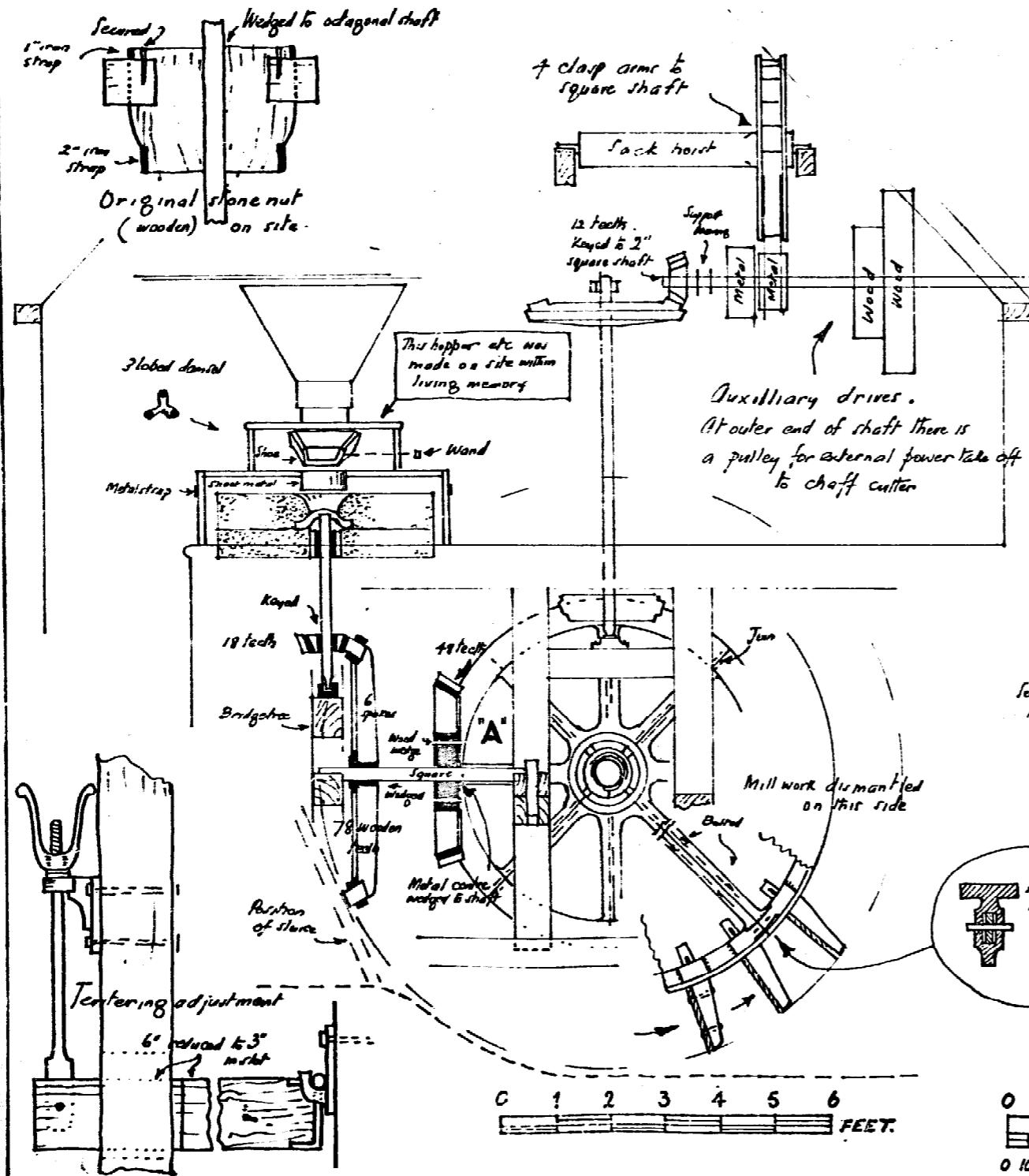
W. FOREMAN. 10.7.72

# CHURCH MILL. STANDLAKE.

BY KIND PERMISSION OF MRS H. F. COLLINS.

SCALE 1/2" TO ONE FOOT.

ORD. REF. SHEET 158.  
397.038.

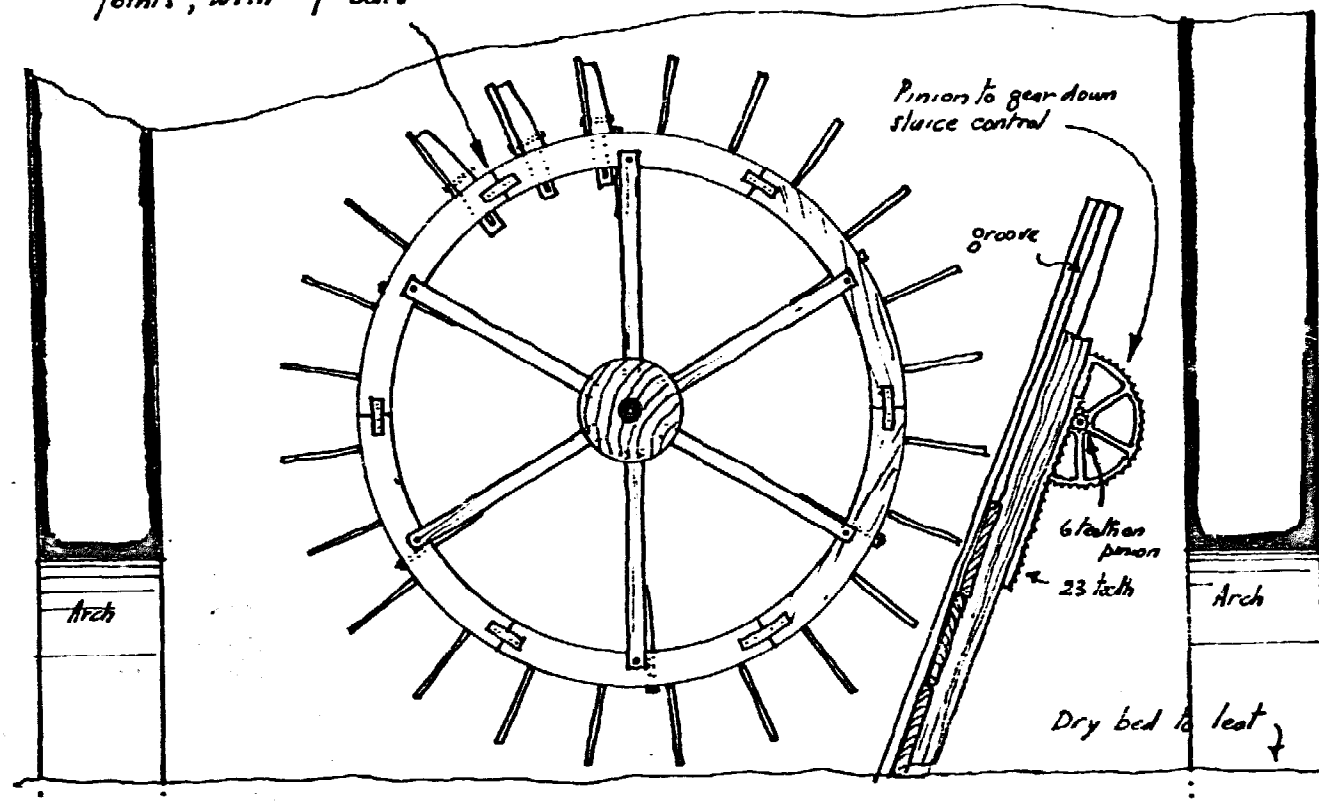
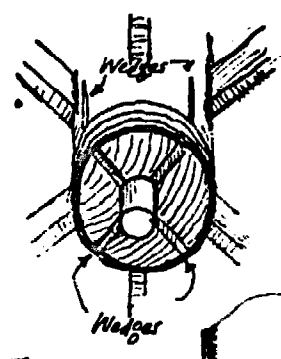


# THE FISH HOUSE . N<sup>R</sup>. DUCKLINGTON . OXON .

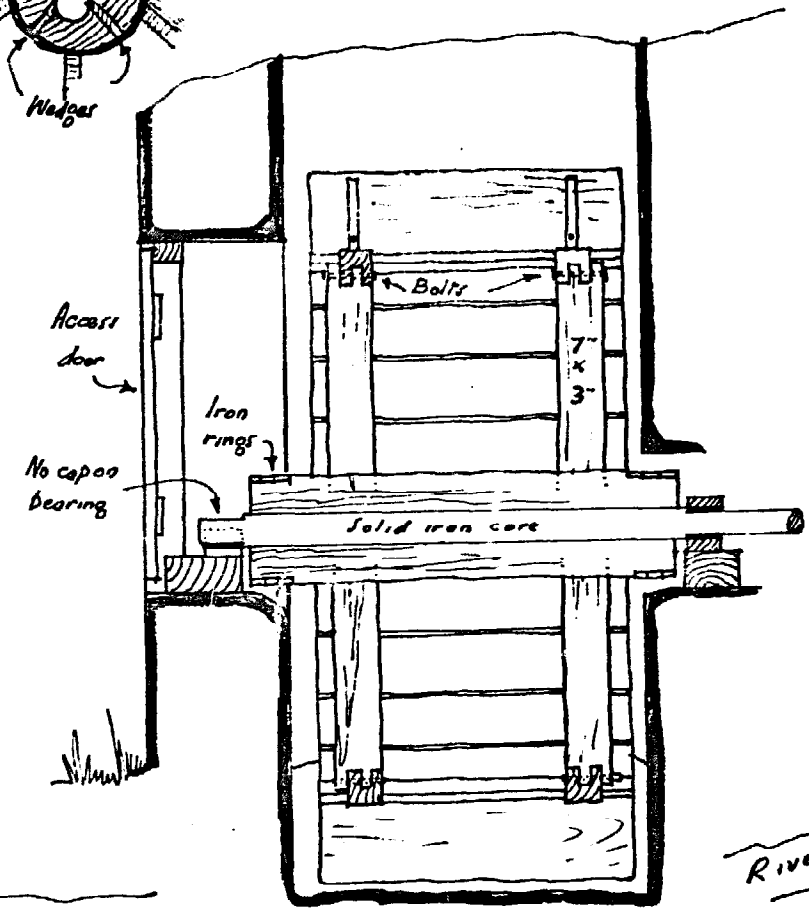
ORDS. REF. S.P. 373 066

SCALE . HALF INCH TO ONE FOOT.

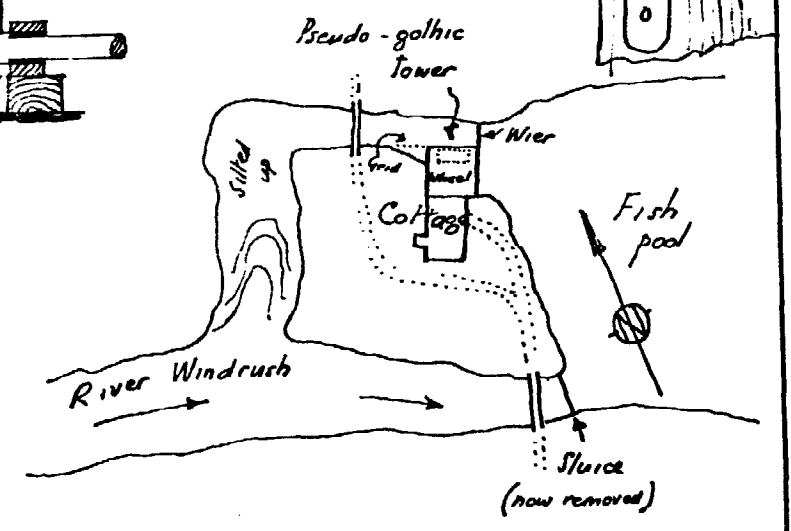
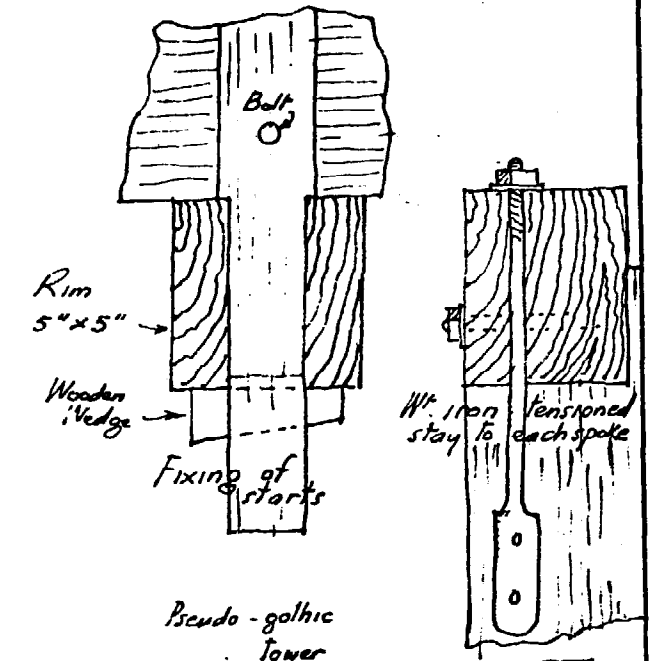
2" iron plates on both sides of rim at butt joints, with 4 bolts



L O N G S E C T I O N



S E C T I O N



BUILDING ERECTED 1710. WHEEL PRESUMABLY BUILT IN THEN,

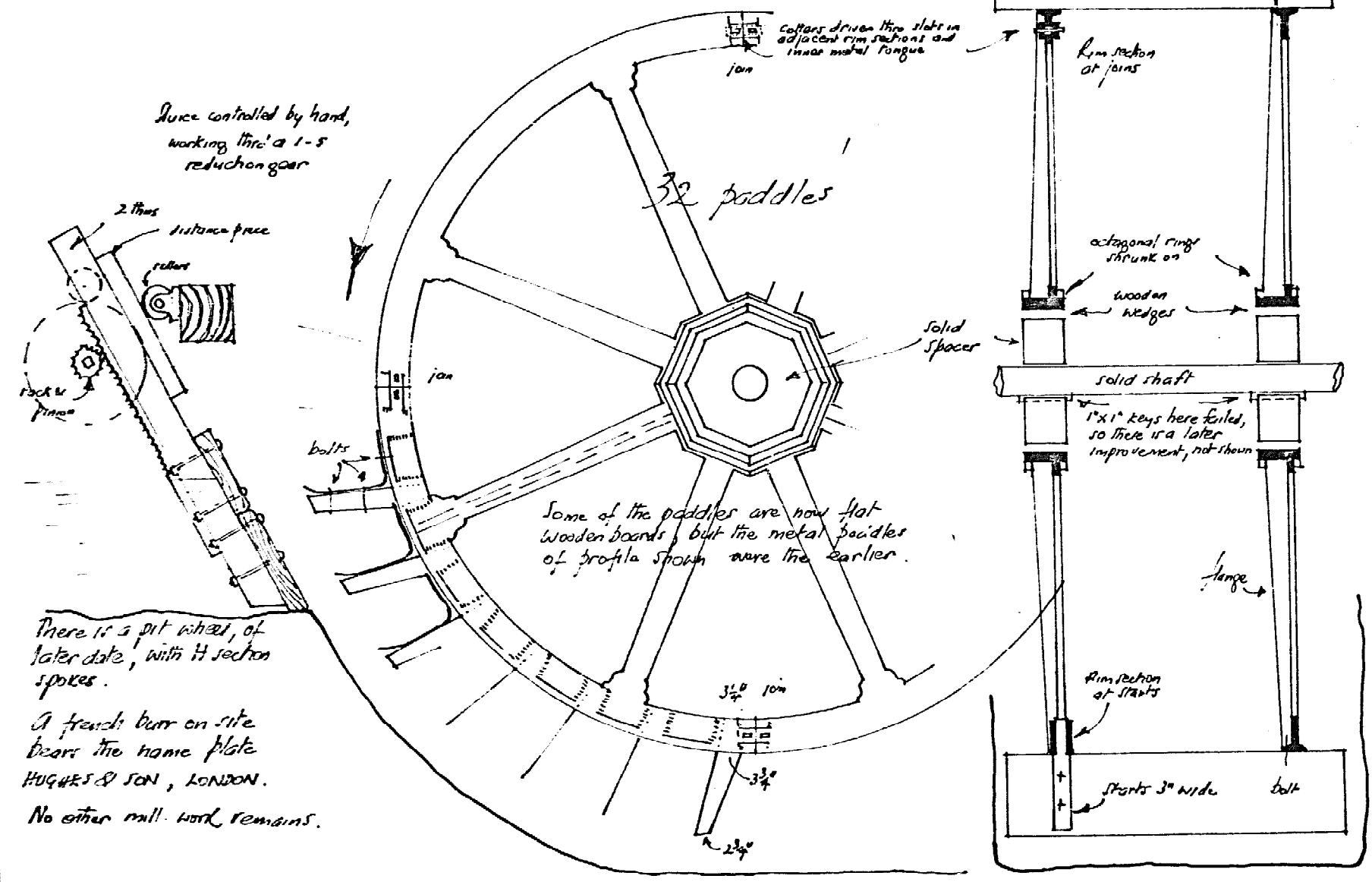
& PUMPED WATER FOR COKEHORPE HOUSE TILL 1950.

W. FOREMAN . JAN. 1973

# FLIGHTS MILL, KIRTLINGTON. OXON.

O.S. REF. SHEET 145. S.P. 487. 195.

SCALE HALF INCH TO ONE FOOT.



Sluice controlled by hand, working thro' a 1-5 reduction gear

32 paddles

Some of the paddles are now flat wooden boards, but the metal paddles of profile shown were the earlier.

There is a pit wheel, of later date, with H section spokes.

A french burr on site bears the name plate HUGHES & SON, LONDON.

No other mill work remains.

By kind permission of the owner, restorer, Mr. L. J. GILES.

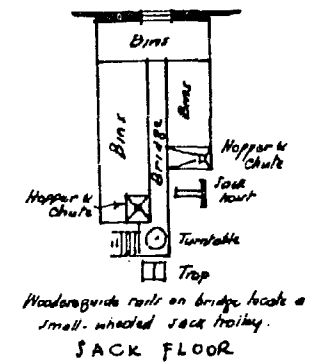
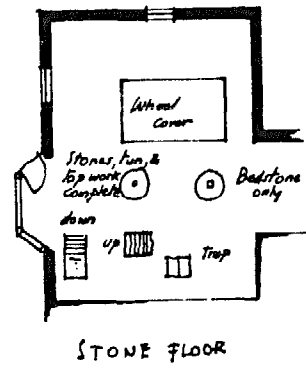
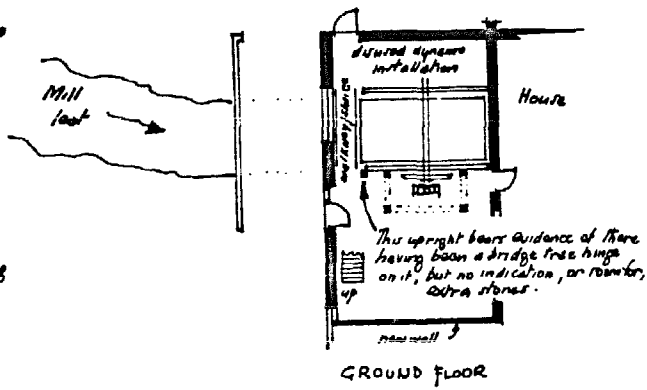
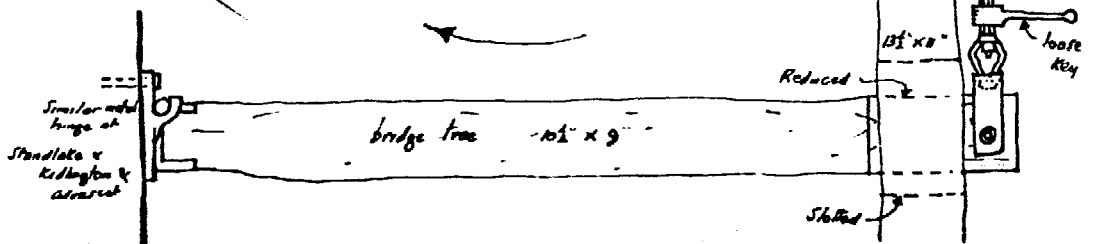
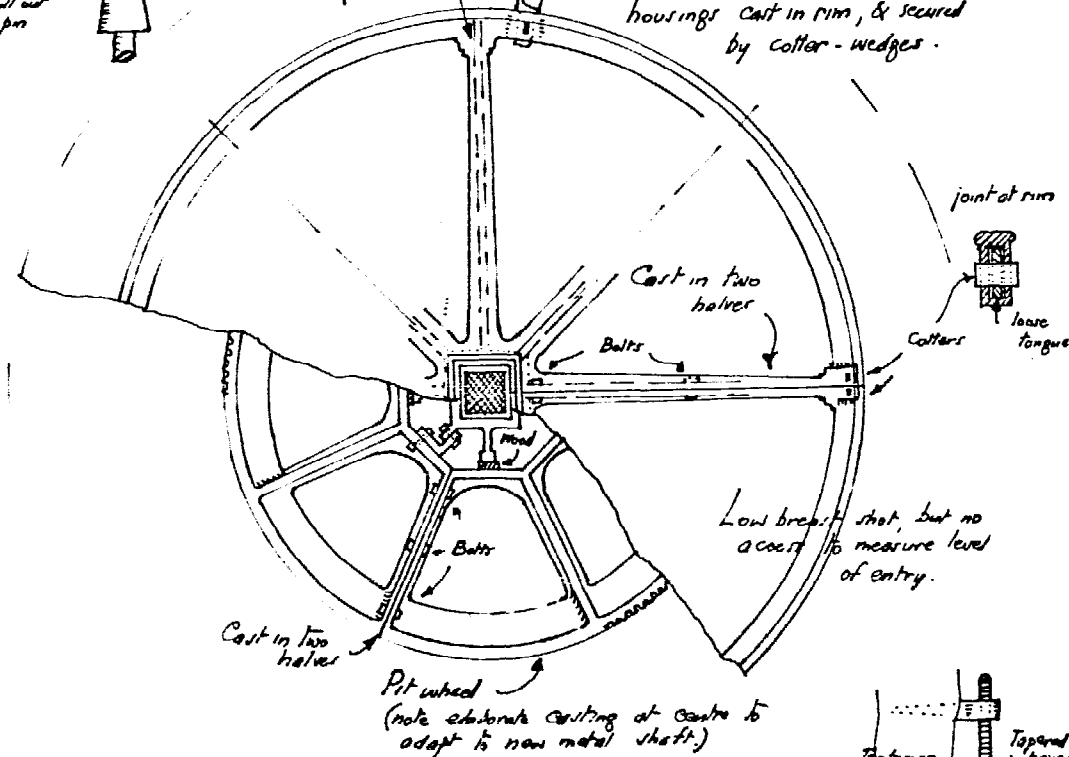
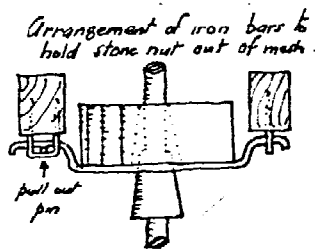
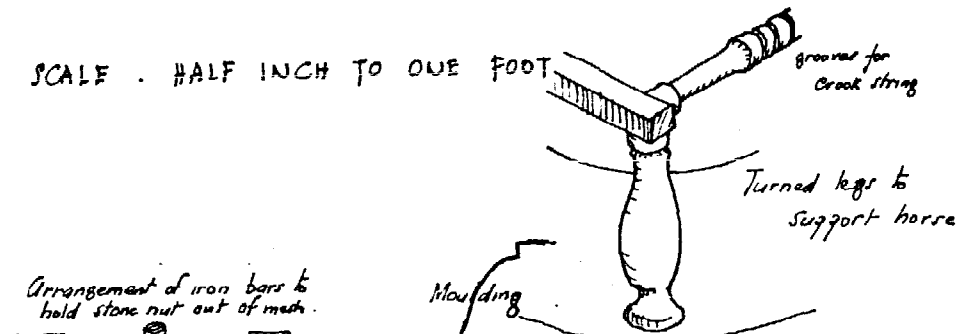
W. FOREMAN JAN. 1974



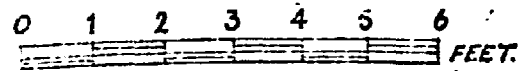
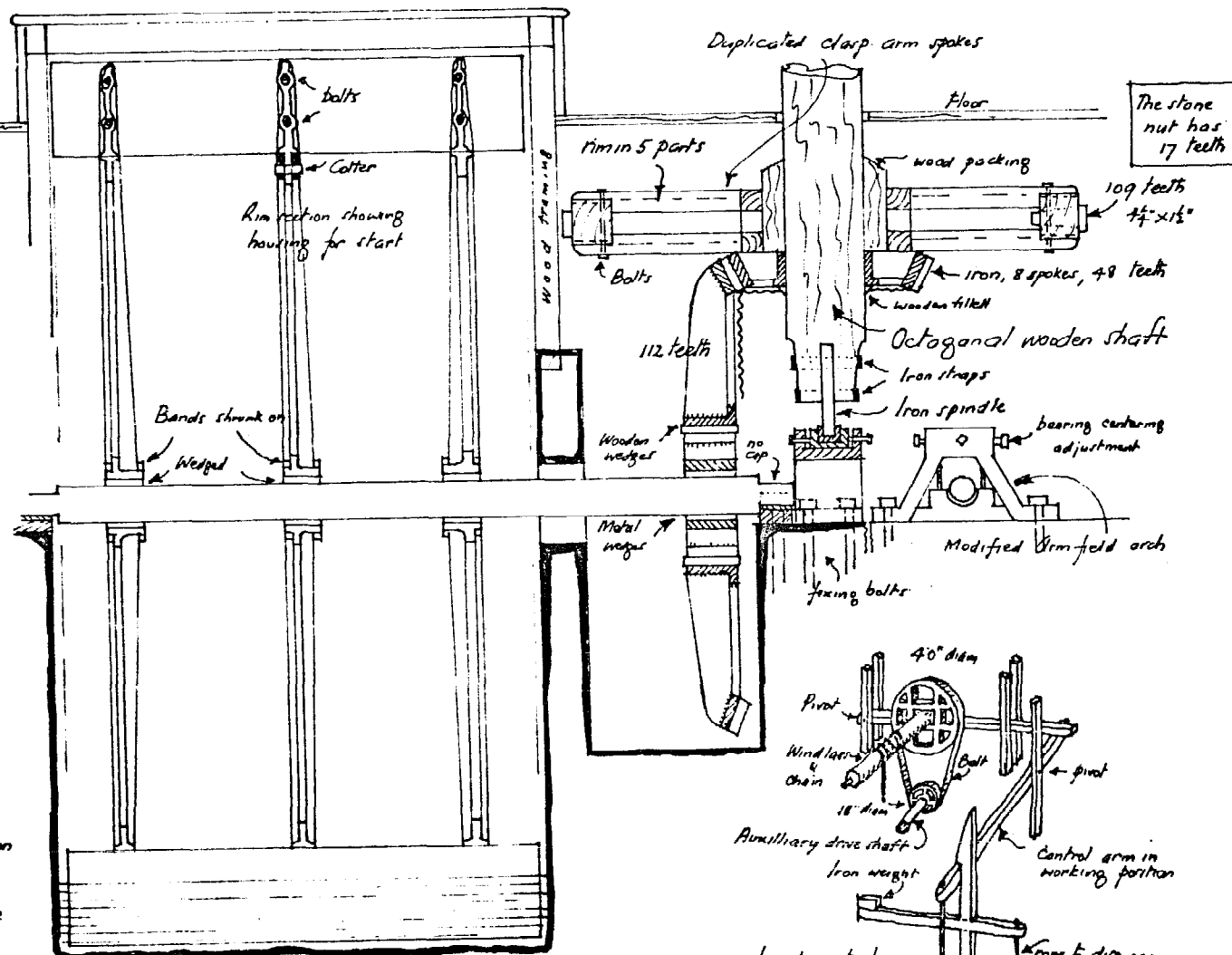
# HOLTON MILL, WHEATLEY, OXON.

BY KIND PERMISSION OF MR L.A. RING.  
O.S. REF. SHEET 158. S.P. 614 058.

SCALE . HALF INCH TO ONE FOOT



7 spoke iron crown wheel, 76 wooden teeth, driving 24 teeth iron aux: shaft pinion.



W. FOREMAN . APRIL 1973.

# HARDWICK MILL . OXON.

ORD. MAP REF. SP 380 061

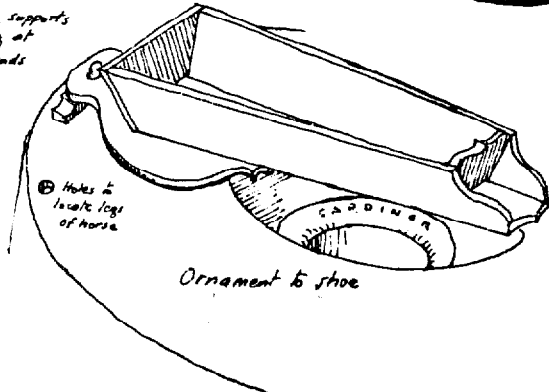
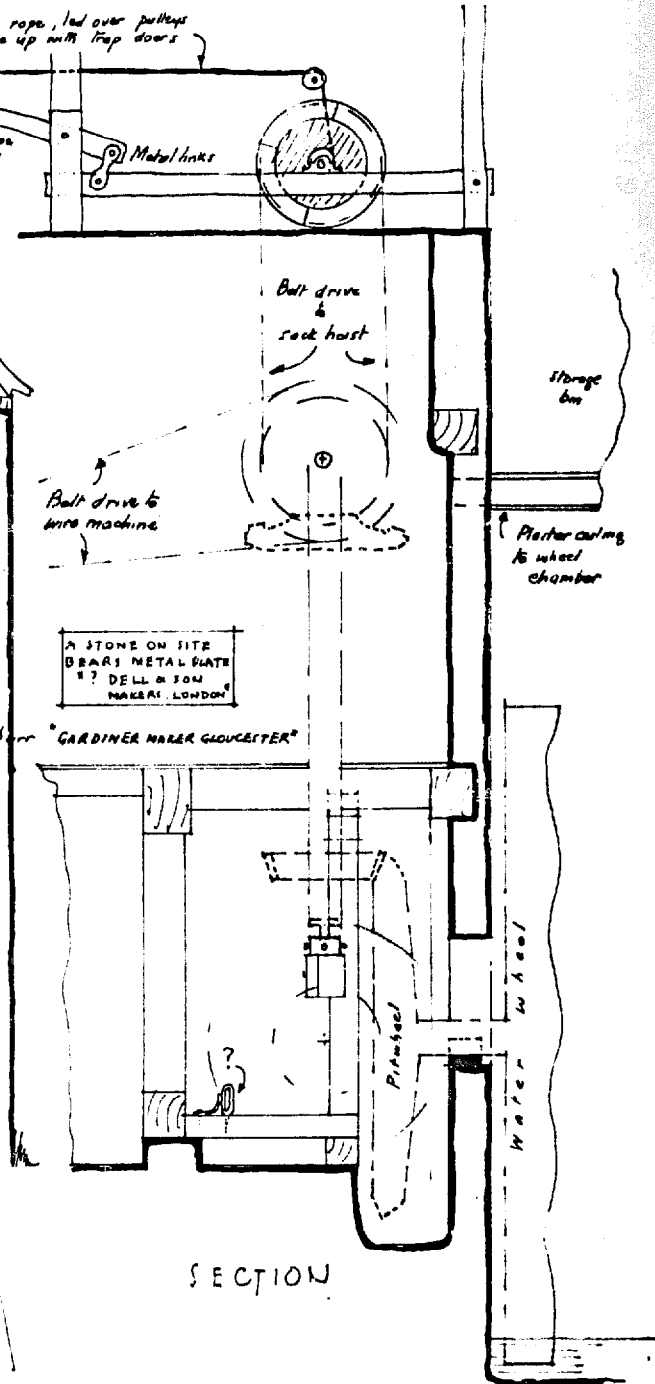
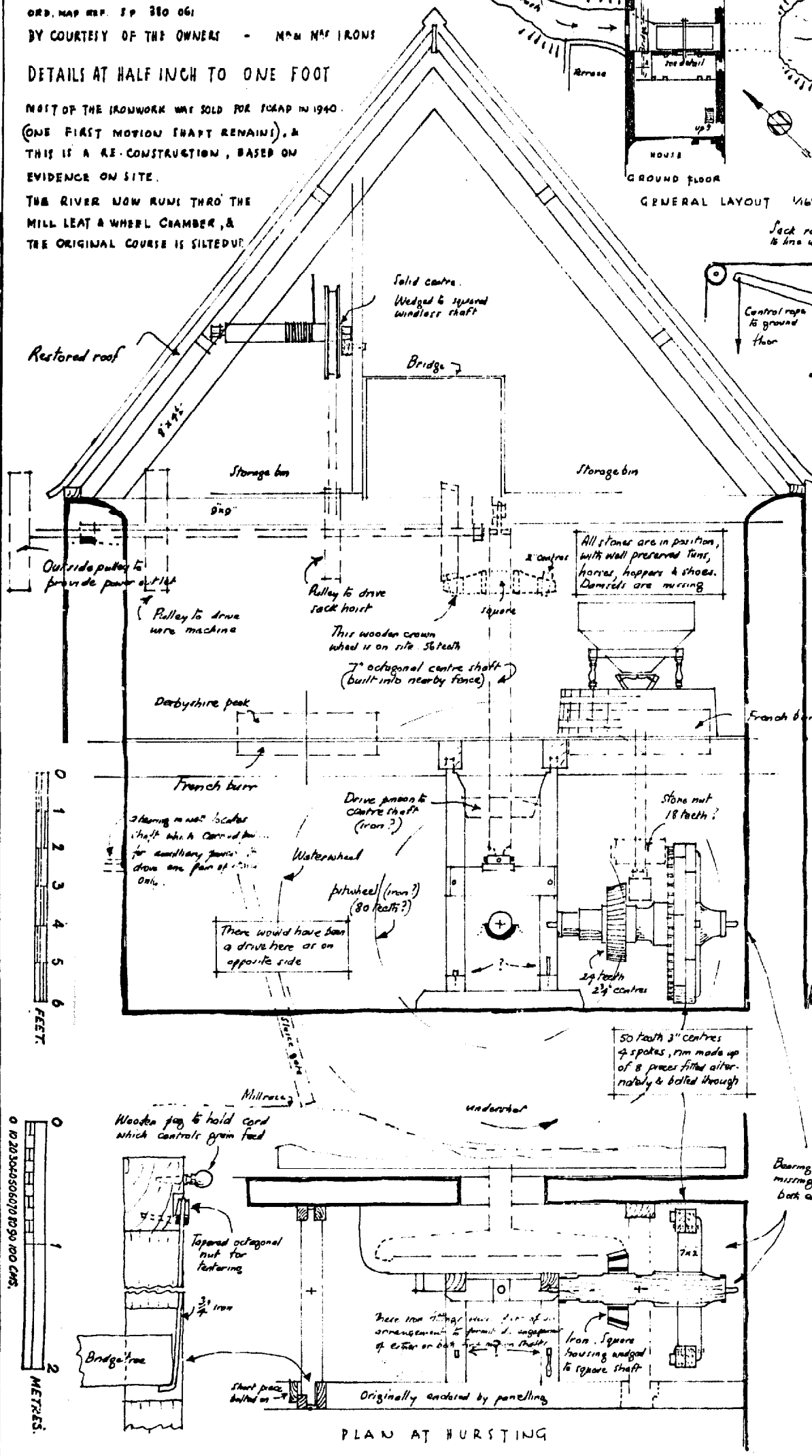
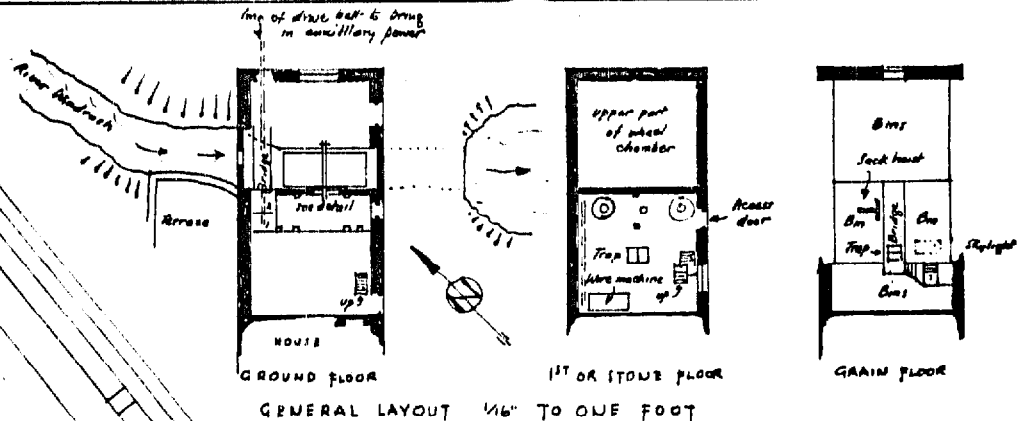
BY COURTESY OF THE OWNERS - M<sup>rs</sup> M<sup>rs</sup> IRONS

DETAILS AT HALF INCH TO ONE FOOT

MOST OF THE IRONWORK WAS SOLD FOR SCRAP IN 1940.

(ONE FIRST MOTION SHAFT REMAINS), & THIS IS A RE-CONSTRUCTION, BASED ON EVIDENCE ON SITE.

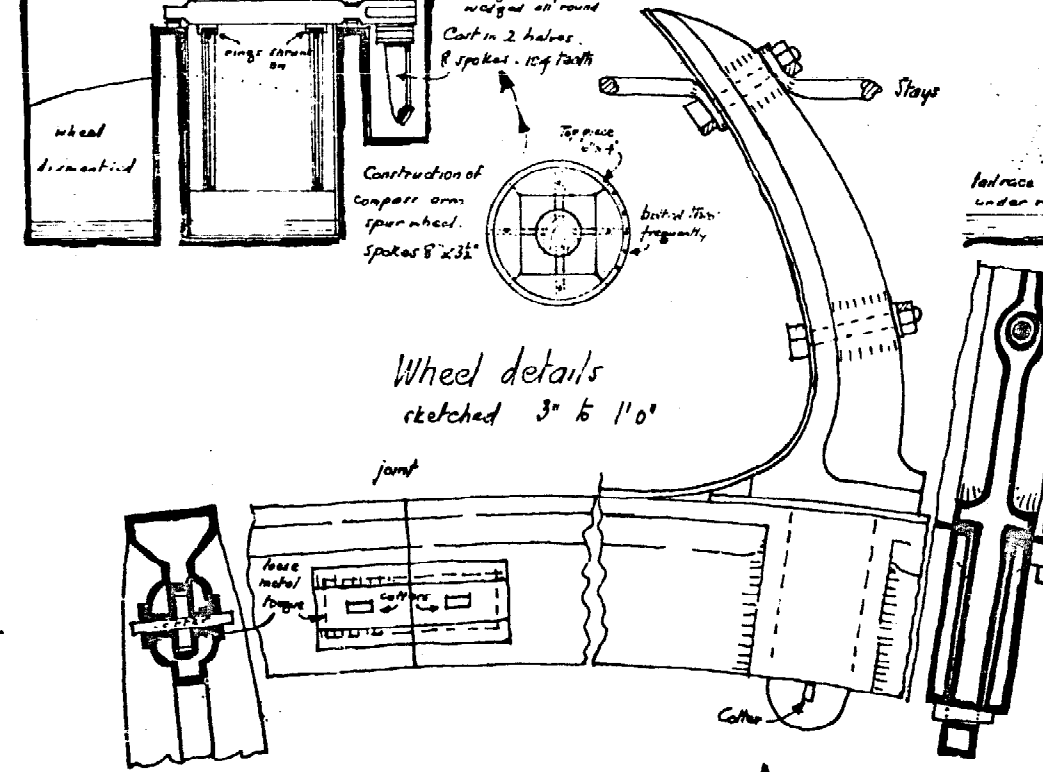
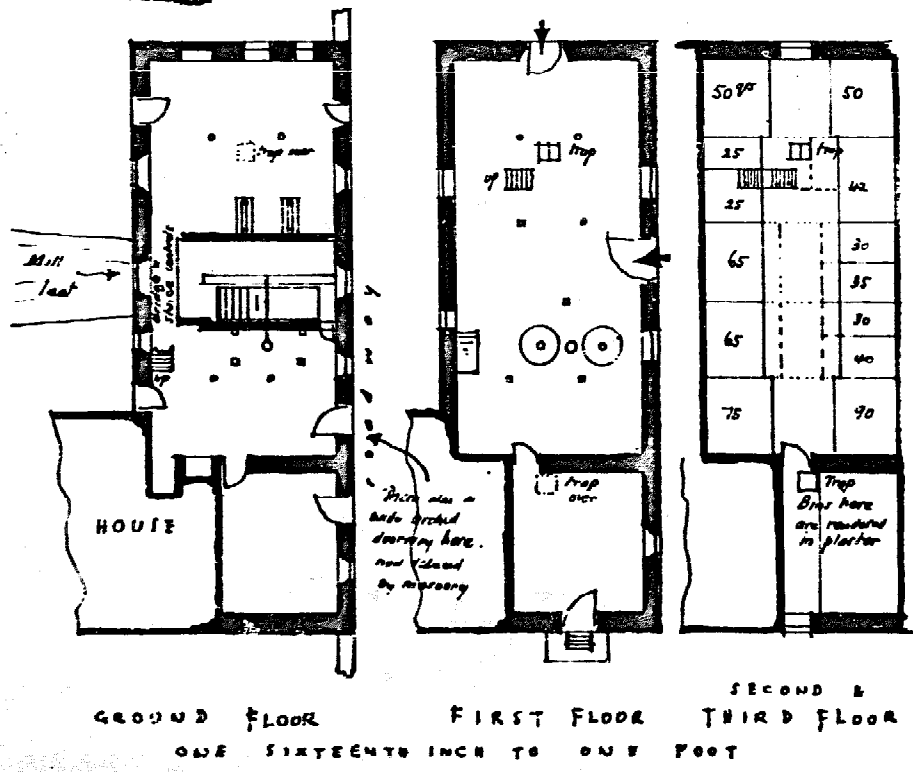
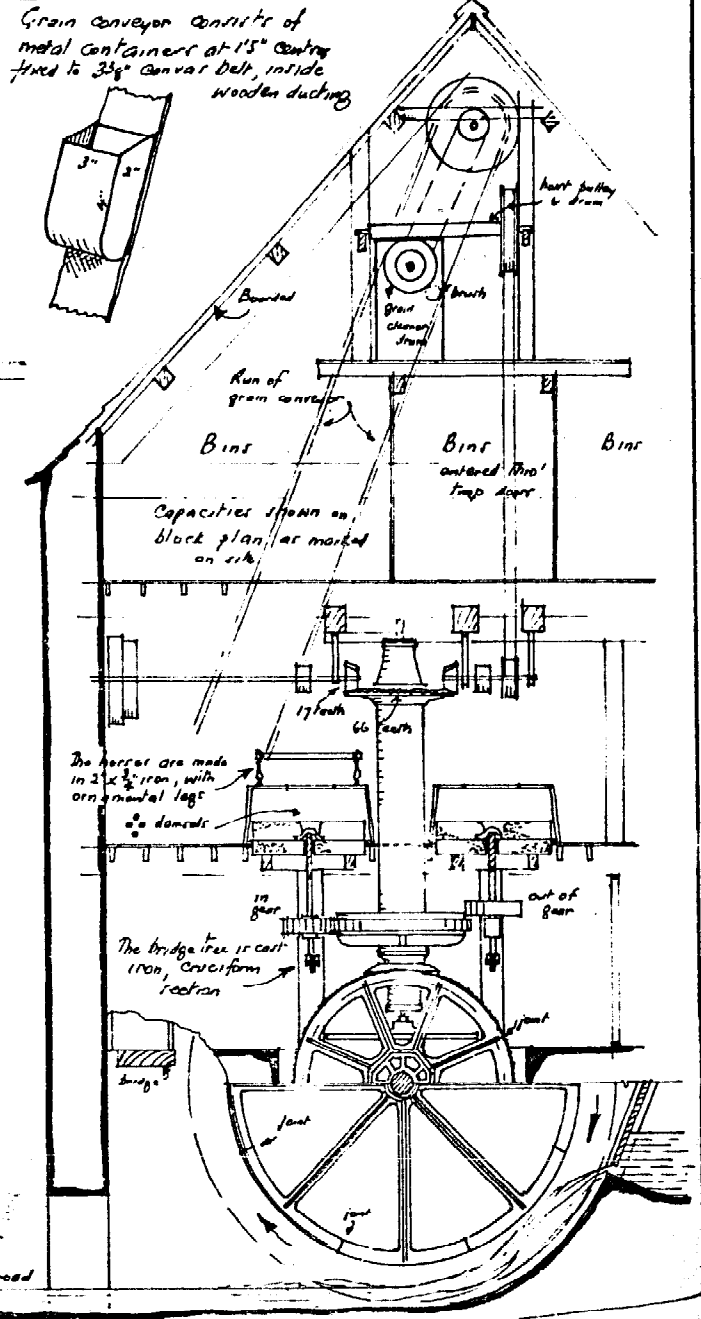
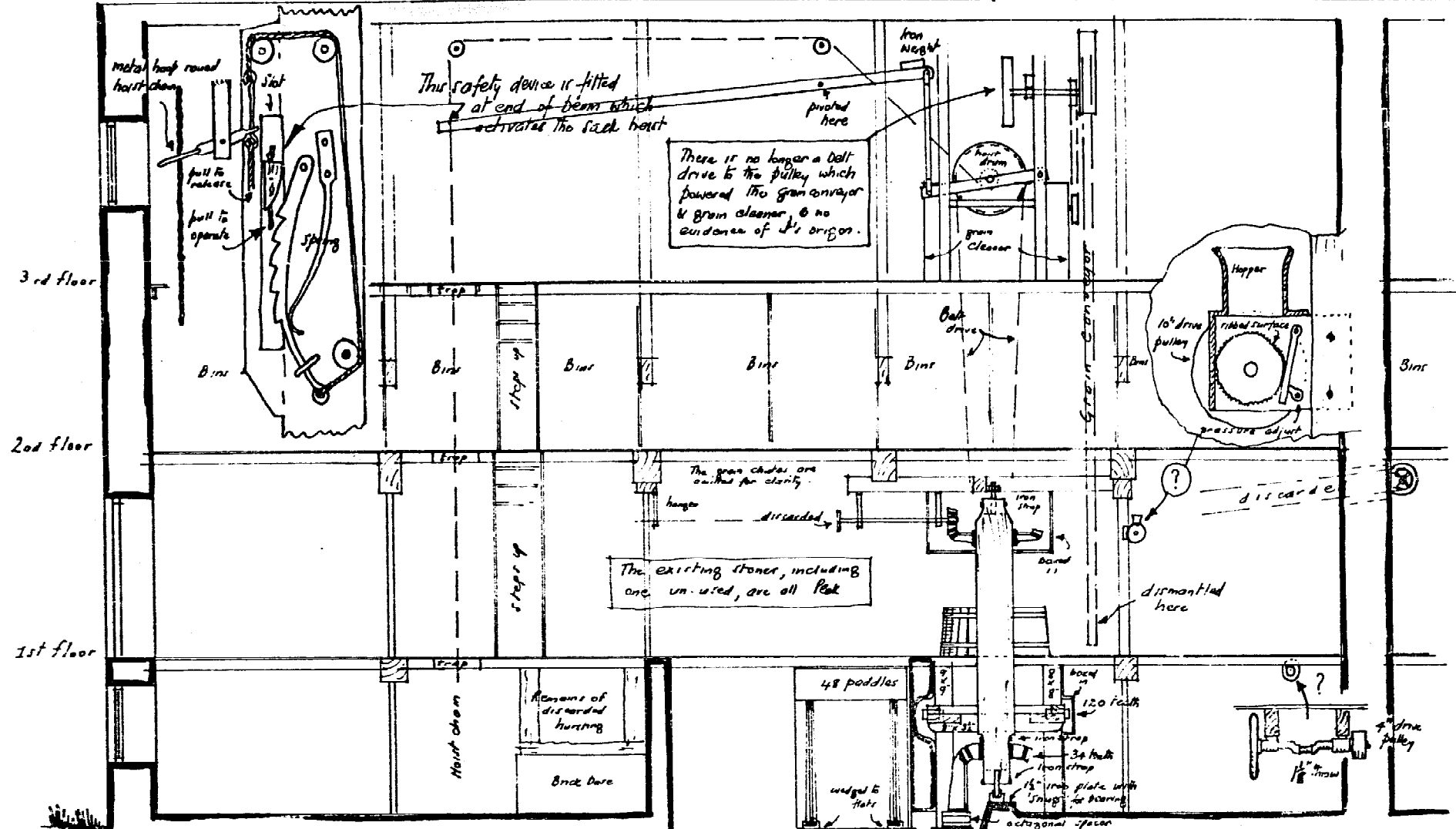
THE RIVER NOW RUNS THRU THE MILL LEAT A WHEEL CHAMBER, & THE ORIGINAL COURSE IS SILTED UP.



# CLIFTON MILL . OXON.

THESE SECTIONS DRAWN TO SCALE OF 1/4" TO ONE FOOT.

BY KIND PERMISSION OF MR. A. R. WELFORD  
ORD. REF. 145 S.F. 491 318



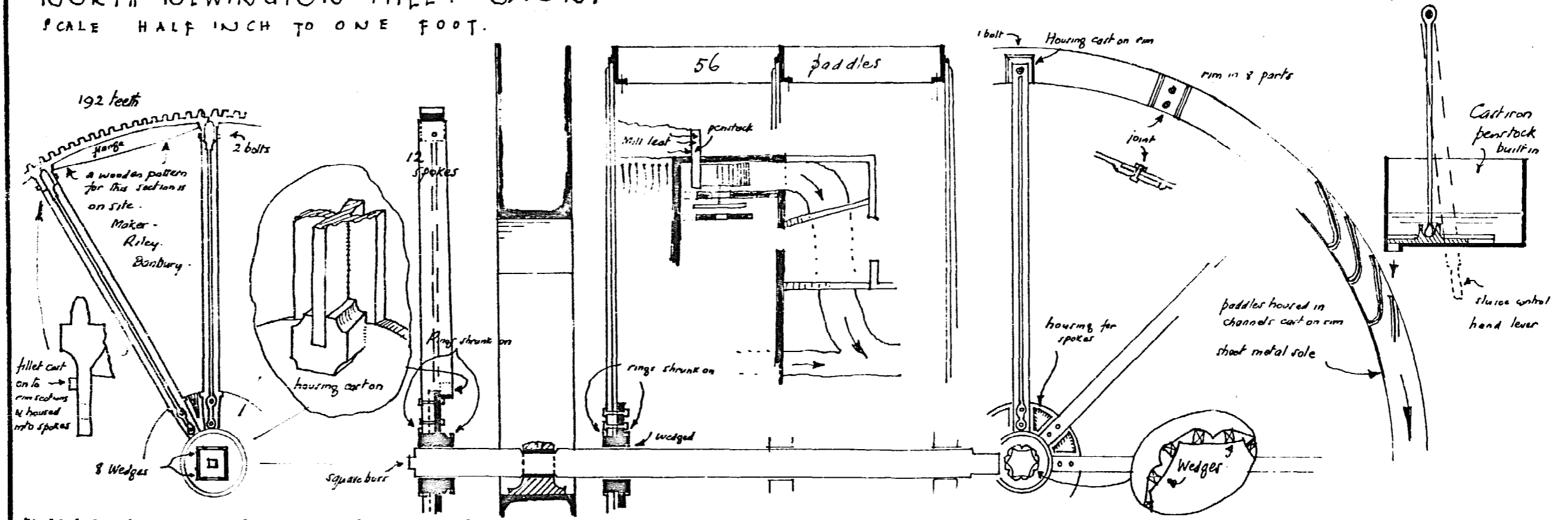
W. FOREMAN. SEPT 1973.

NORTH NEWINGTON MILL. OXON.

WATER WHEEL & PIT WHEEL.

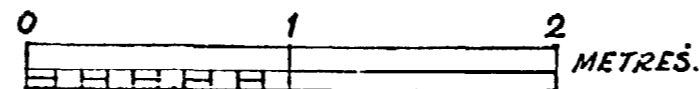
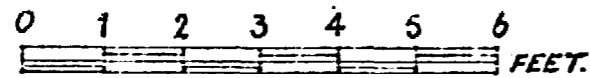
O.S. REF. SHEET 145 S.P. 424 394

SCALE HALF INCH TO ONE FOOT.



EVIDENCE OF THIS AT A PAPER MILL SHOWN IN THE LONG DRYING SHED, WITH ADJUSTABLE VERTICAL WOODEN LOUVRES.

W. FOREMAN OCT. 1973.

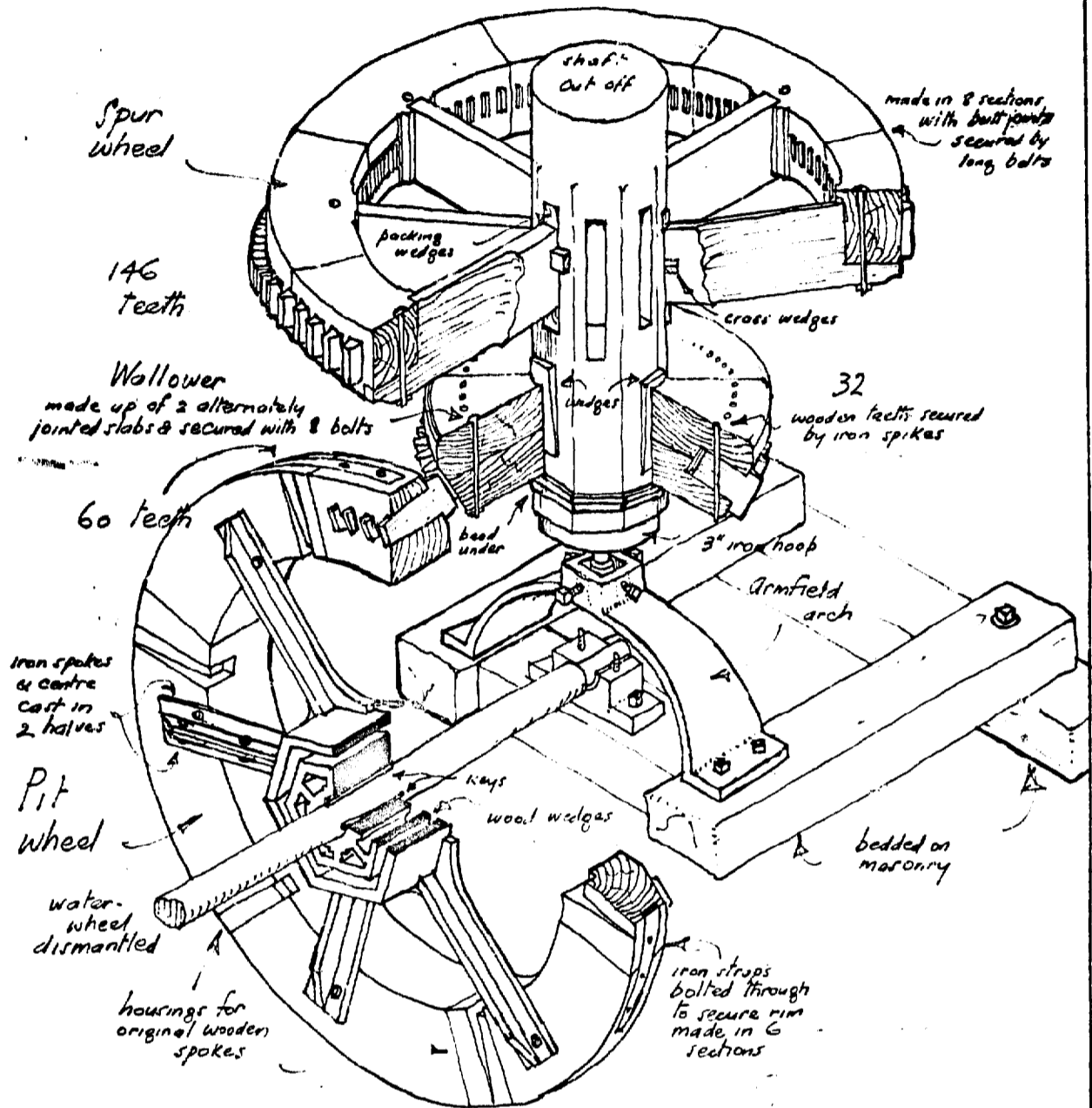


0 10 20 30 40 50 60 70 80 90 100 CMS.

# OVERY MILL. DORCHESTER. OXON.

ISOMETRIC SKETCH.

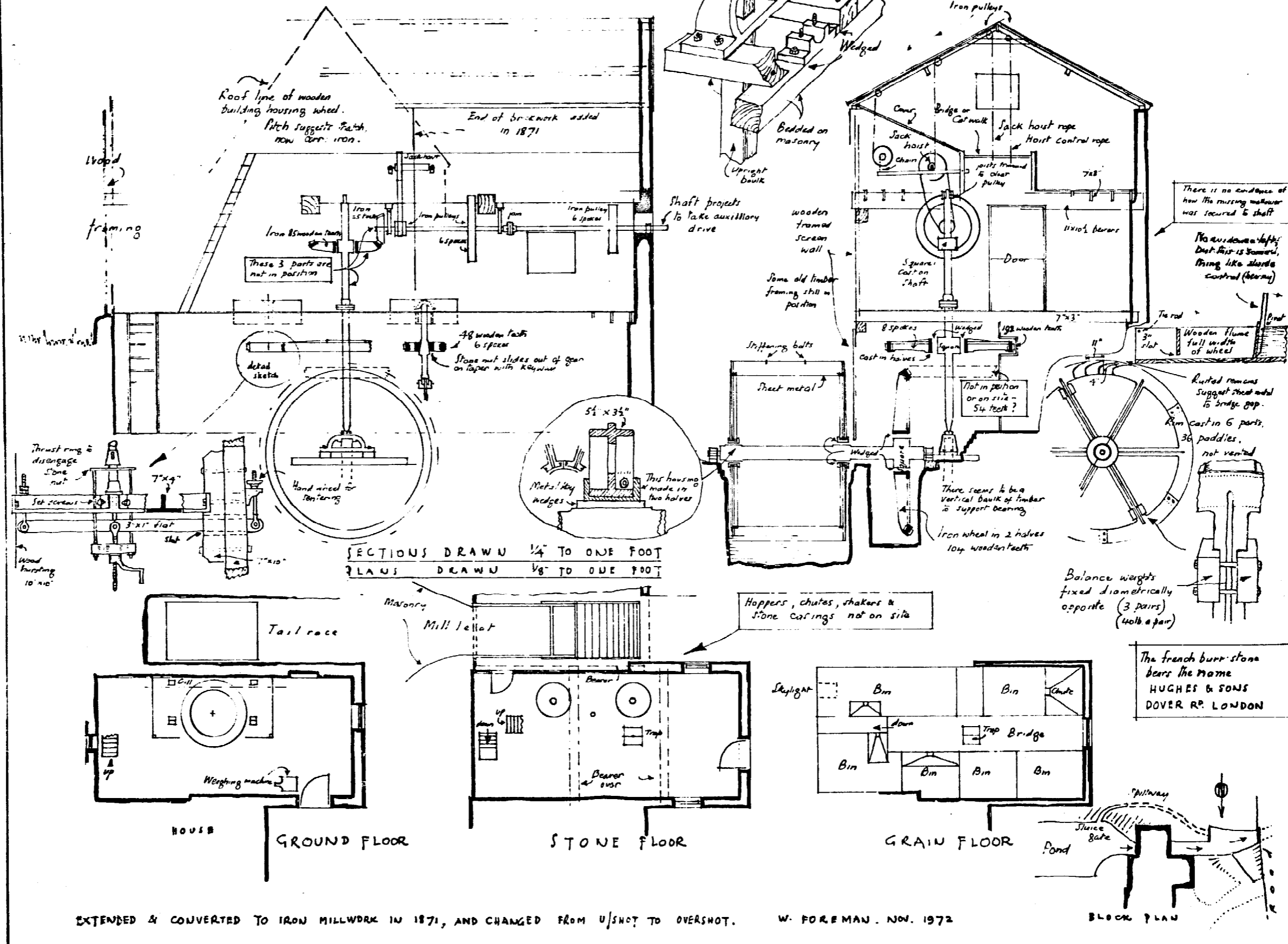
W. FOREMAN



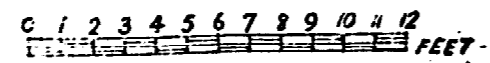
WOODEN PIT WHEELS WERE ALWAYS AT RISK & IN LOCAL MILLS WERE THE FIRST PART TO BE REPLACED BY IRON. IN THIS CASE THE SPOKES ONLY HAVE BEEN REPLACED. NOTICE HOW THE CENTRE WAS CAST TO FIT AN OCTAGONAL WOODEN WHEEL-SHAFT, & WHEN THAT SHAFT WAS REPLACED BY A SMALLER IRON ONE, A SPACER HAD TO BE SPECIALLY CAST TO MAKE UP BETWEEN THE OLD CENTRE & THE NEW SHAFT. IN SOME 200 MILLS I HAVE NEVER BEFORE FOUND A WOODEN WALLOWER.

# CHALGROVE MILL . OXON.

OS. REF. S.U. 631 970



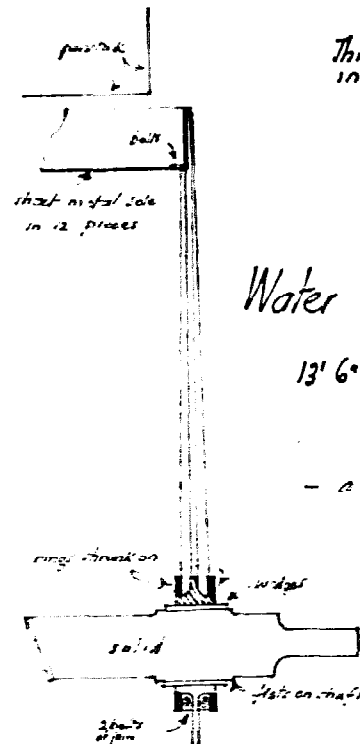
EXTENDED & CONVERTED TO IRON MILLWORK IN 1871, AND CHANGED FROM U/SNOT TO OVERSHOT. W. FOREMAN. NOV. 1872



# SALFORD MILL. N<sup>o</sup>. CHIPPING NORTON. OXON.

O.S. REF 175 S.P. 292 276

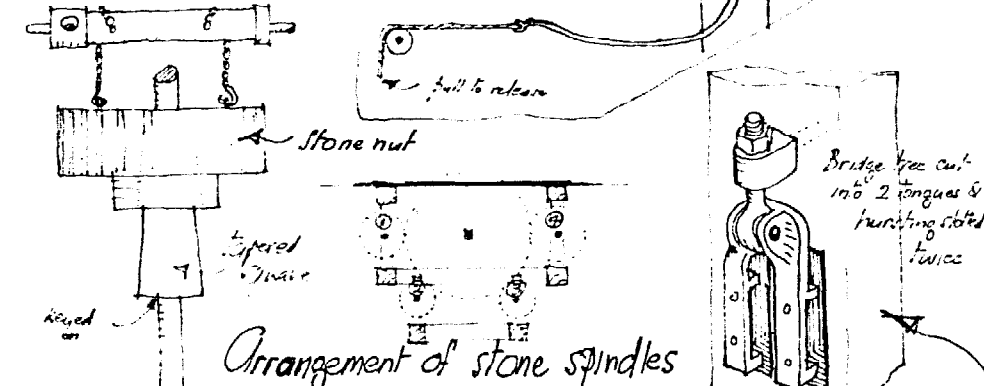
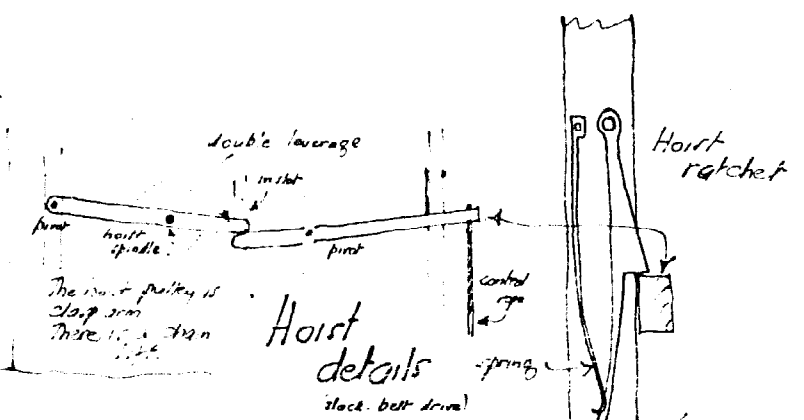
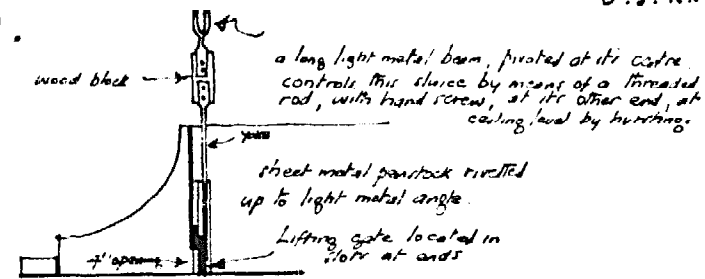
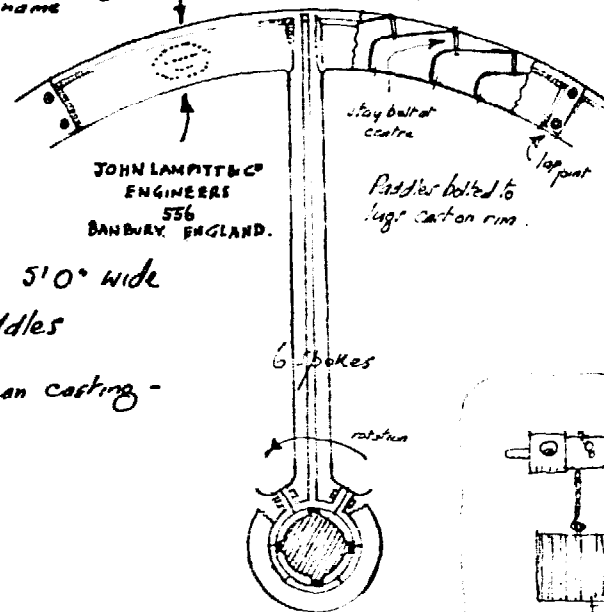
BY KIND PERMISSION OF MR. FAWCETT.



This is the only mill-work in the country bearing a maker's name

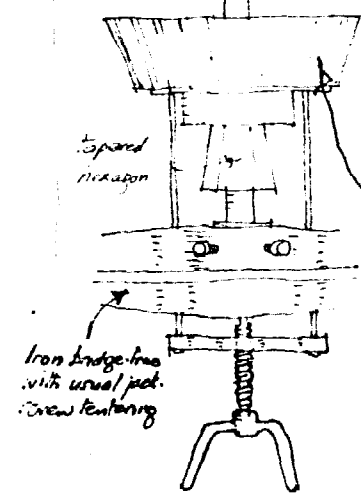
Water wheel

13' 6" diam 5' 0" wide  
48 paddles  
- a very clean casting -



## Arrangement of stone spindles

Drive ① with stones etc. over, has been dismantled completely, tho' a bevel driven feathering screw remains. Drive ② is carried on a wooden bridge-tree, with feathering as shown, & the usual jack screw & pressure ring arrangement to disengage the drive. Drive ① & ③ were presumably acquired from another mill, in fact these bevel gears have no matching bevel drive, & the disengaging arrangement is not necessary. Note the chains & hooks to raise the stone nuts out of mesh, by means of a small tommy-bar operated unidirectionally.



Pit wheel is heavily cast in 2 halves, fitted to a square bar cast on shaft. Iron wallower, fitted to boss cast on 5" dia centre shaft, which bar also carries 8 spokes cast in one piece, bolted to a rim cast in 2 halves, to make up the spur wheel. The stone nuts are iron.

The crown wheel is unusually heavy (8 1/2" x 7 1/2" wooden rim) with 4 compass arm spokes which are housed into a cast iron hub. It is 6' 8" diam.

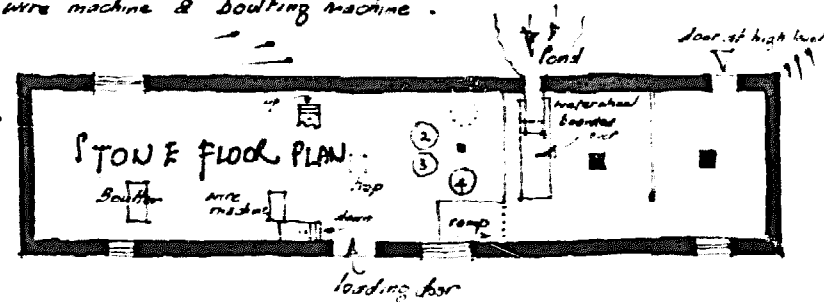
There are 2 fans & hoppers complete, one ② with peak stones, the other ③ with pair of french burrs from GARDNER & SONS, GLOUCESTER. There is another pair of peak stones in situ ④ & 2 runner french burrs of dark colour stored on site. Two 4 lobed saws in working position ⑤ & ⑥.

Barn thresher by GOOD, HARLESTON, NORTHAMPTONSHIRE.

Dust & chaff separator by S. HOWE, SILVER CREEK, NEW YORK.

Un-named wire machine & bottling machine.

There is a larger than usual storage on sack floor.

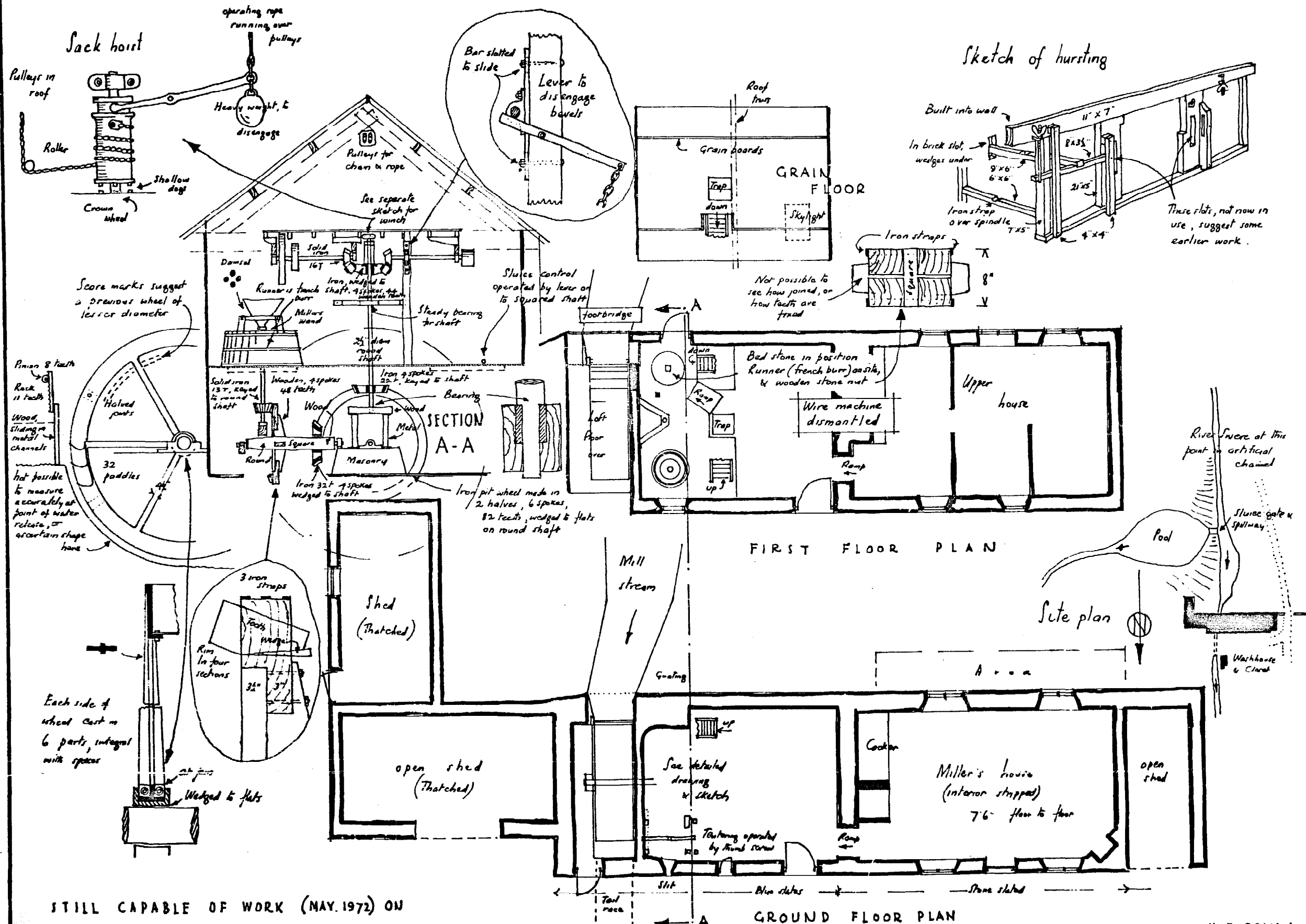


# MILL BUILDINGS . BARFORD ST JOHN . OXON .

O.S. S.P. 445 330

SCALE ~ 1/8" & 1/4" TO ONE FOOT.

BY KIND PERMISSION OF MAGDALEN COLLEGE, OXFORD. OWNERS & MR F.E. LOVELL, TENANT

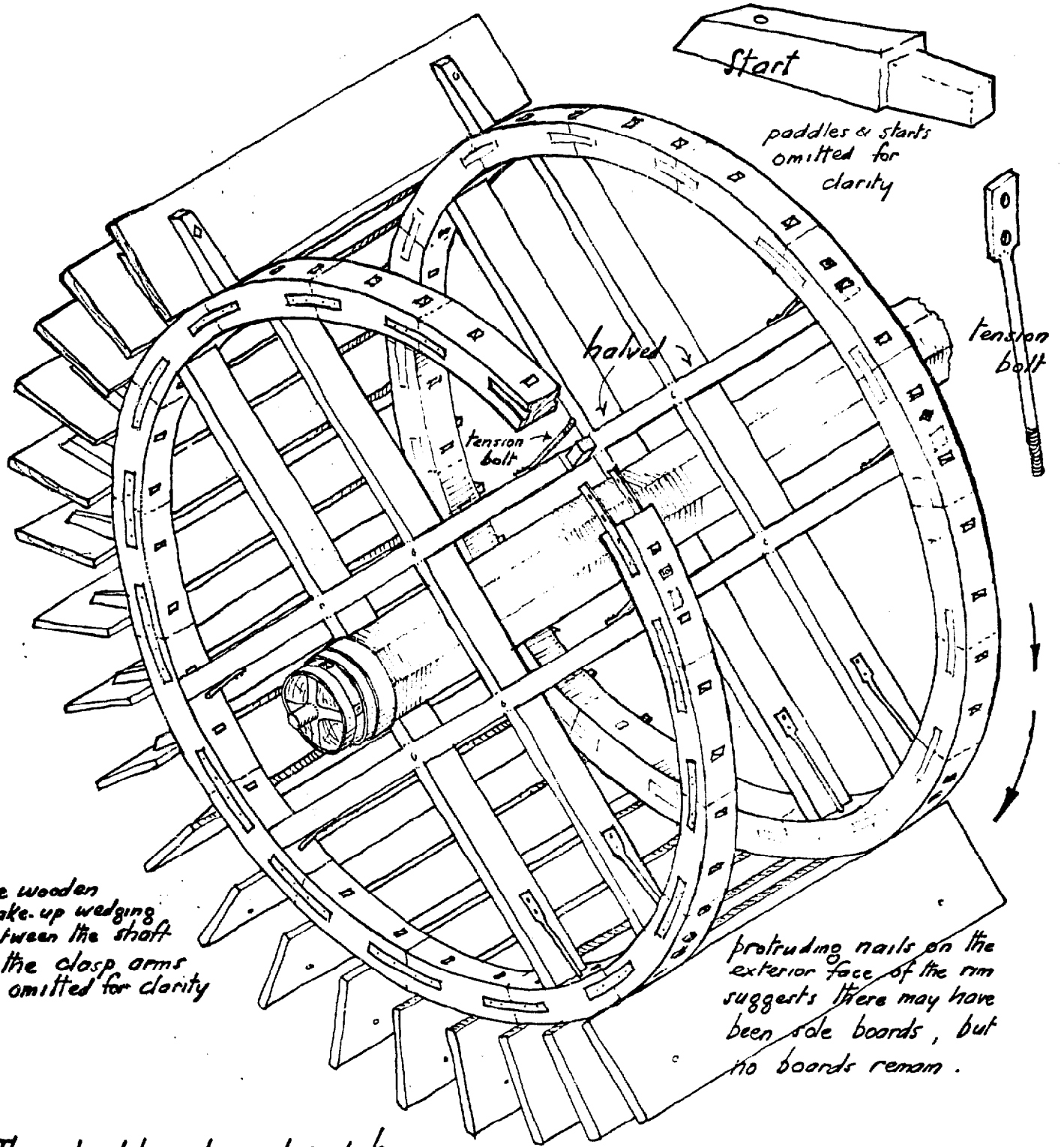


STILL CAPABLE OF WORK (MAY 1972) ON THE REMAINING PAIR OF STONES.

W. FOREMAN. MAY 1972



THE WATER WHEEL. BROUGHTON POGGES MILL.  
ISOMETRIC VIEW 8 O'CLOCK BREAST SHOT.



The wooden make-up wedging between the shaft & the clasp arms is omitted for clarity

protruding nails on the exterior face of the rim suggests there may have been side boards, but no boards remain.

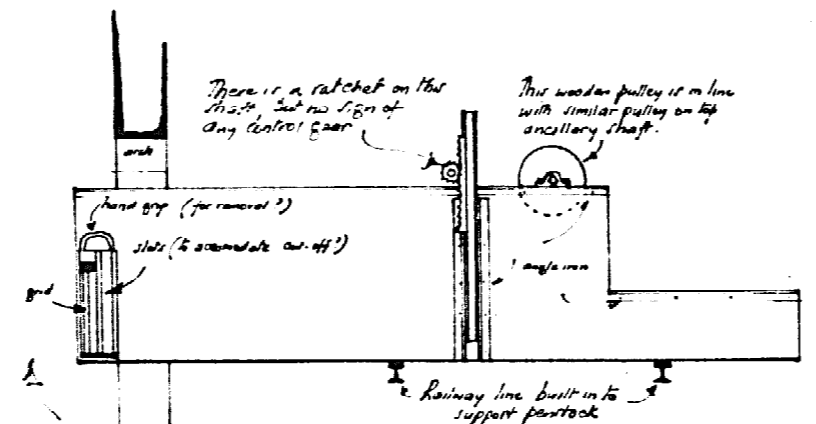
This wheel has decayed and has collapsed into the wheel chamber.

W. FOREMAN . 74 .

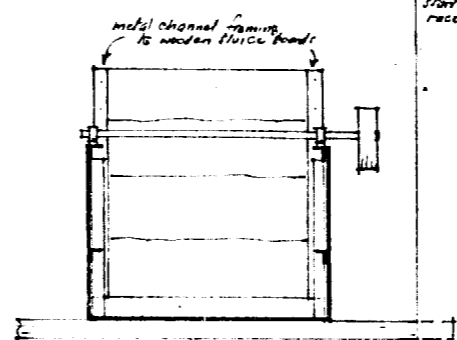
SOUTH WESTON MILL. LEWKWOD. OXON.

BY KIND PERMISSION OF MR R. C. KEEN.

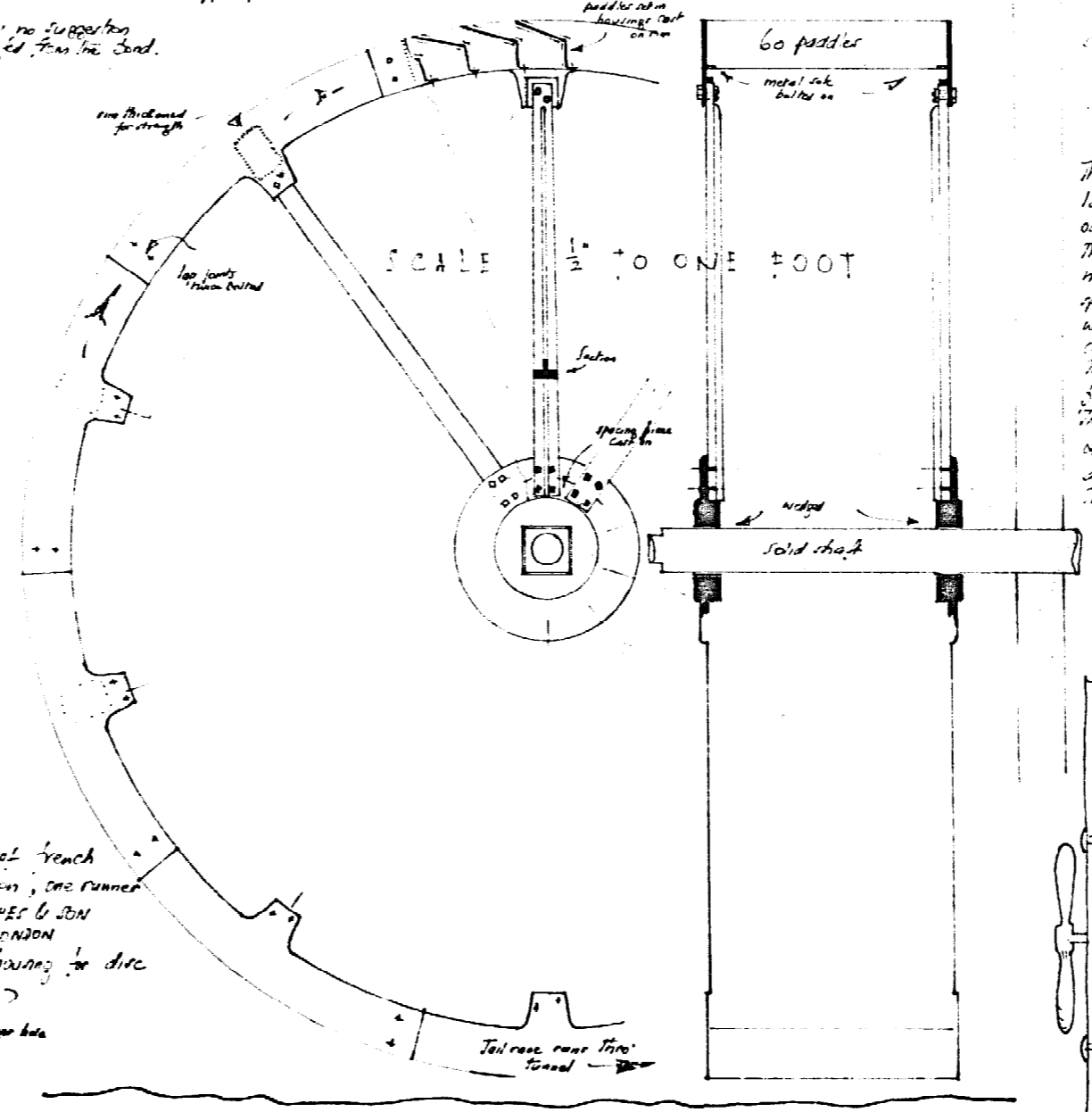
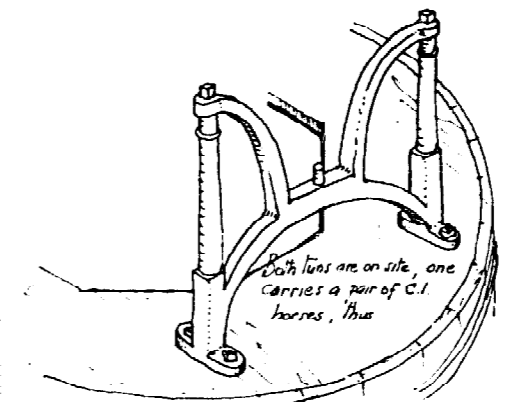
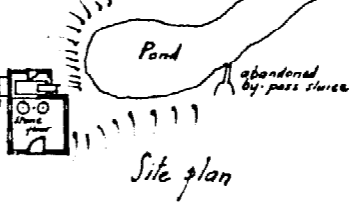
O.S. REF. SHEET 159 S.U. 702. 983.



There is a void here, no support from the counter, not ed. from the cord.

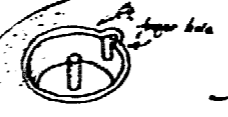


open area at start of tail race tunnel

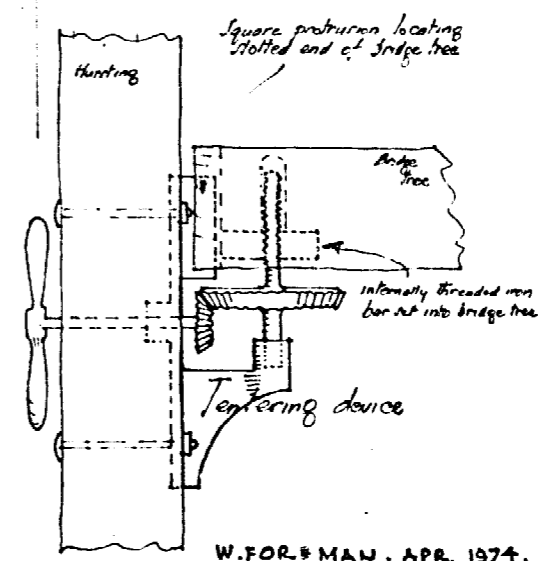


The pit wheel is heavily cast, with wooden cogs. It has a large square open centre, with a cast boss to accommodate a rotating metal water wheel shaft. The wallower is iron, wedged to a 6" square section metal centre shaft, which carries adjacent iron spur wheels, both with wooden cogs. Auxiliary drive was brought in to drive the lower spur, which had five cogs, while the upper one drove the stone nut. These could be taken out of gear by the usual pressure ring. The upper part of the centre shaft is 2 1/2" square, & the main wheel iron with wooden teeth. It drives 2 shafts with various pulleys. The wheel has no longer cogs.

There are 2 pairs of bench bars stones in position, one runner bearing name HUGHES & SON LONDON. This stone has a housing for disc balance weights.



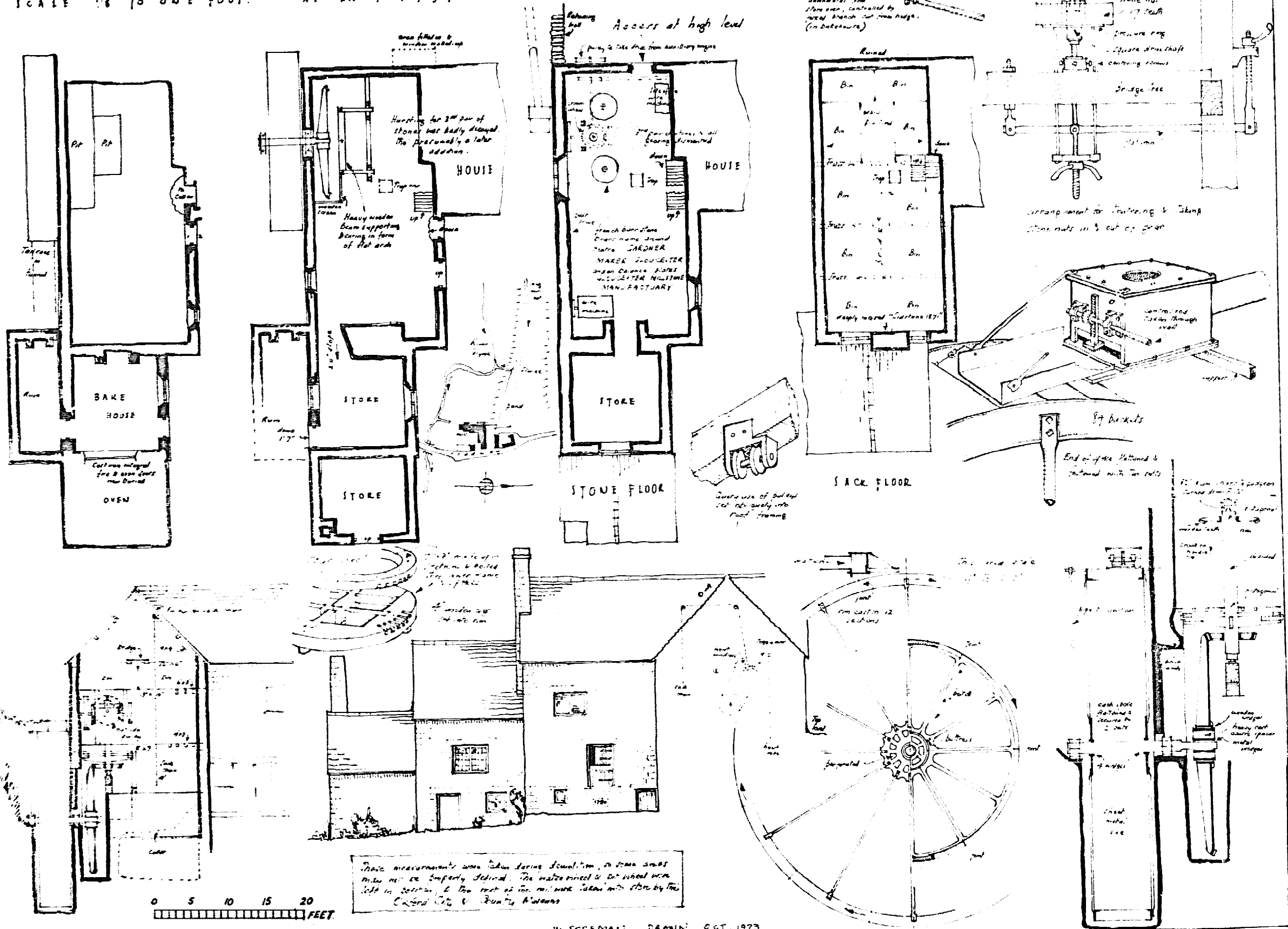
Tail race runs thro' tunnel



# WATER MILL & BAKEHOUSE AT LIDSTONE, OXON.

O.S. REF. SHEET 145. S.P. 346 148

SCALE 1/8" TO ONE FOOT. AS EXISTING 7.9.71. PRIOR TO DEMOLITION.

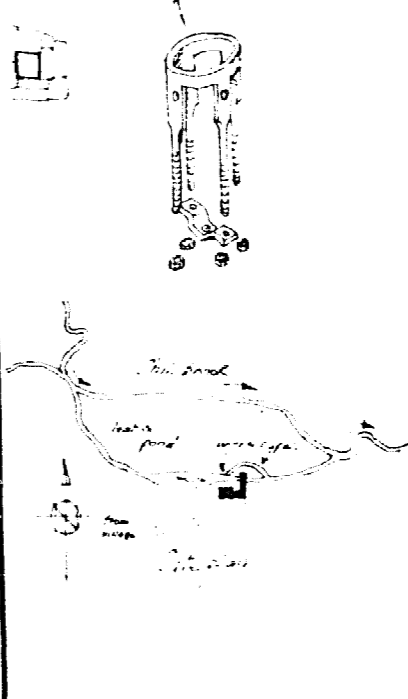
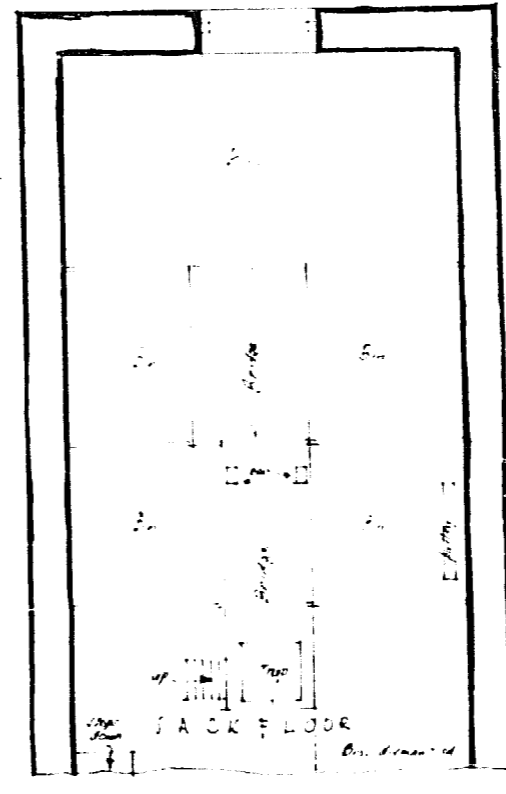
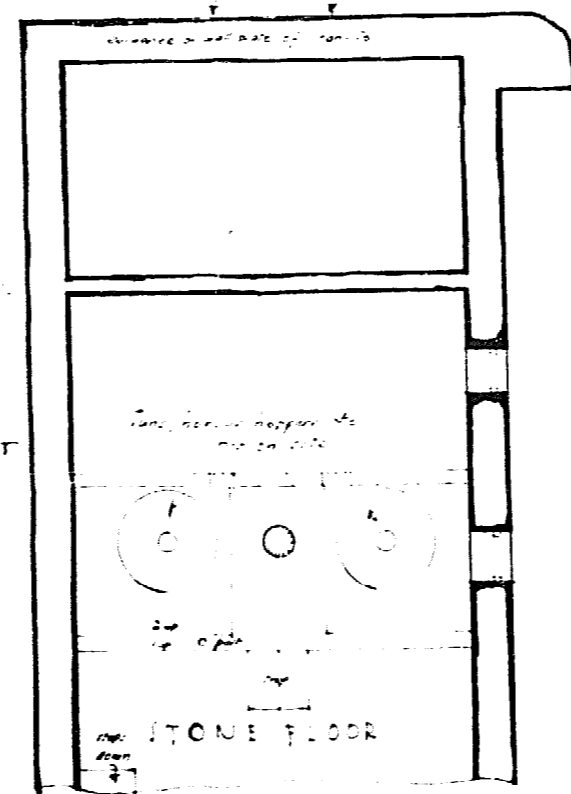
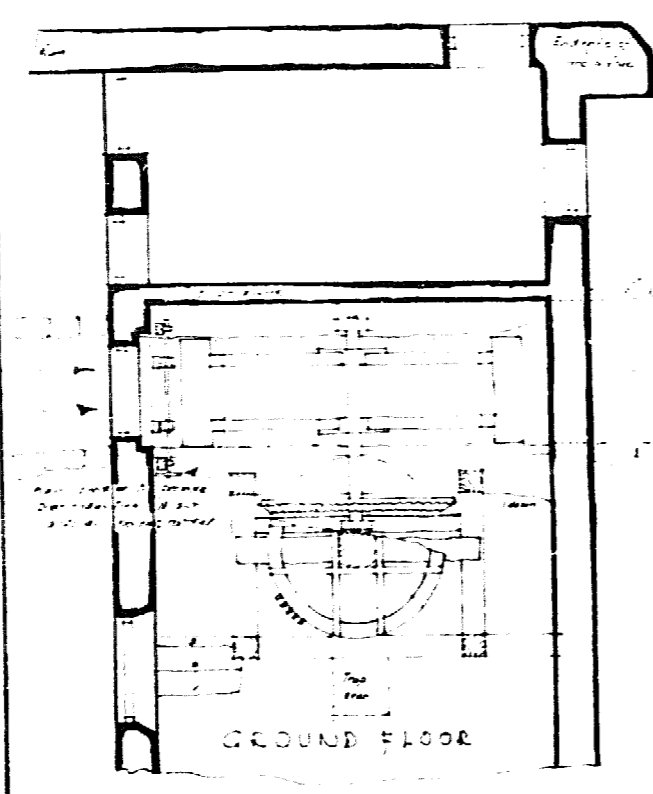
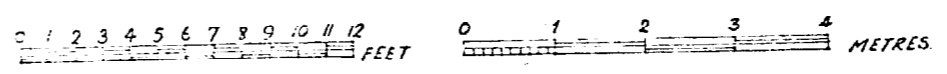
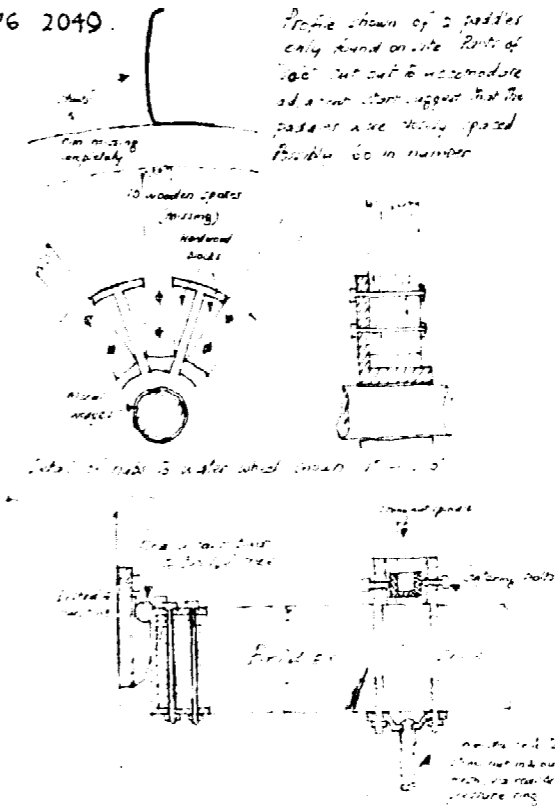
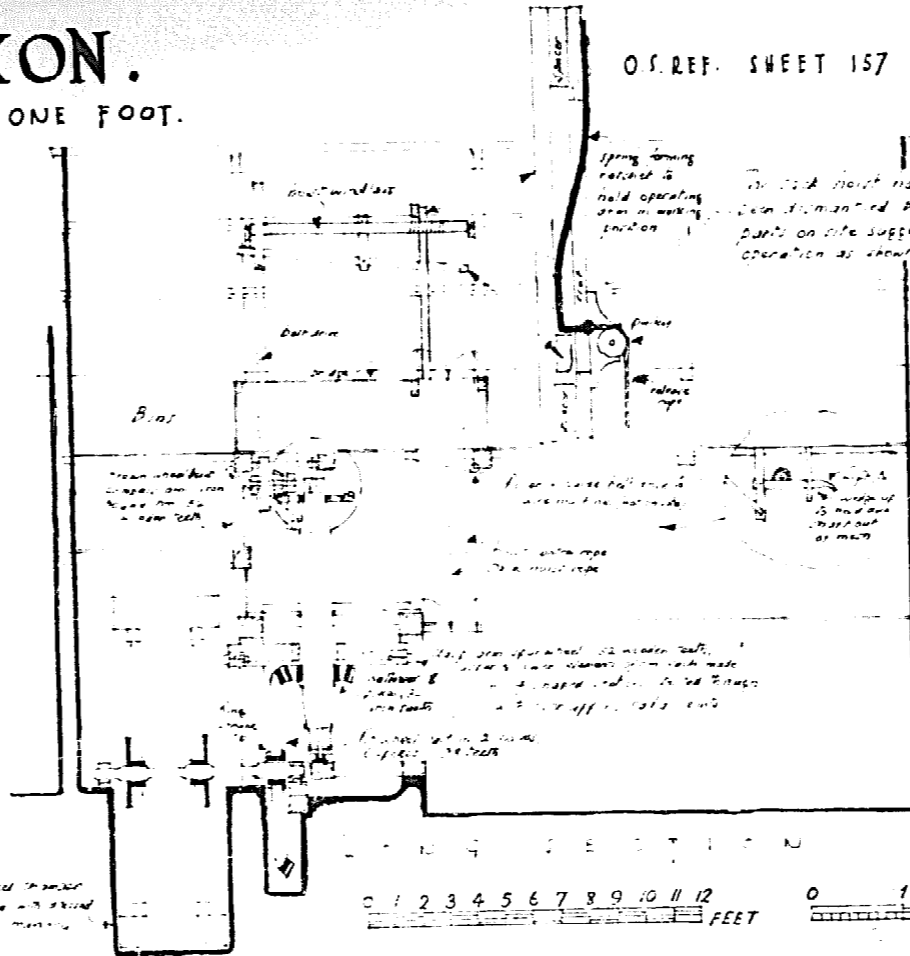
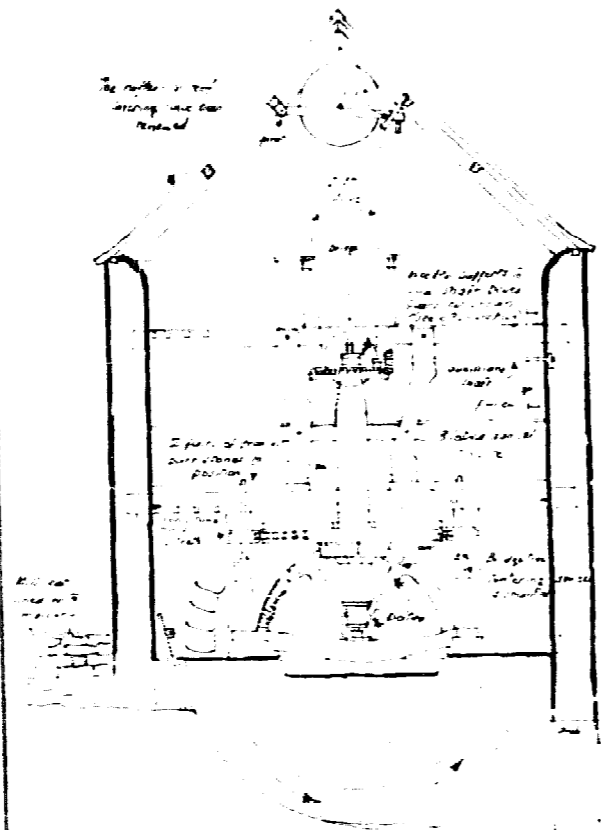


W FOREMAN DRAWN OCT. 1973

# ALVESCOT MILL . OXON.

SCALE  $\frac{1}{4}$ " TO ONE FOOT.

O.S. REF. SHEET 157 4276 2049.



W. FOREMAN. DEC. 1973.

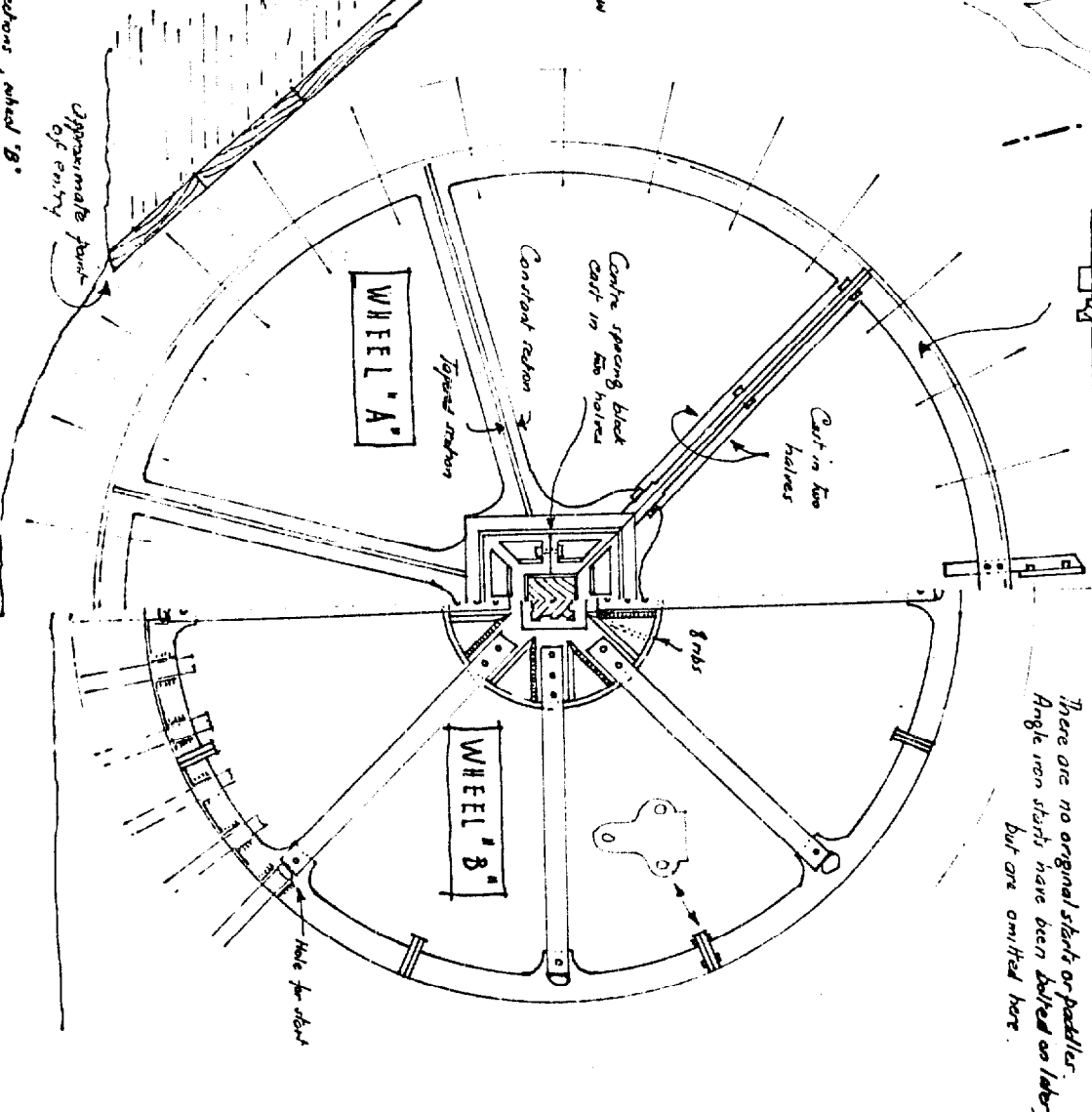
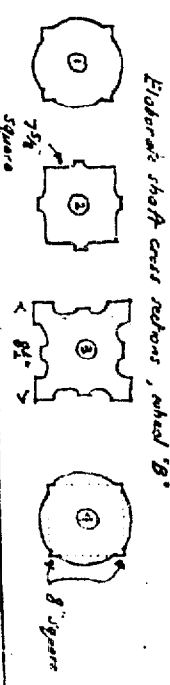
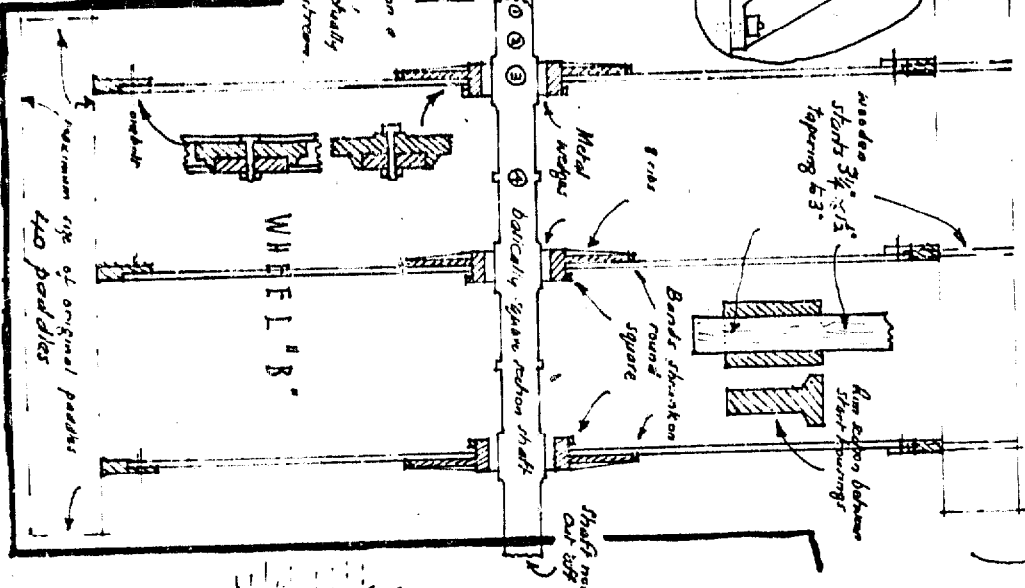
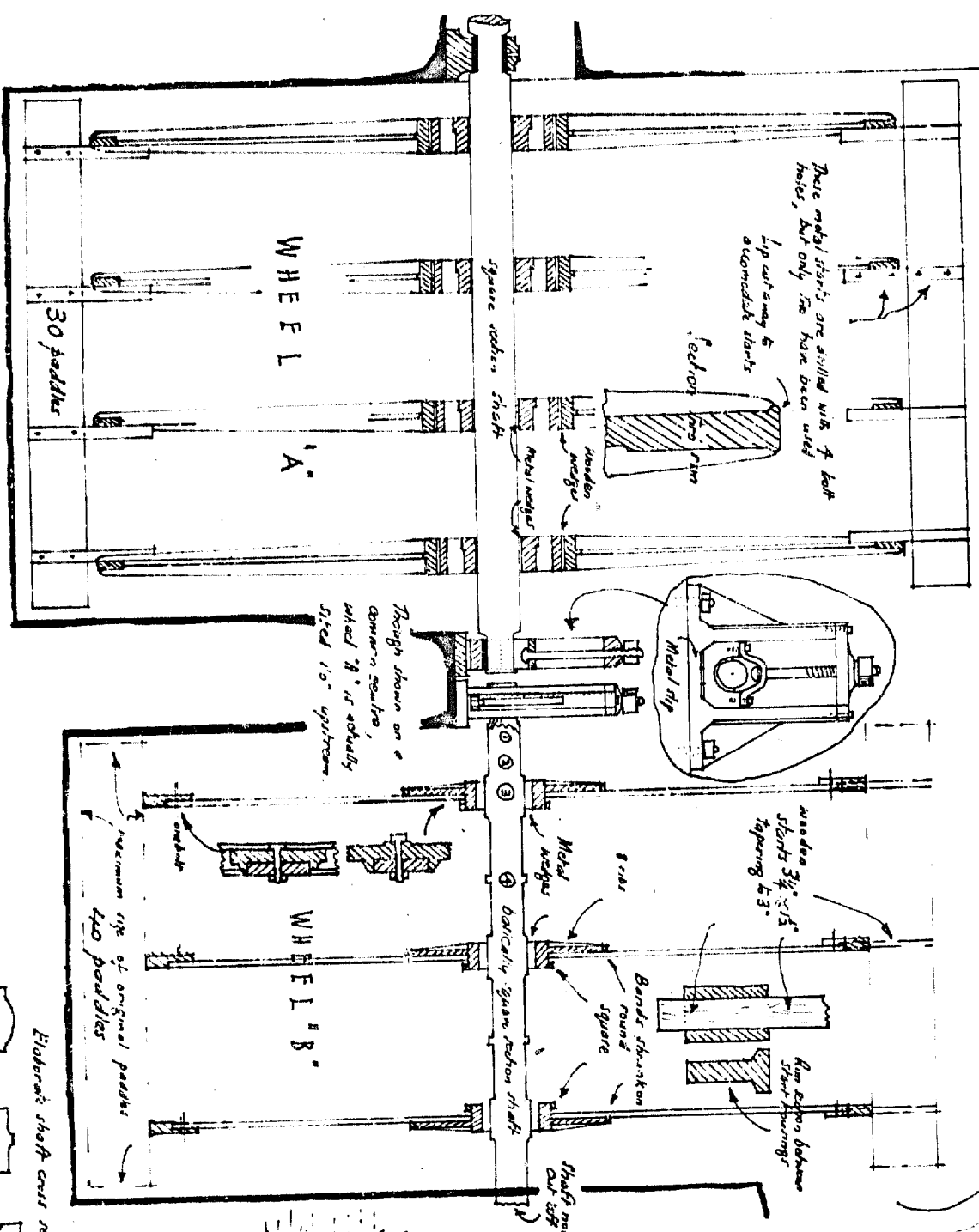
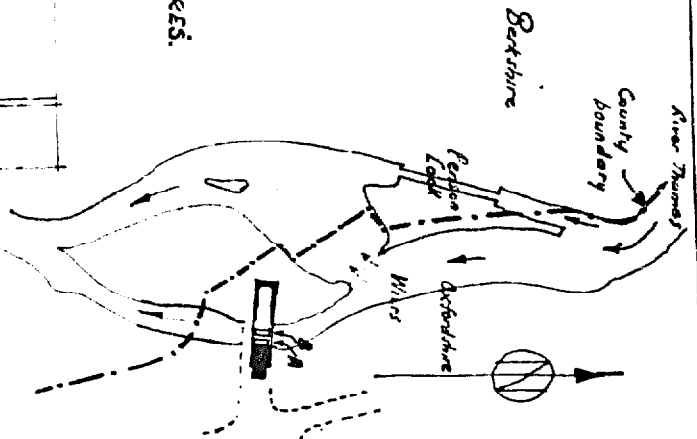
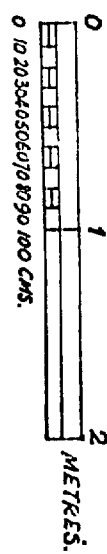
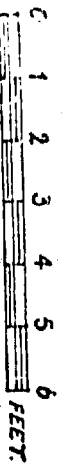
# CROWMARSH MILL, OXON.

BY KIND PERMISSION OF MR M. BLACK.

SCALE 1/2" TO ONE FOOT.

O.S. REF. SHEET 158 S.U. 614 911.

BOTH WHEELS ARE LOW BREAKFAST SPOT. 6" HEAD OF WATER.



This was a flash lock until 1788. A steam engine was installed in 1871, but only operated for a few years. The mill building, which straddled the leat, & housed the wheels, was derelict in 1930, & demolished about that time. The miller's house was retained. Some heavy concrete has been placed immediately upstream of the sluice gates. Wheel 'A' might be arranged to operate, but wheel 'B' has been partly dismantled, & does not exist as on drawing.

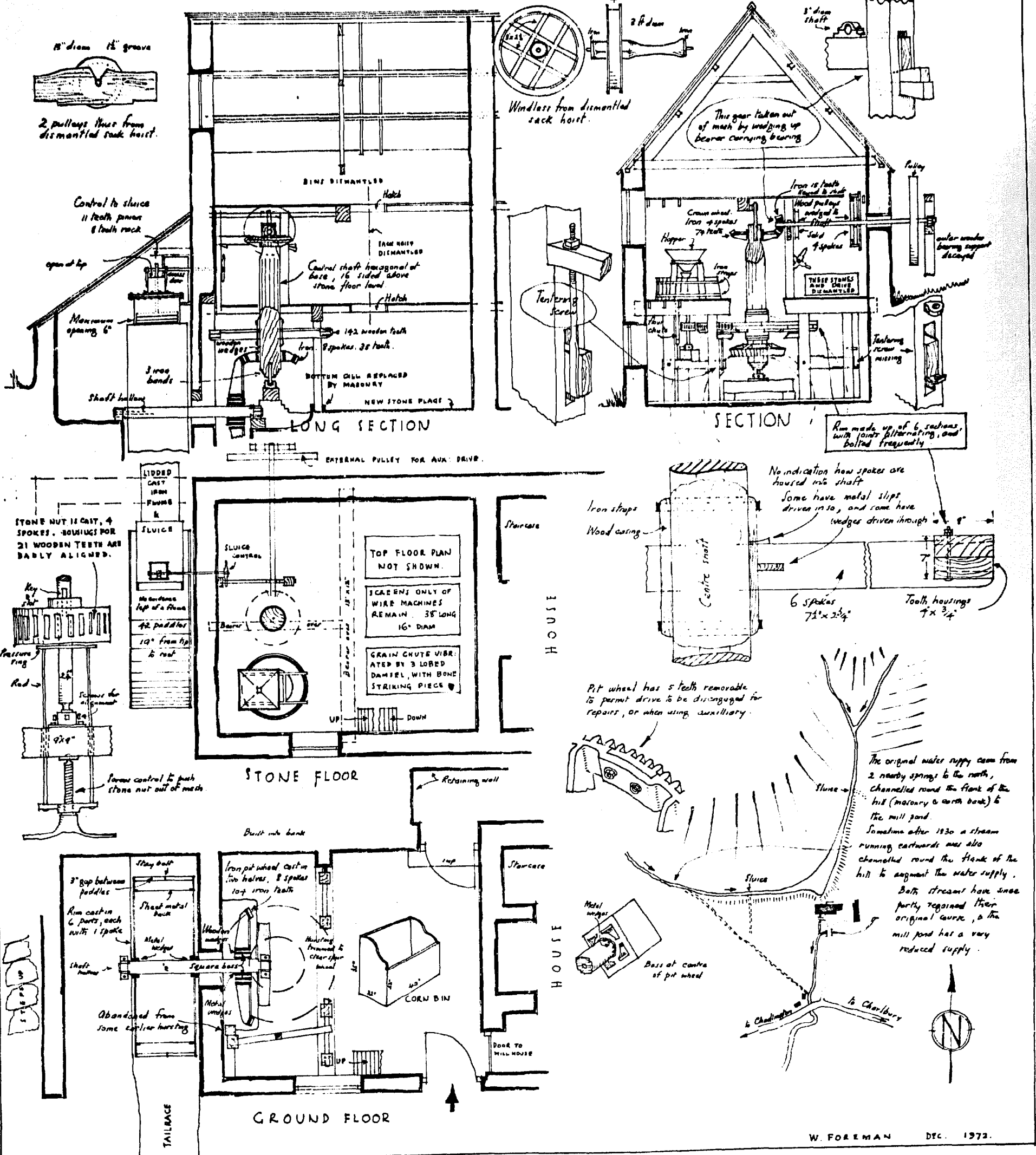
There are no original starts or paddles. Angle iron starts have been bolted on later, but one omitted here.

# DEAN MILL . OXFORDSHIRE .

SCALE 1/4 INCH TO ONE FOOT

O.S. REF. S.P. 343 222

BY KIND PERMISSION OF THE OWNERS . MR & MRS GERRARD.



# COMBE MILL. OXON.

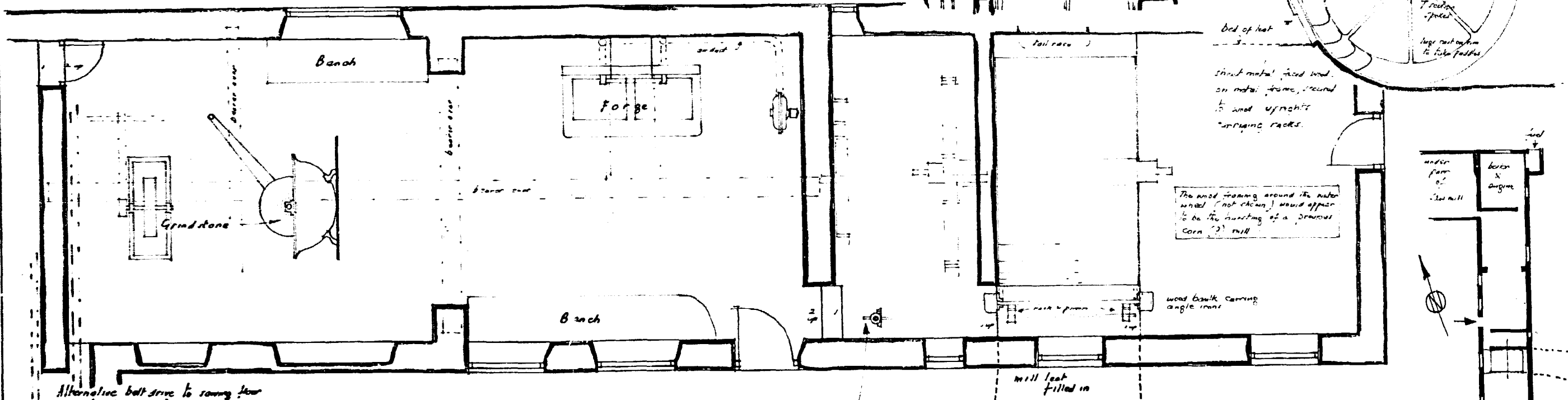
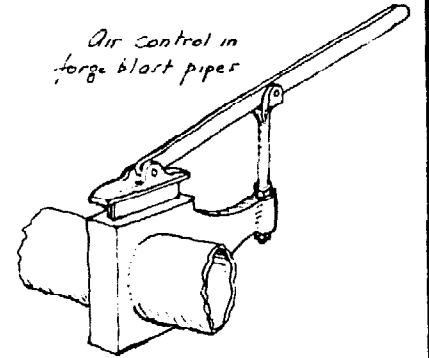
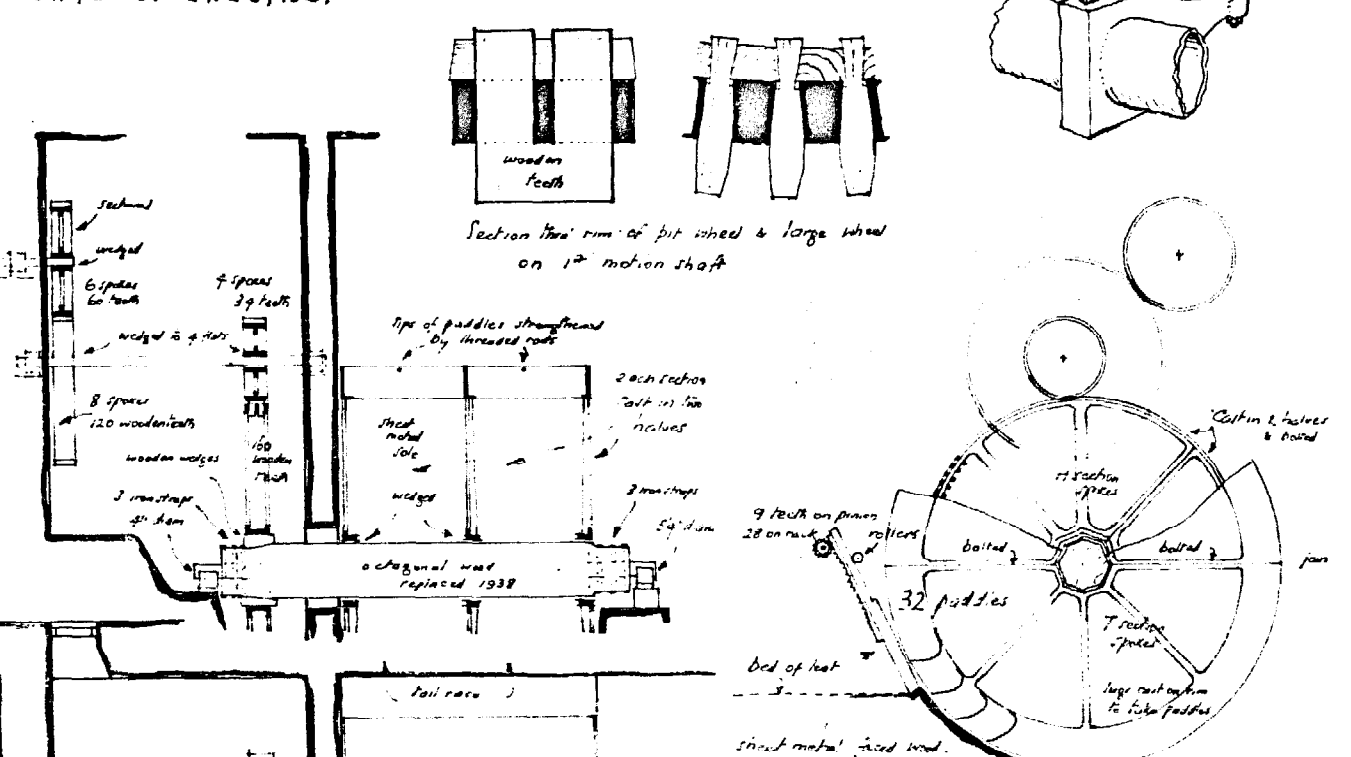
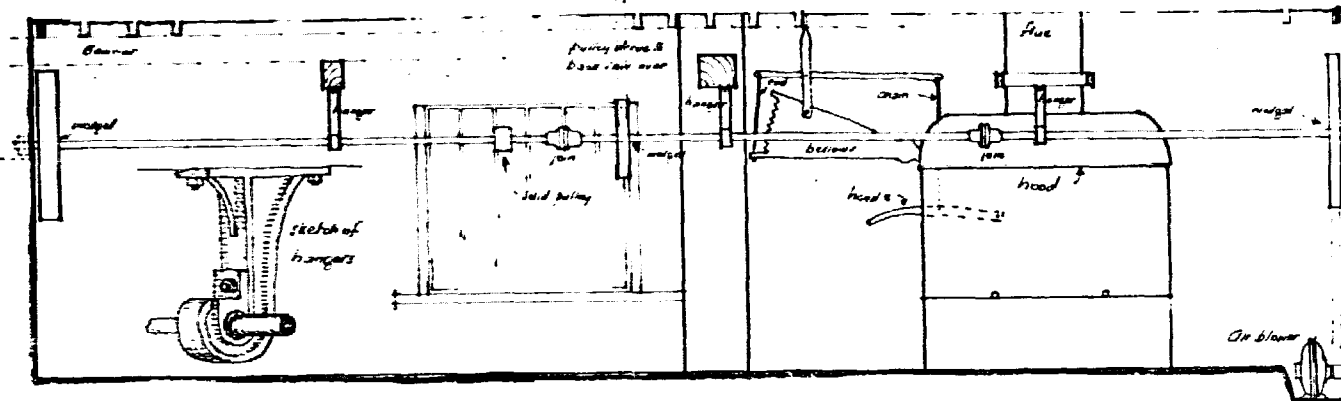
WATER WHEEL POWERING WORKSHOP SHAFTING & SAW MILL.

SCALE 1/4" TO ONE FOOT.

O.S. REF. SHEET 145 S.P. 414 151

WHEN WATER WHEEL TURNED ONCE, ITS MOTION WOULD TURN  $1\frac{3}{4}$  TIMES, WORKSHOP SHAFTING 91 TIMES, & FORGE BLOWER 180 TIMES.  
THE DATE 1852 ON THE BEAM ENGINE BUILT INTO THIS COMPLEX SUGGESTS AN APPROXIMATE DATE OF ERECTION.

There is a workshop on the first floor.

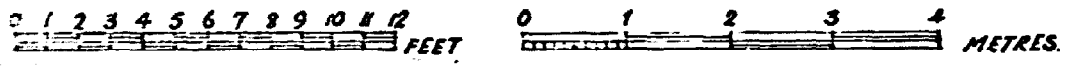


Alternative belt drive to saving floor could be dogged in for either the steam engine or water wheel.

Hand wheel in timber shop connected this rack & pinion to rack & pinion controlling these. Also direct hand wheel control of

The wood framing around the water wheel (not shown) would appear to be the housing of a previous Corn (?) mill

W. FOREMAN. 1972.



# THE MILL . CHARNEY BASSETT .

SCALE 1/4 INCH TO ONE FOOT .

ONE RUNNER PEAK STONE ON SITE  
50 FRENCH BURR BEARING MAKER'S  
NAME - GARDIER . GLOUCESTER .  
ONE BED STONE FRENCH BURR ON SITE

ALSO ON SITE . ONE RHYD , ONE  
BROKEN GUDGROW SPINDLE & TWO  
STONE LIFTING WEDGES , LEAF HANDLES .  
TWO MEAL BINS .

SECTION ON B-B

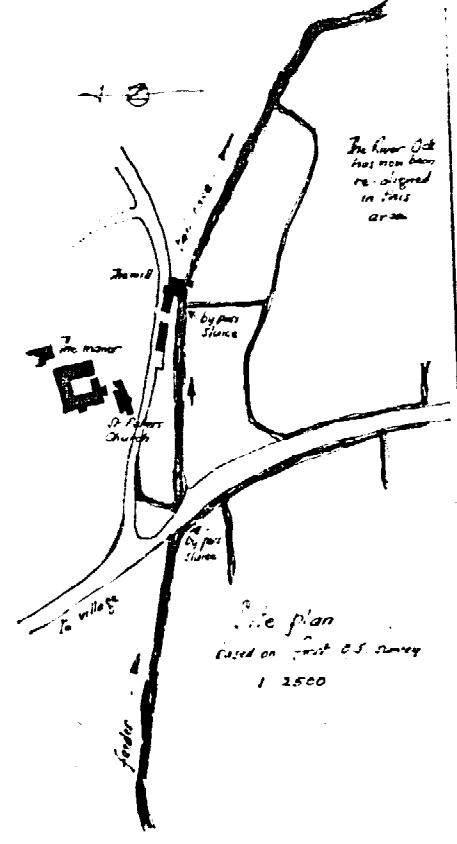
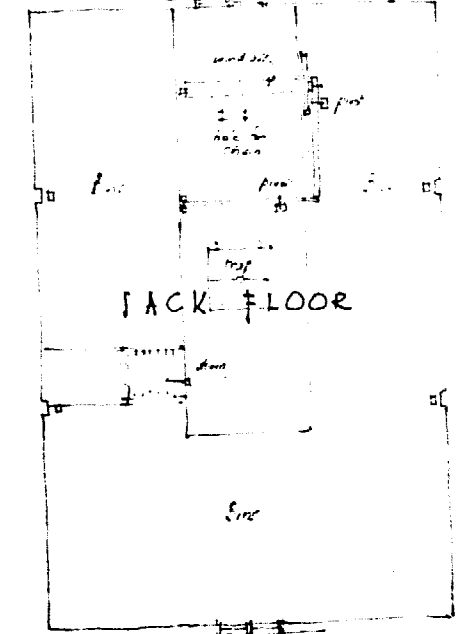
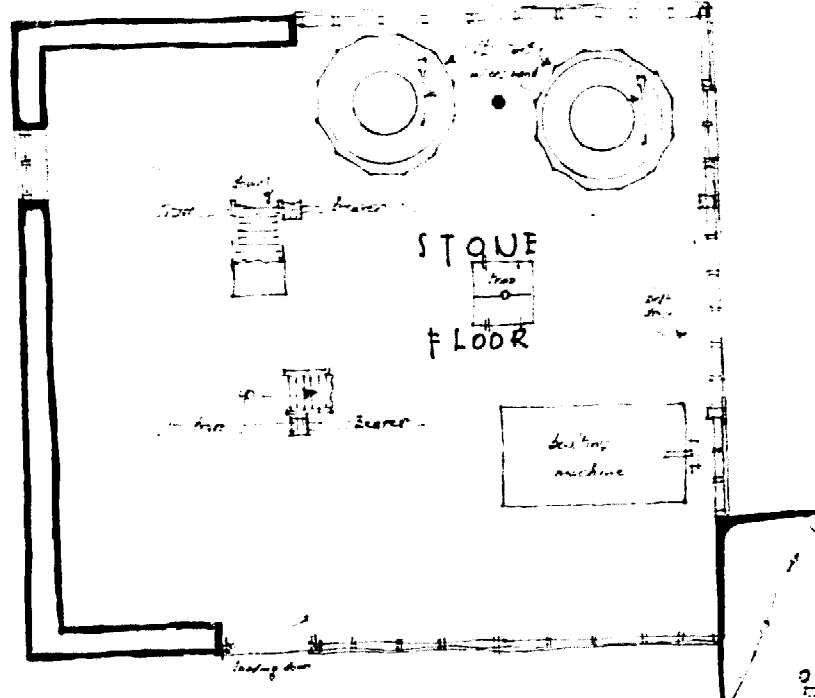
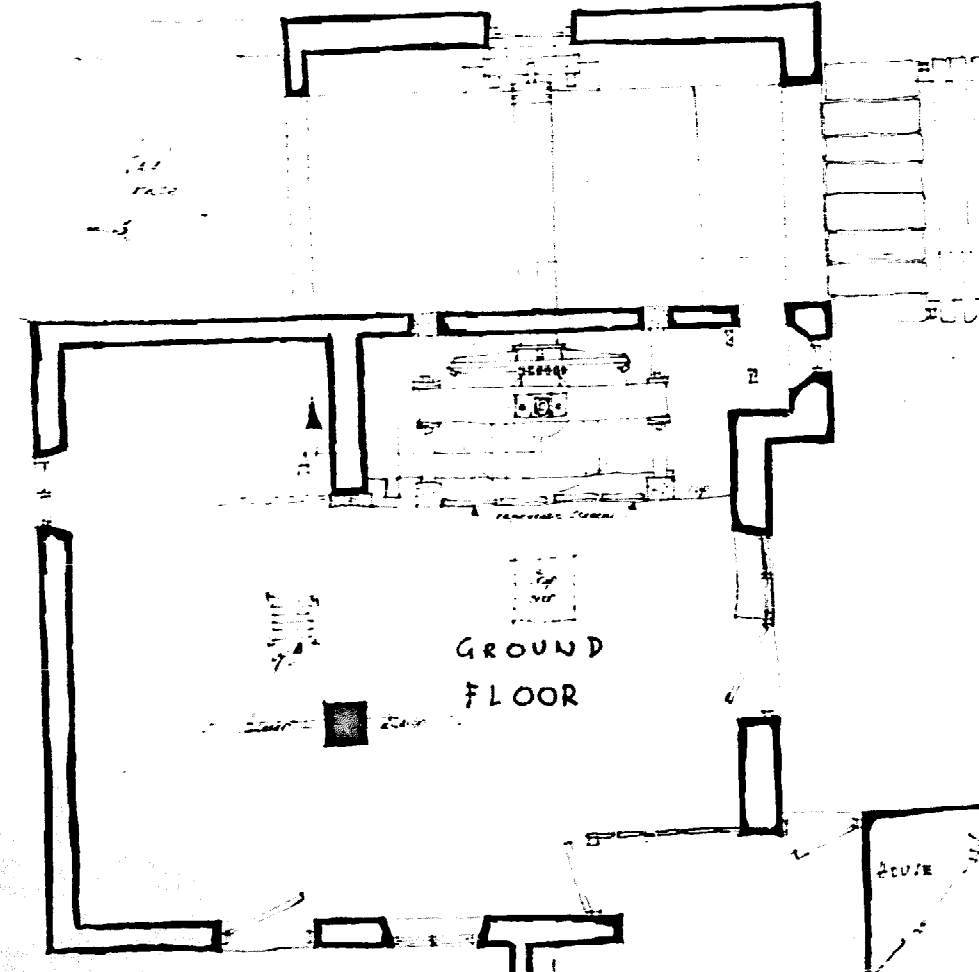
SECTION ON A-A

Miller's wand (wooden)  
which acts as a spring  
to keep the stone in  
contact with the  
dormer .

Shed made  
to strengthen  
rod centre

method of  
securing  
chain

chain to lifting  
chain



0 1 2 3 4 5 6 7 8 9 10 11 12 FEET

0 1 2 3 4 METRES