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Mill Drawings

by: W. Foreman

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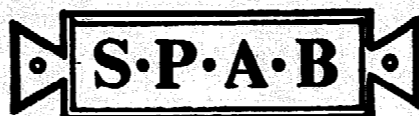
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MILL DRAWINGS

Measured Drawings and Details

by

W. FOREMAN

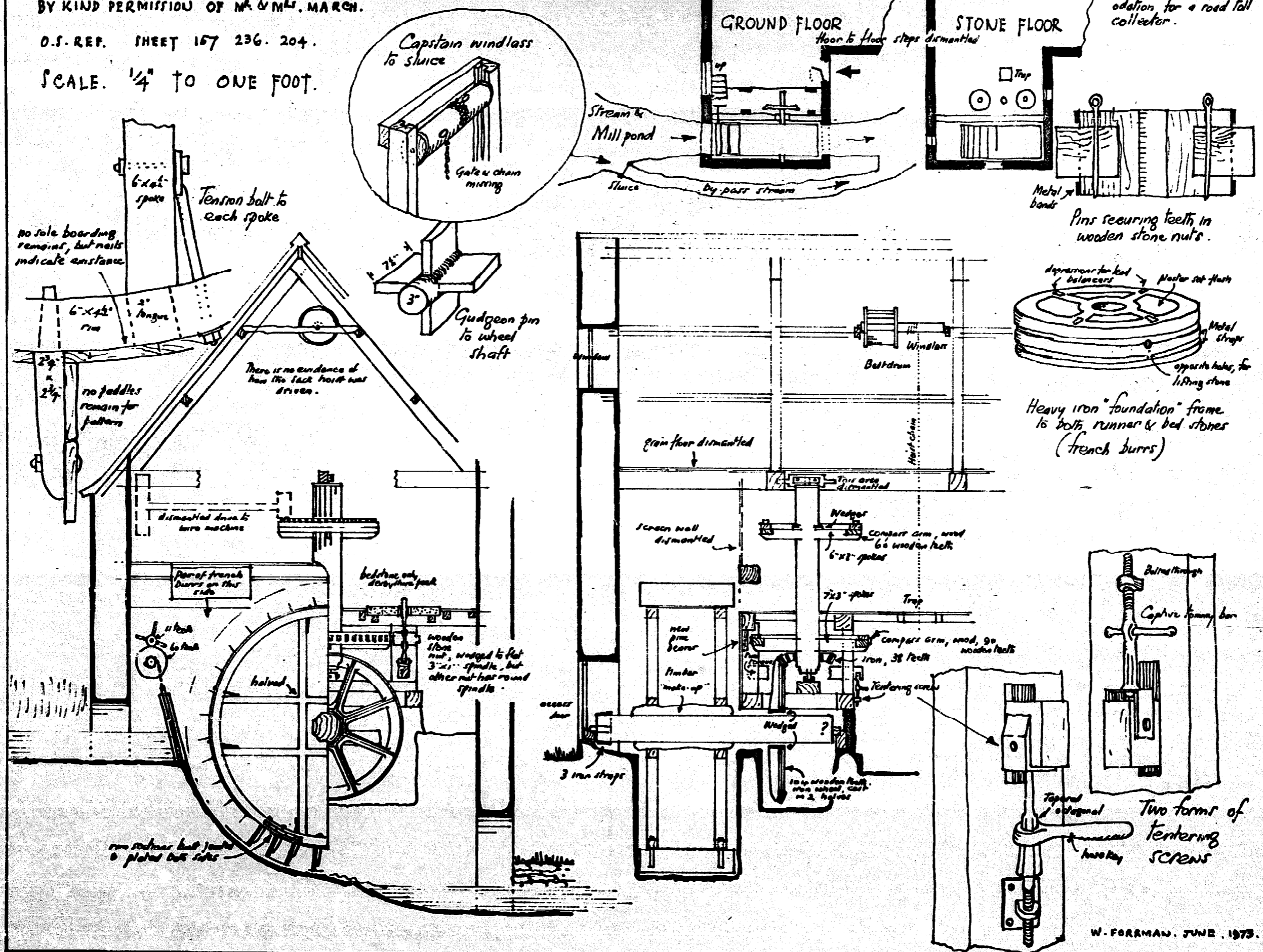


MILL AT BROUGHTON POGGES, OXON.

BY KIND PERMISSION OF MR. & MRS. MARCH.

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

SCALE. 1/4" TO ONE FOOT.



There was stabling for pack horses on part of the premises, & on the road front there was accommodation for a road toll collector.

Pins securing teeth in wooden stone nuts.

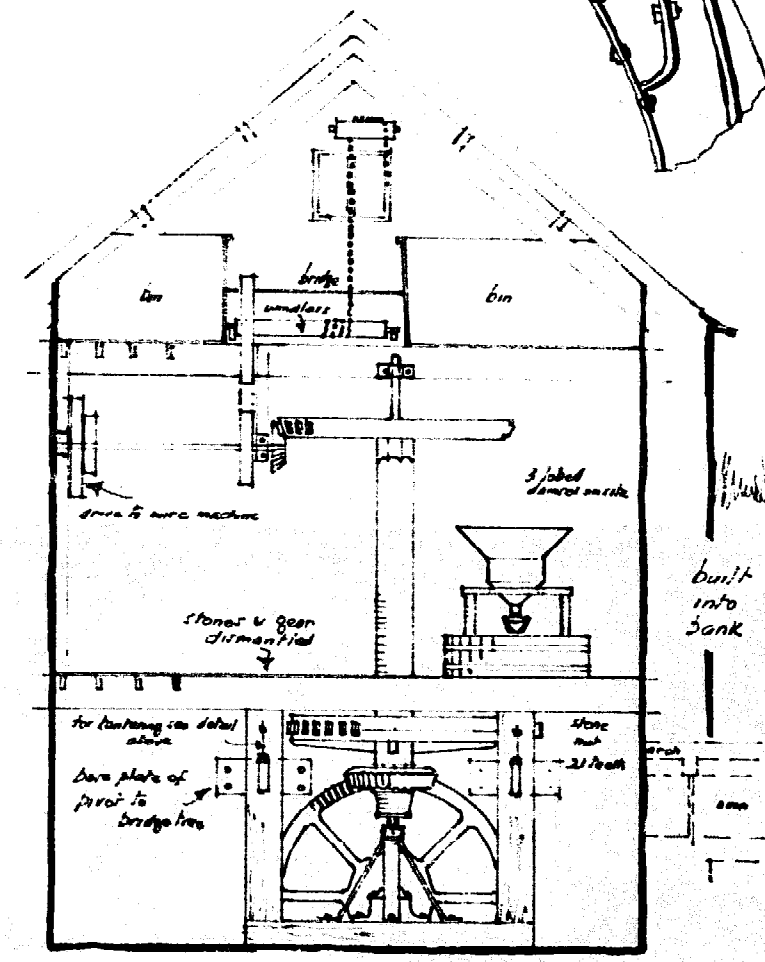
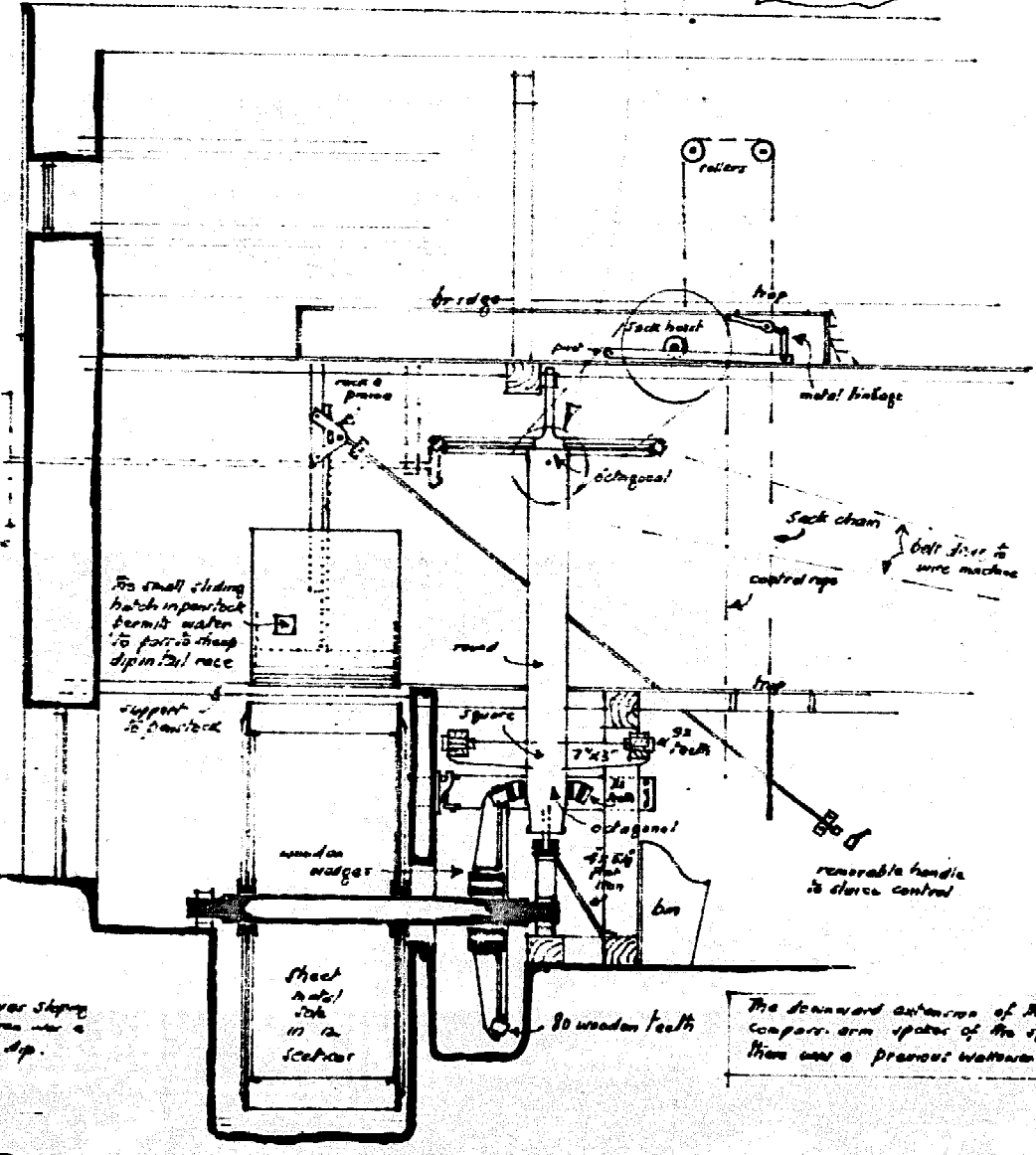
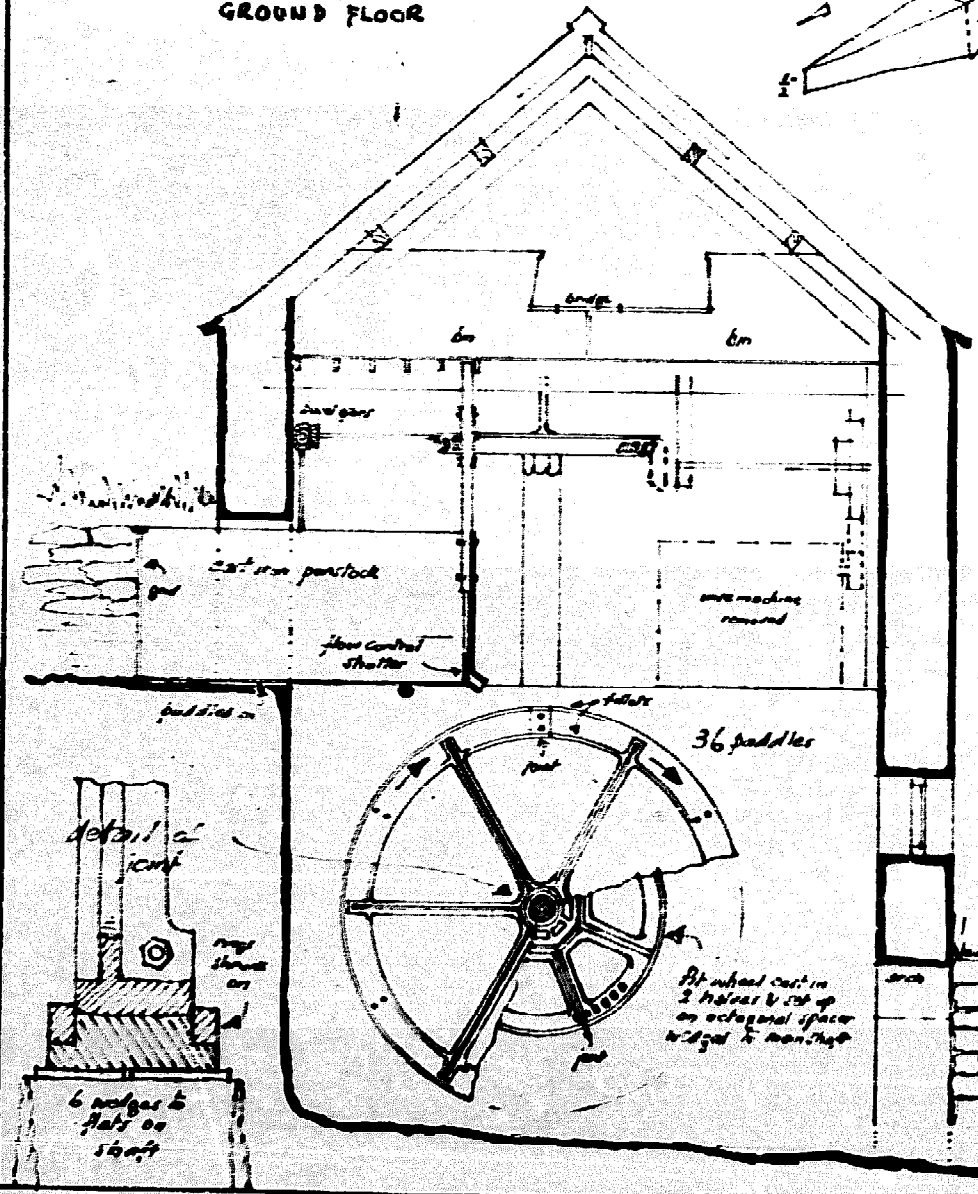
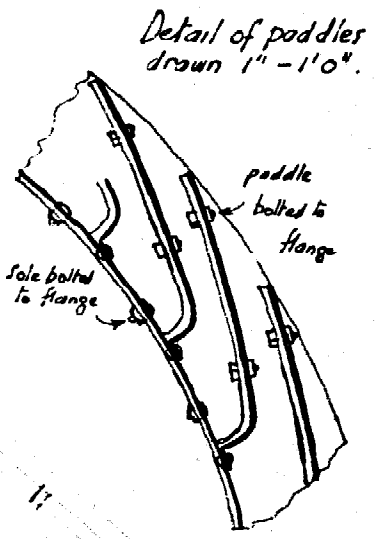
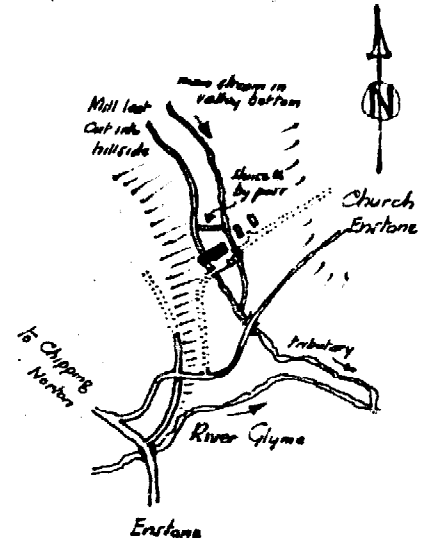
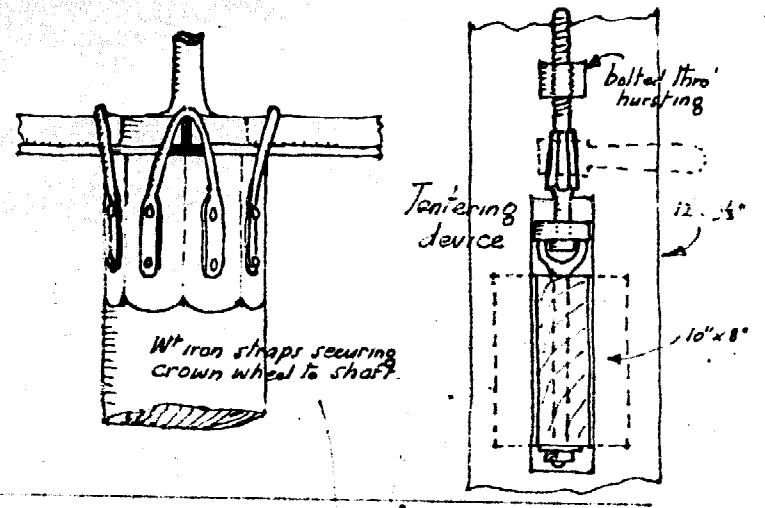
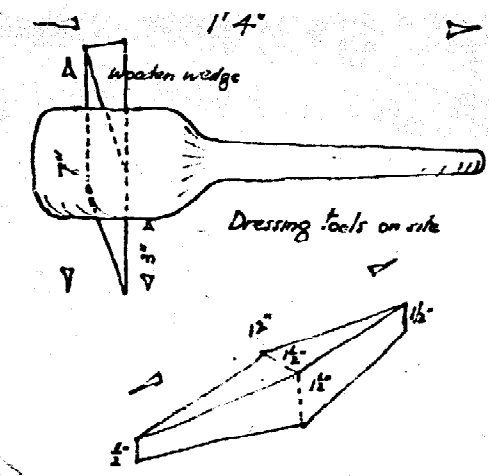
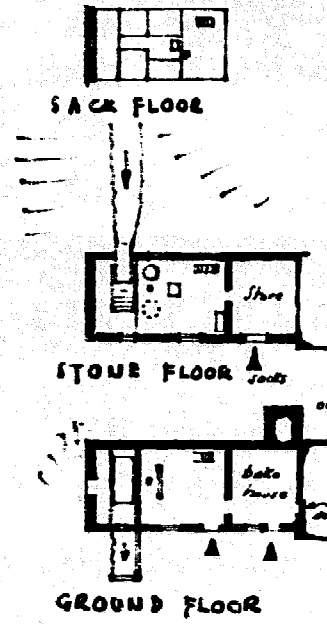
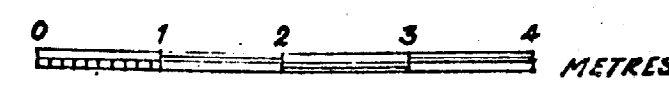
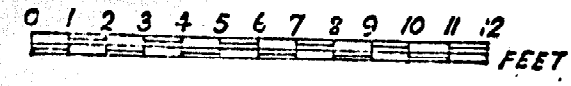
Heavy iron "foundation" frame to both runner & bed stones (trench burrs)

Two forms of tentering screws

CHURCH ENSTONE MILL . OXON .

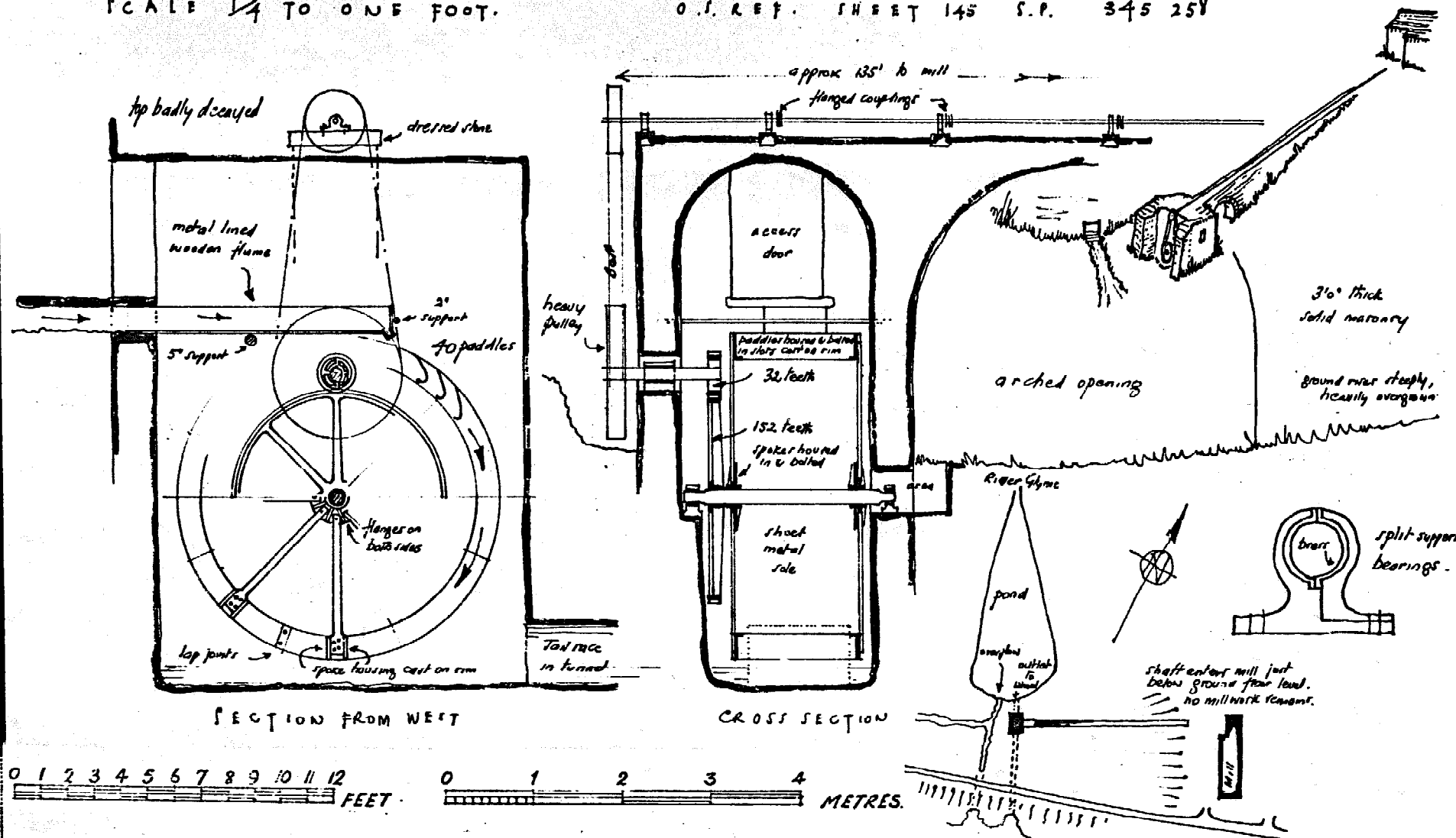
BY KIND PERMISSION OF MR IVINGS. OWNER.

SECTIONS DRAWN AT SCALE OF 1/4" TO 1'0".
BLOCK PLANS ~ ~ 1/32" TO 1'0".

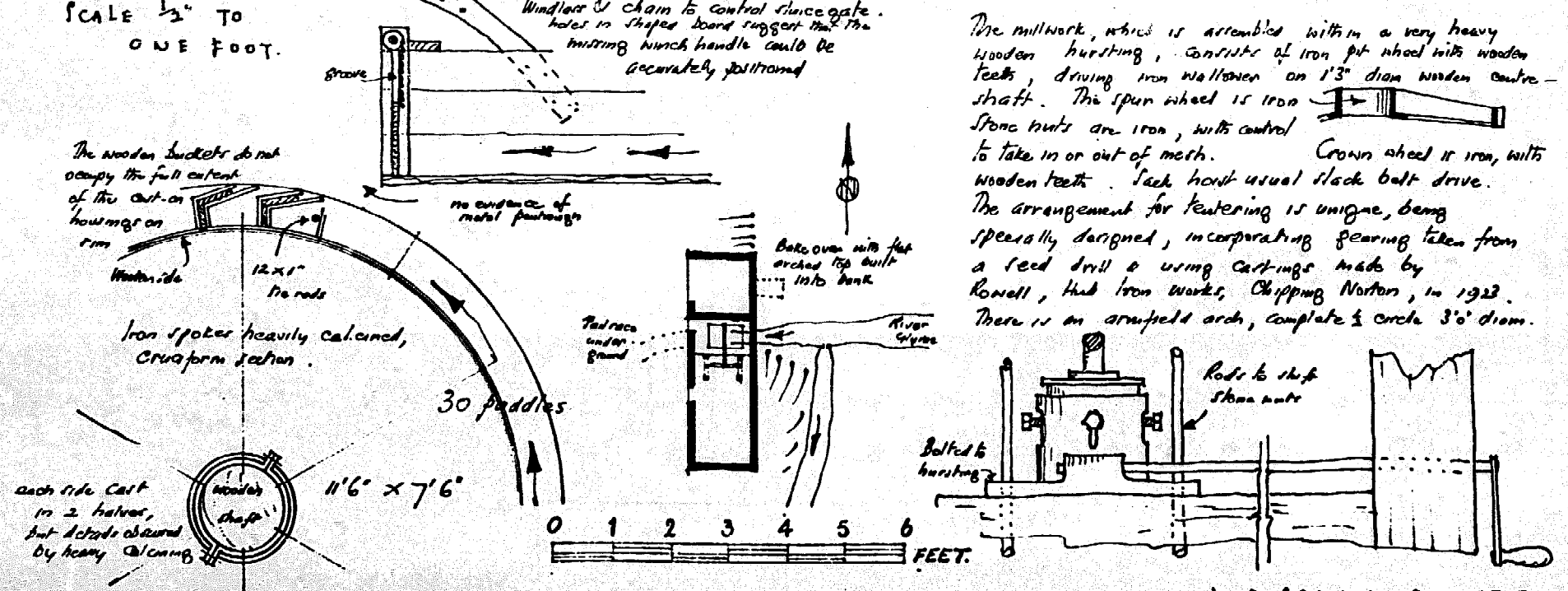


The downward extension of the bearings for the scapors arm spores of the spur wheel suggest there was a previous watermill with timber spores

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

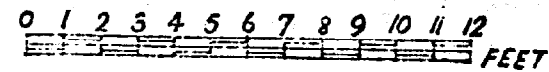


The millwork, which is assembled within a very heavy wooden hursting, consists of iron pit wheel with wooden teeth, driving iron wallower on 1 3/4" diam wooden centre shaft. The spur wheel is iron. Stone nuts are iron, with control to take in or out of mesh. Crown wheel is iron, with wooden teeth. Each hour usual slack belt drive. The arrangement for feathering is unique, being specially designed, incorporating gearing taken from a seed drill & using castings made by Rowell, the iron works, Chipping Norton, in 1923. There is an armfield arch, complete to circle 3'6" diam.

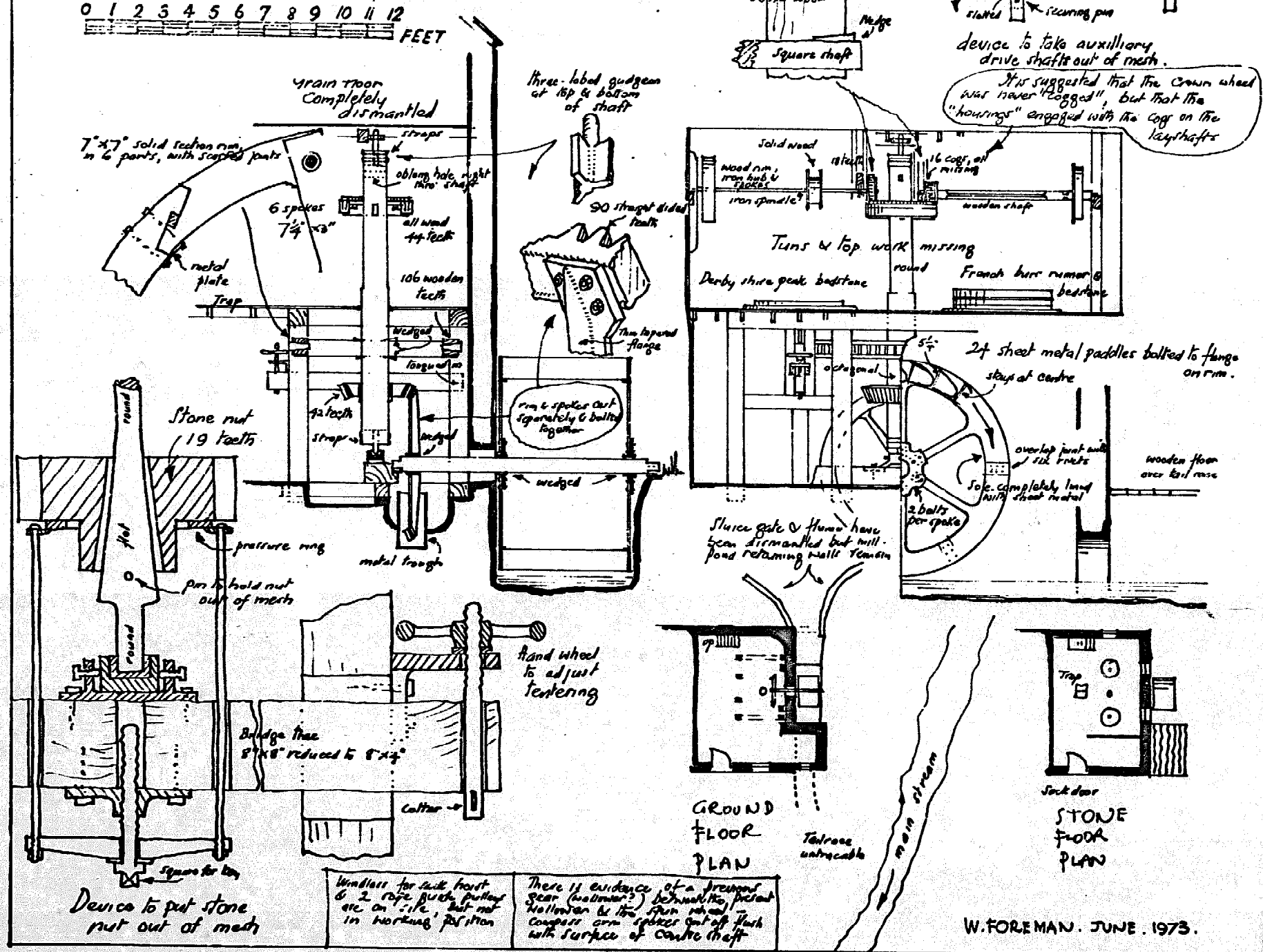
STADHAMPTON MILL, OXON.

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.



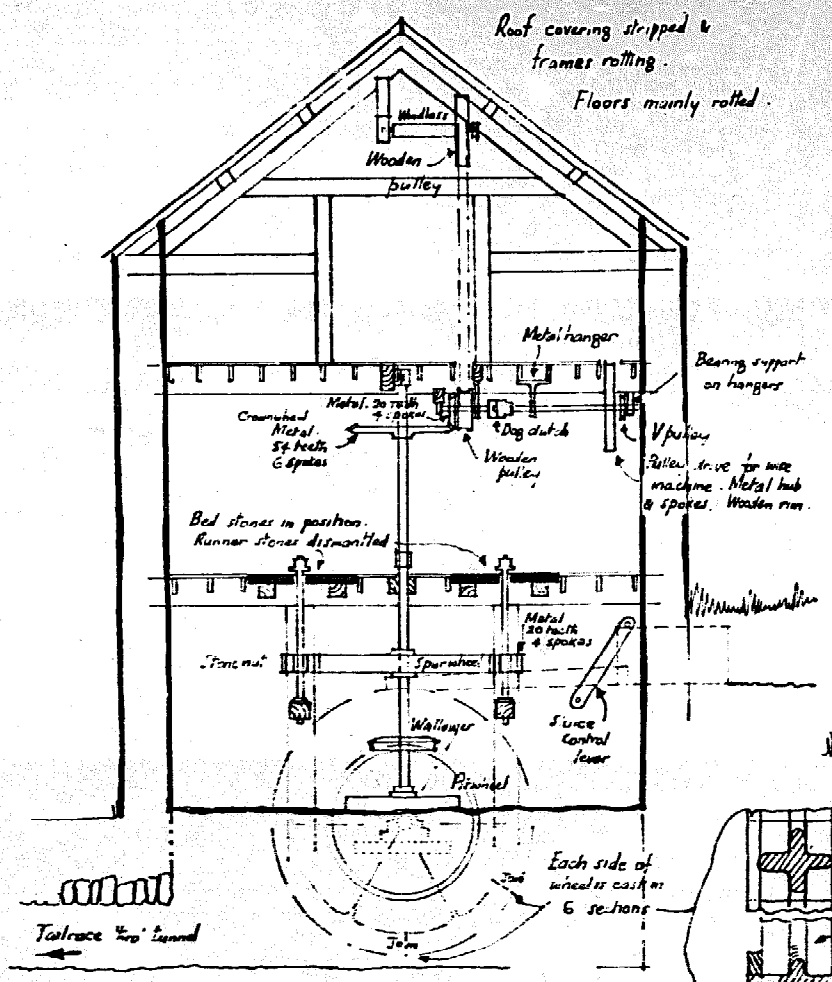
W. FOREMAN. JUNE. 1973.

WATER MILL

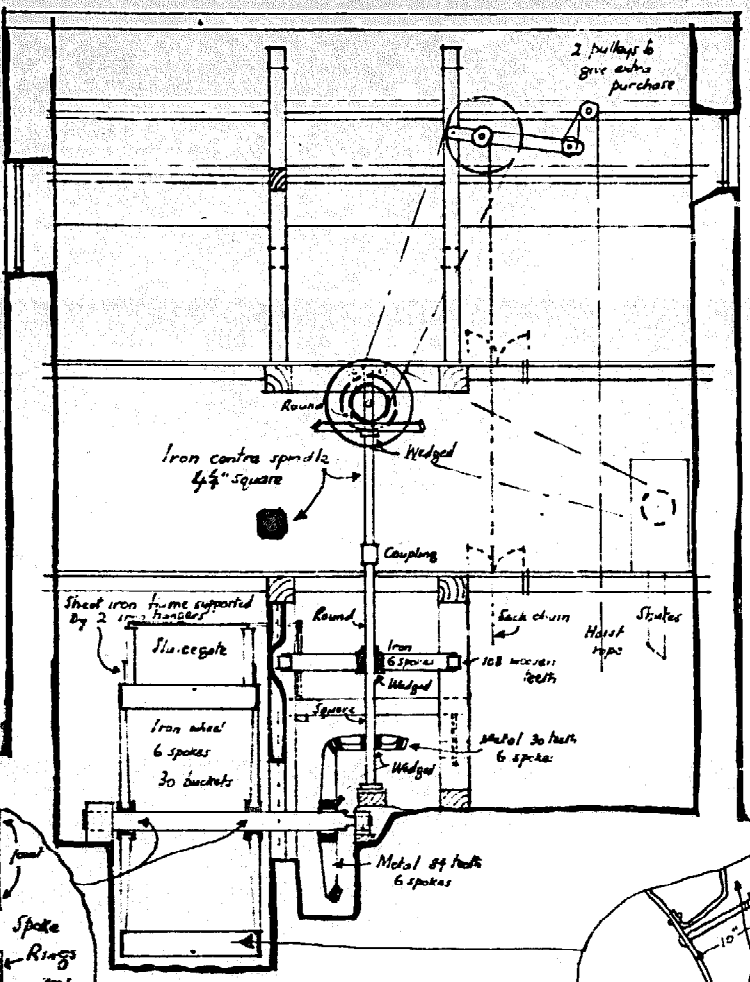
REF. SHEET 145.
S.P. 433 328

AT BARFORD ST MICHAEL OXFORDSHIRE

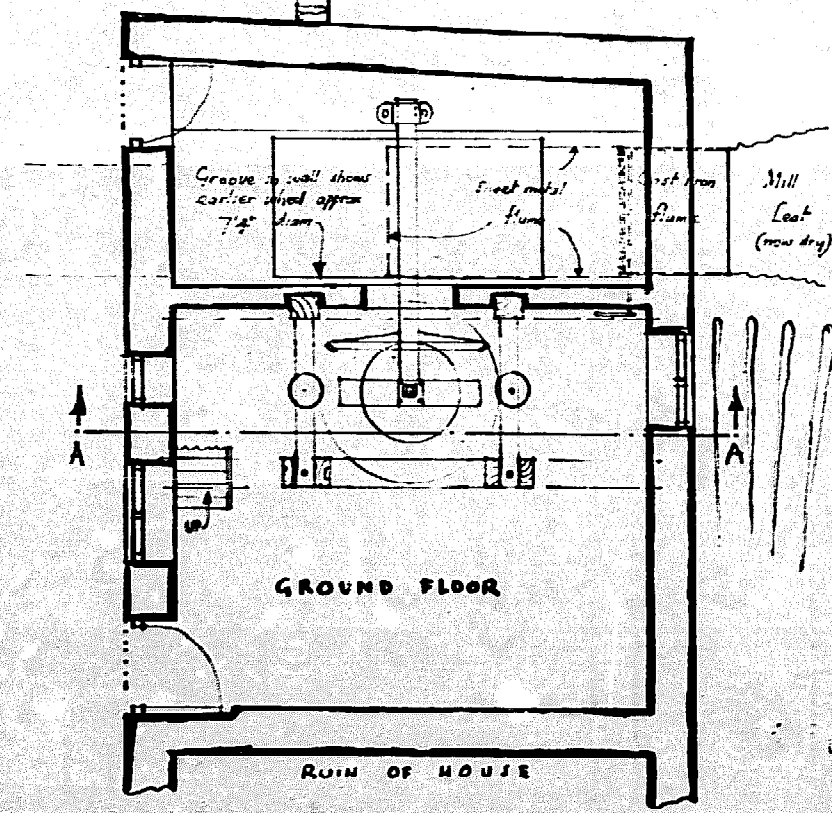
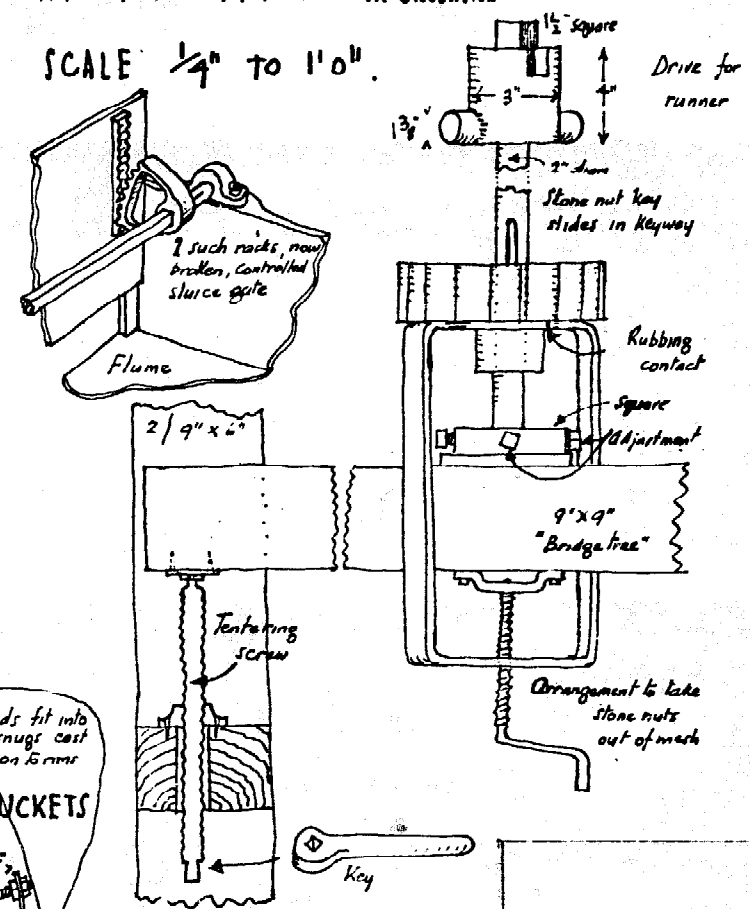
SCALE 1/4" TO 1'0"



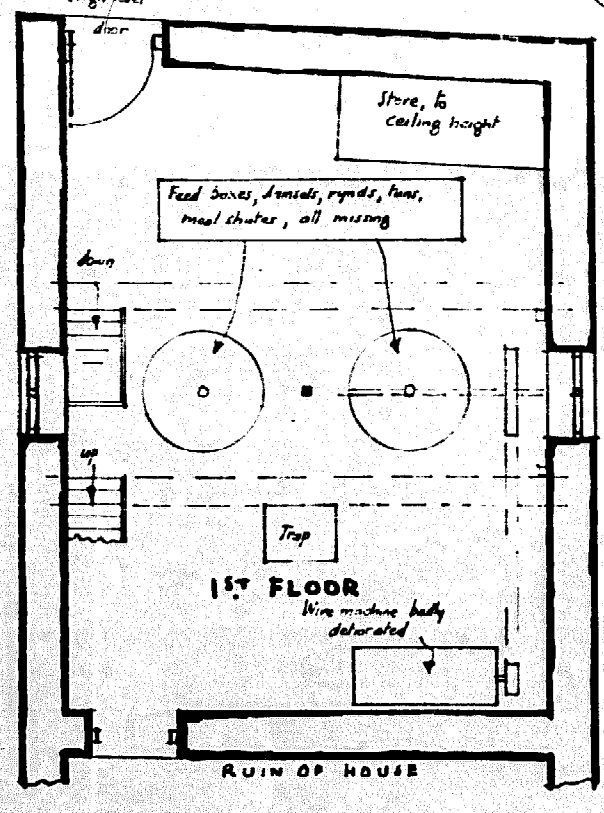
CROSS SECTION A-A



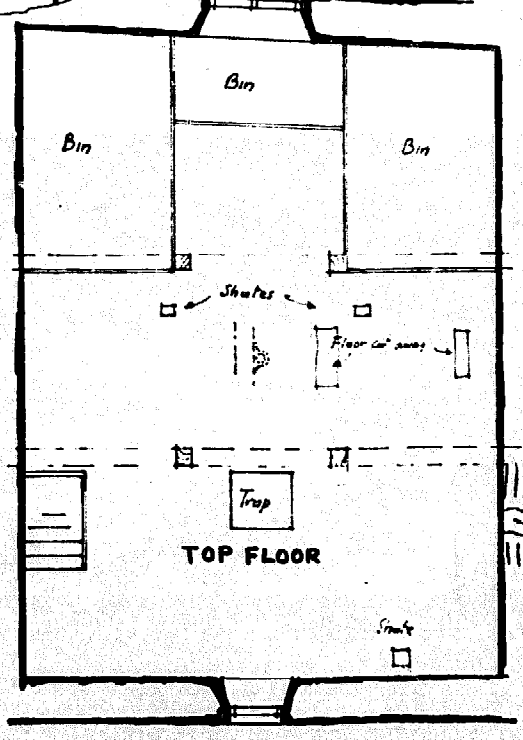
LONG SECTION



GROUND FLOOR

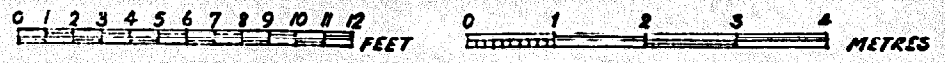
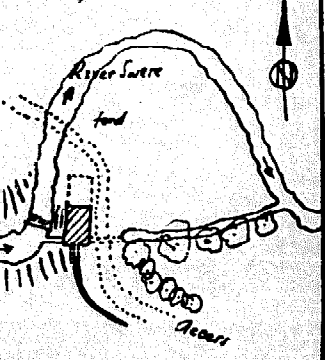


1ST FLOOR



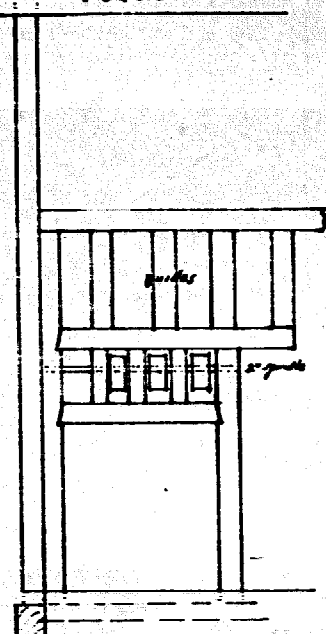
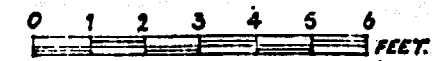
TOP FLOOR

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



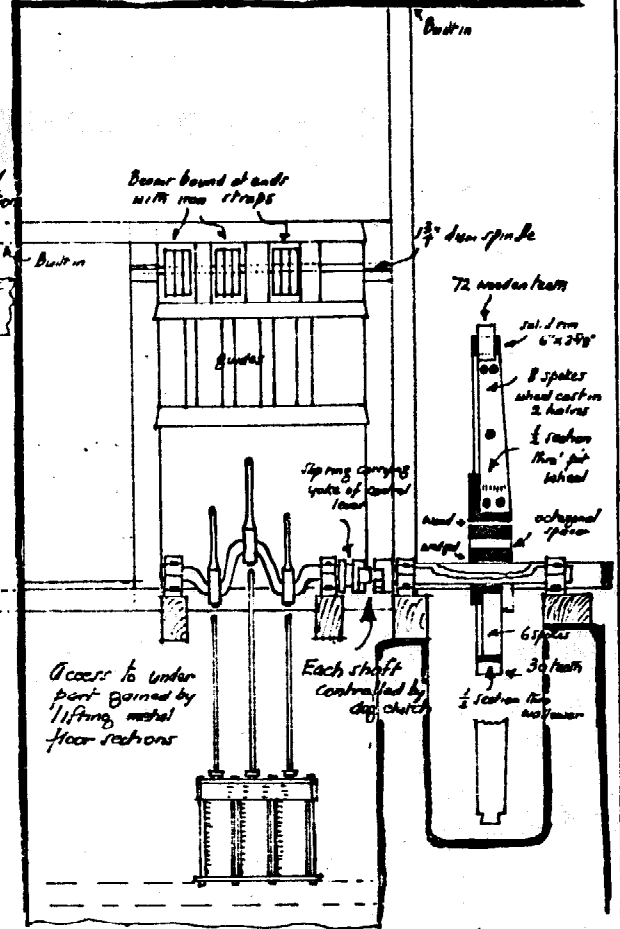
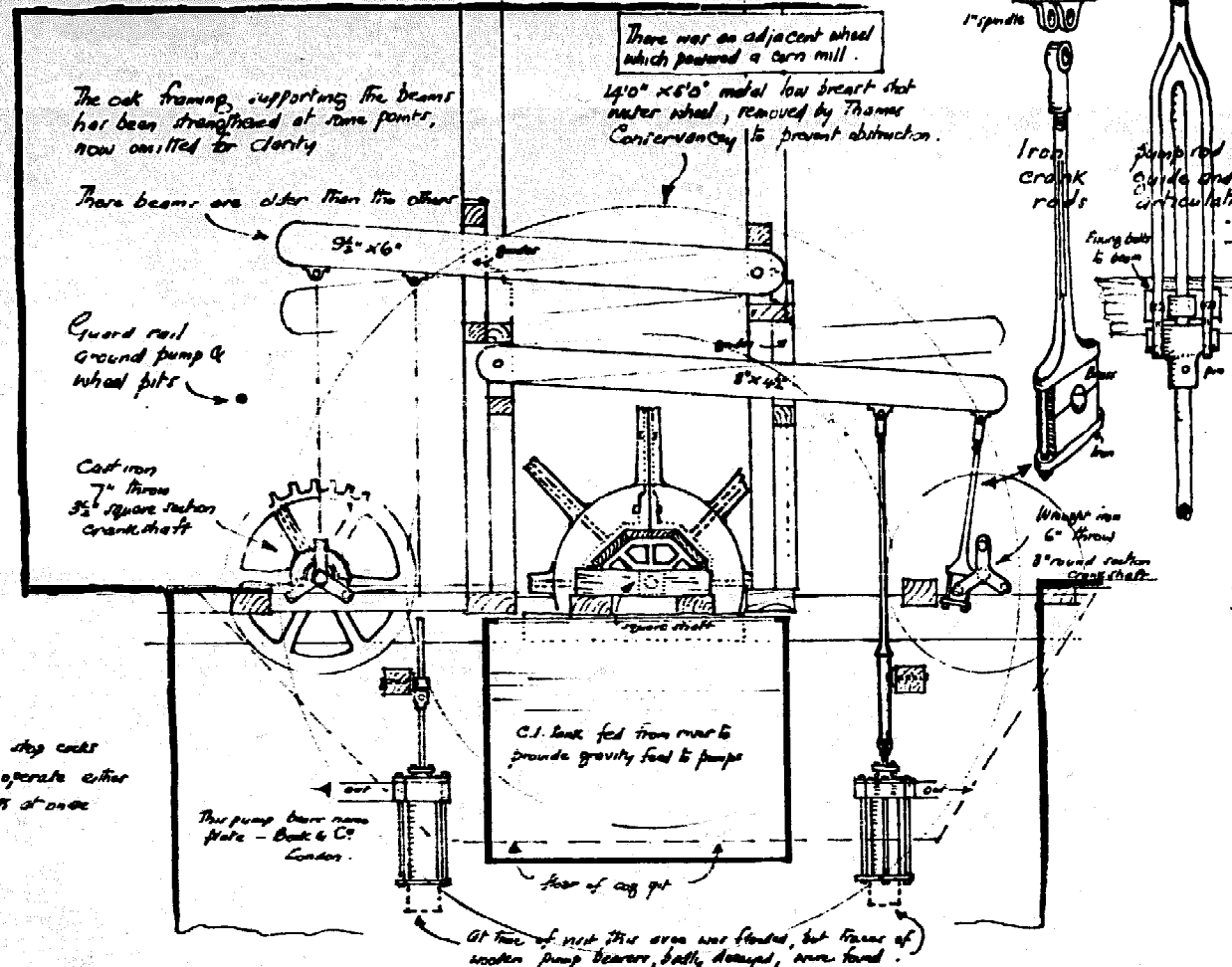
WATER PUMPS AT OLD WOODSTOCK . OXON .

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

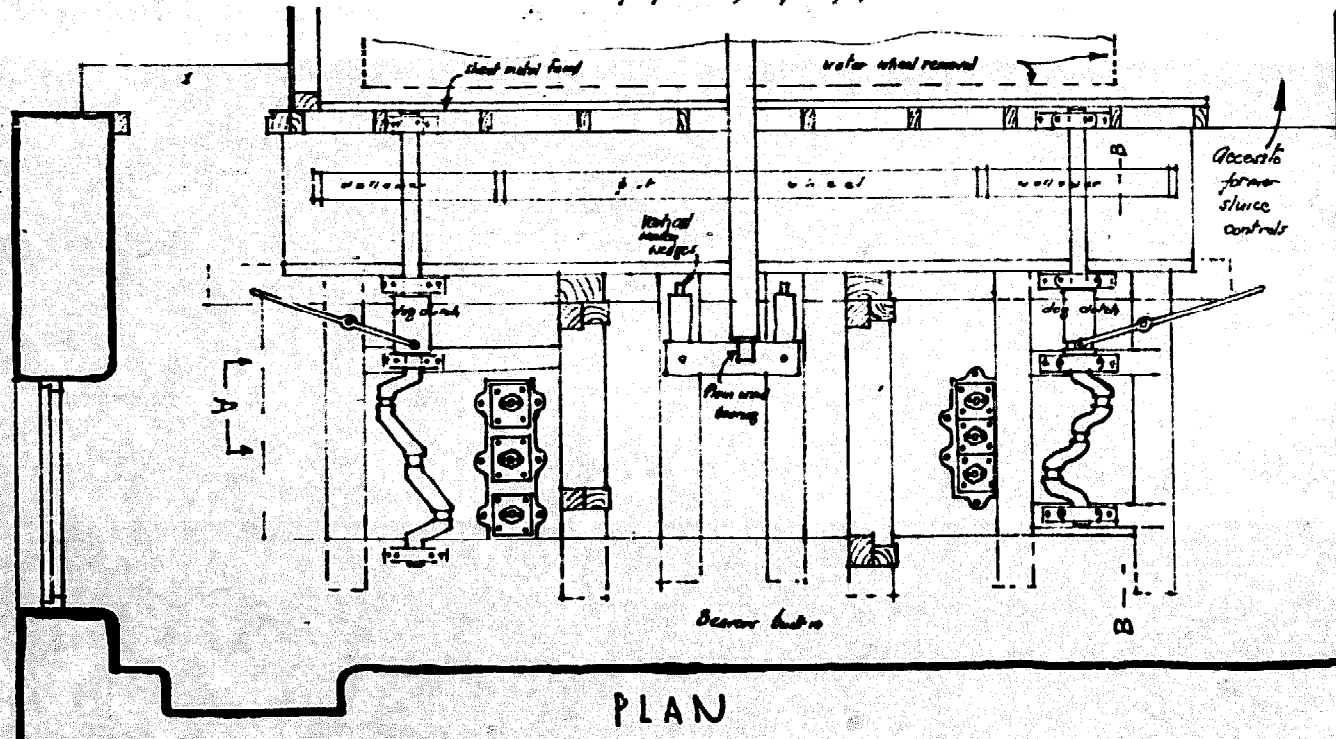


END VIEW "A"

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



SECTION ON "B-B"



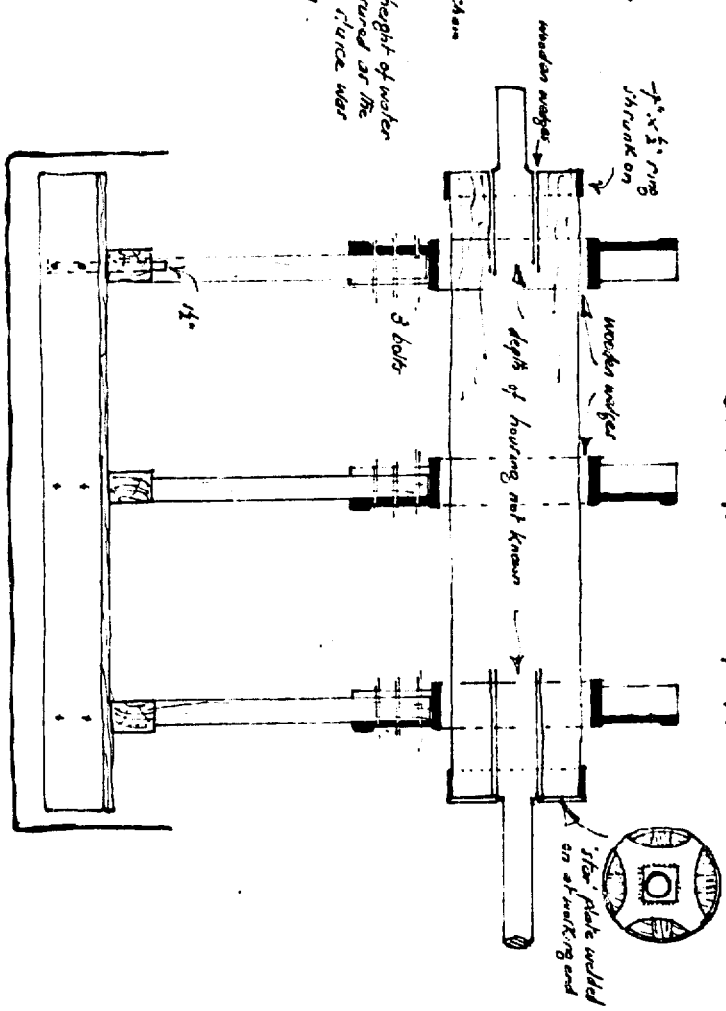
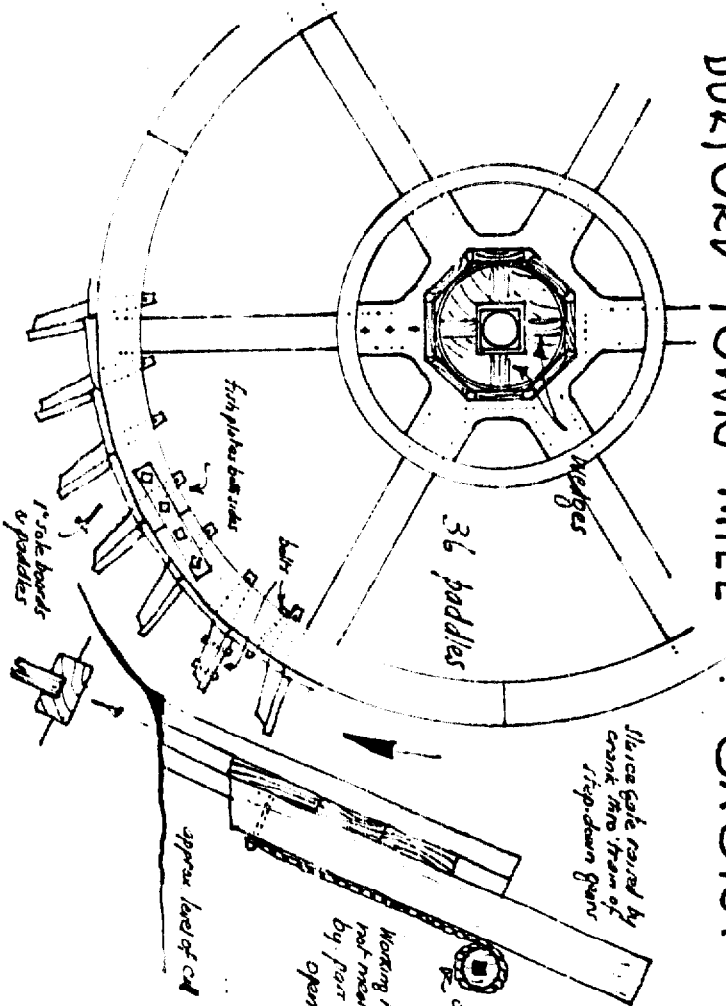
PLAN

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 Haverly. 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

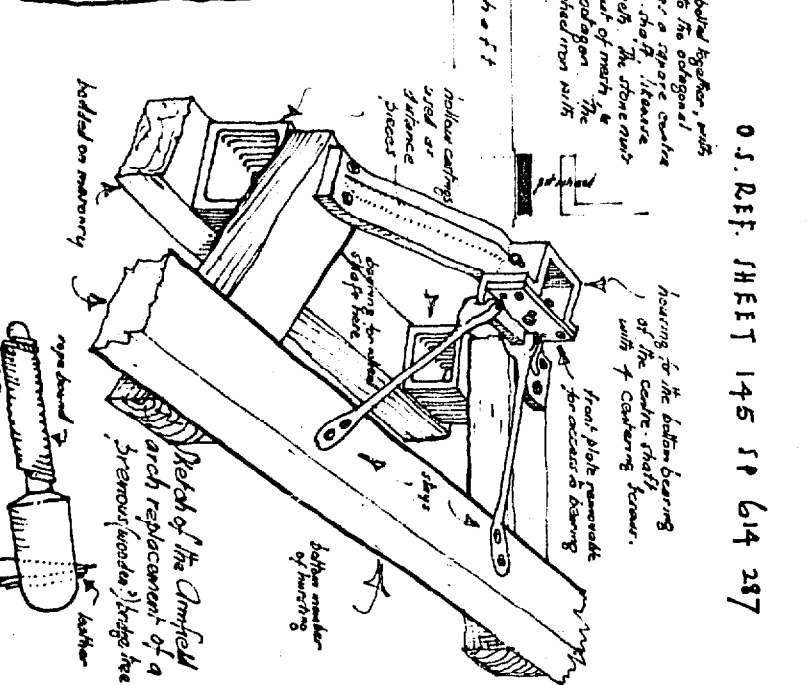
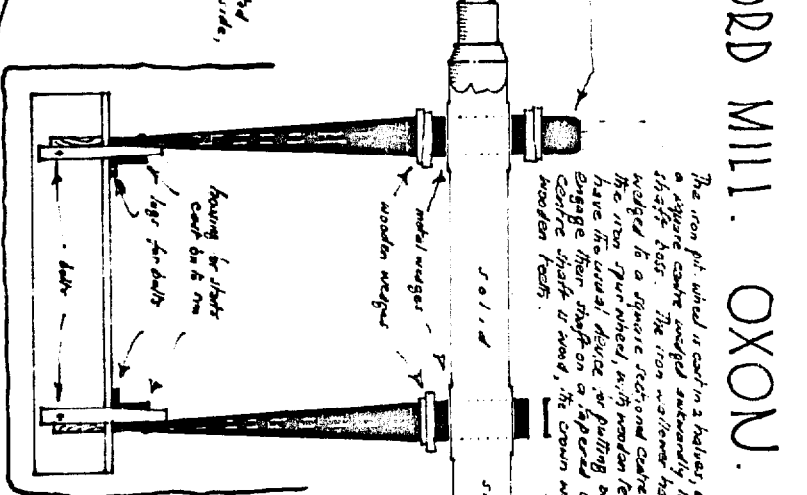
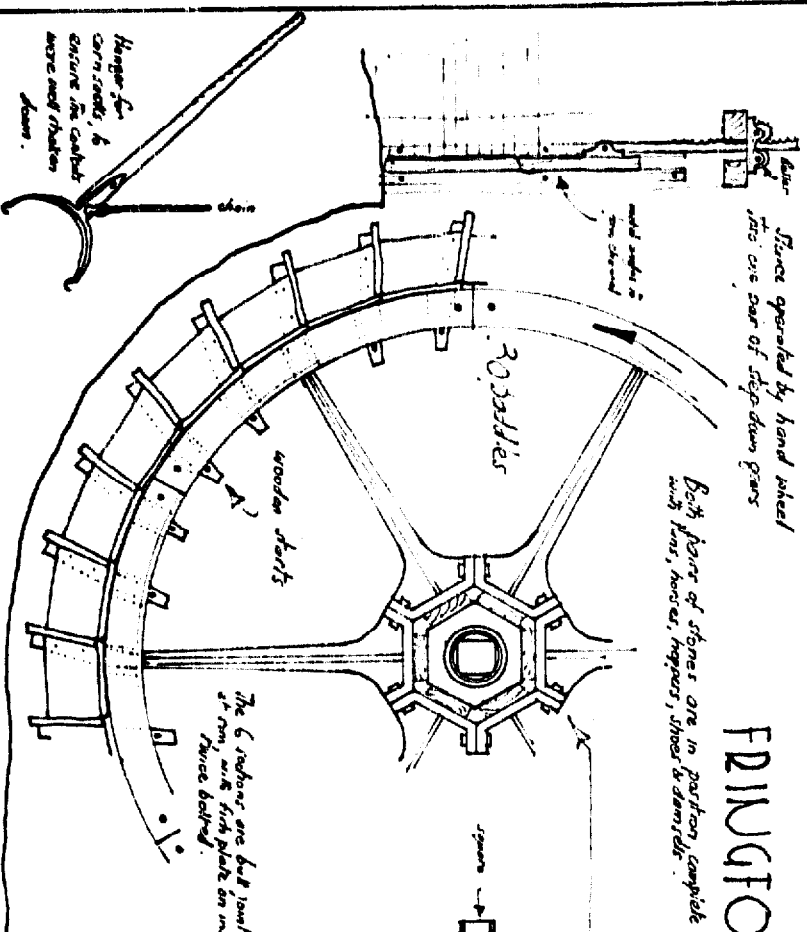


0 1 2 3 4 5 6 FEET.

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\"/>

by kind permission of the owner, Mark Waghorn.

W. FOREMAN. EN. 1974.

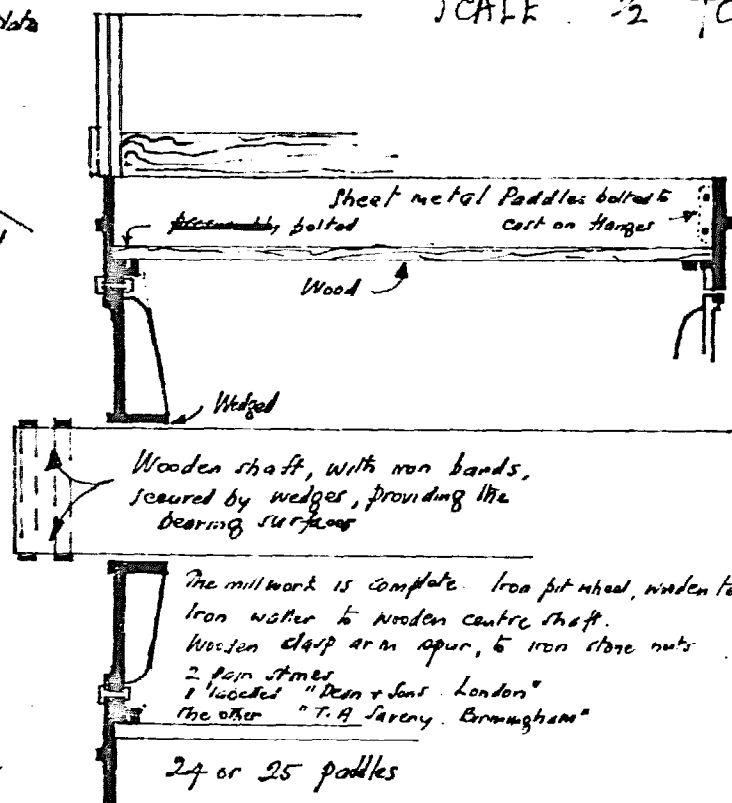
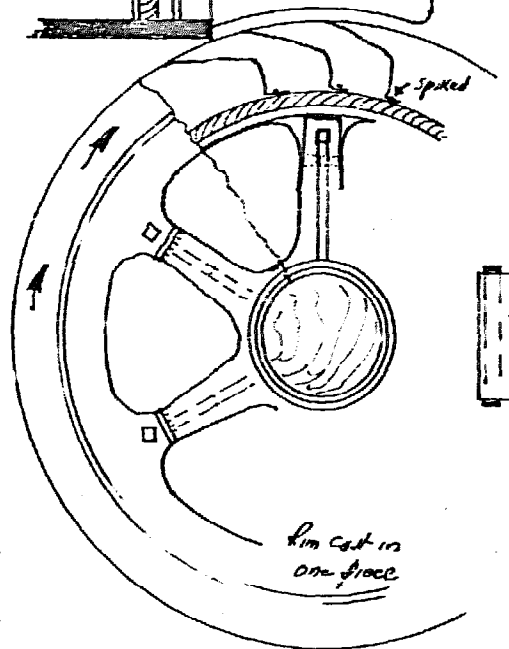
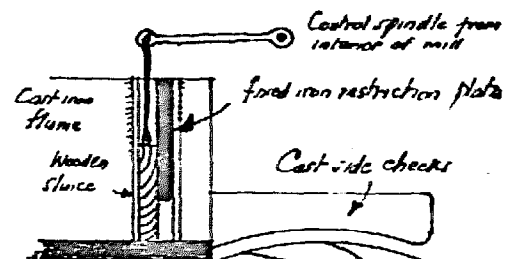
BROADWELL MILL. OXON.

SHEET 157 270.015

LITTLE CLANFIELD MILL.

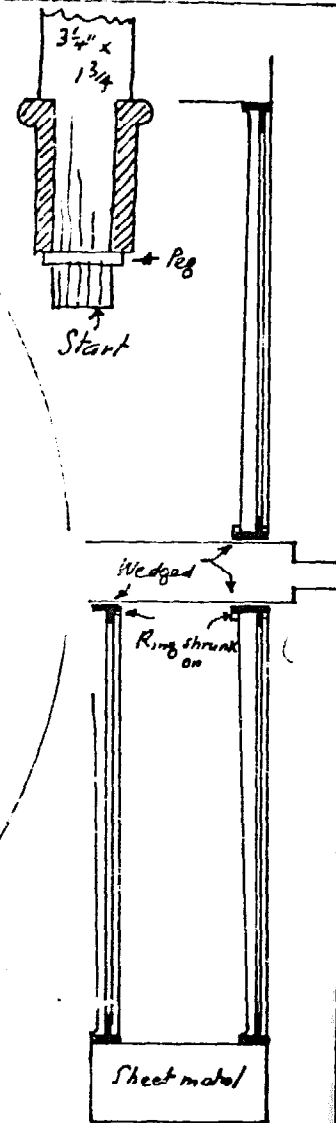
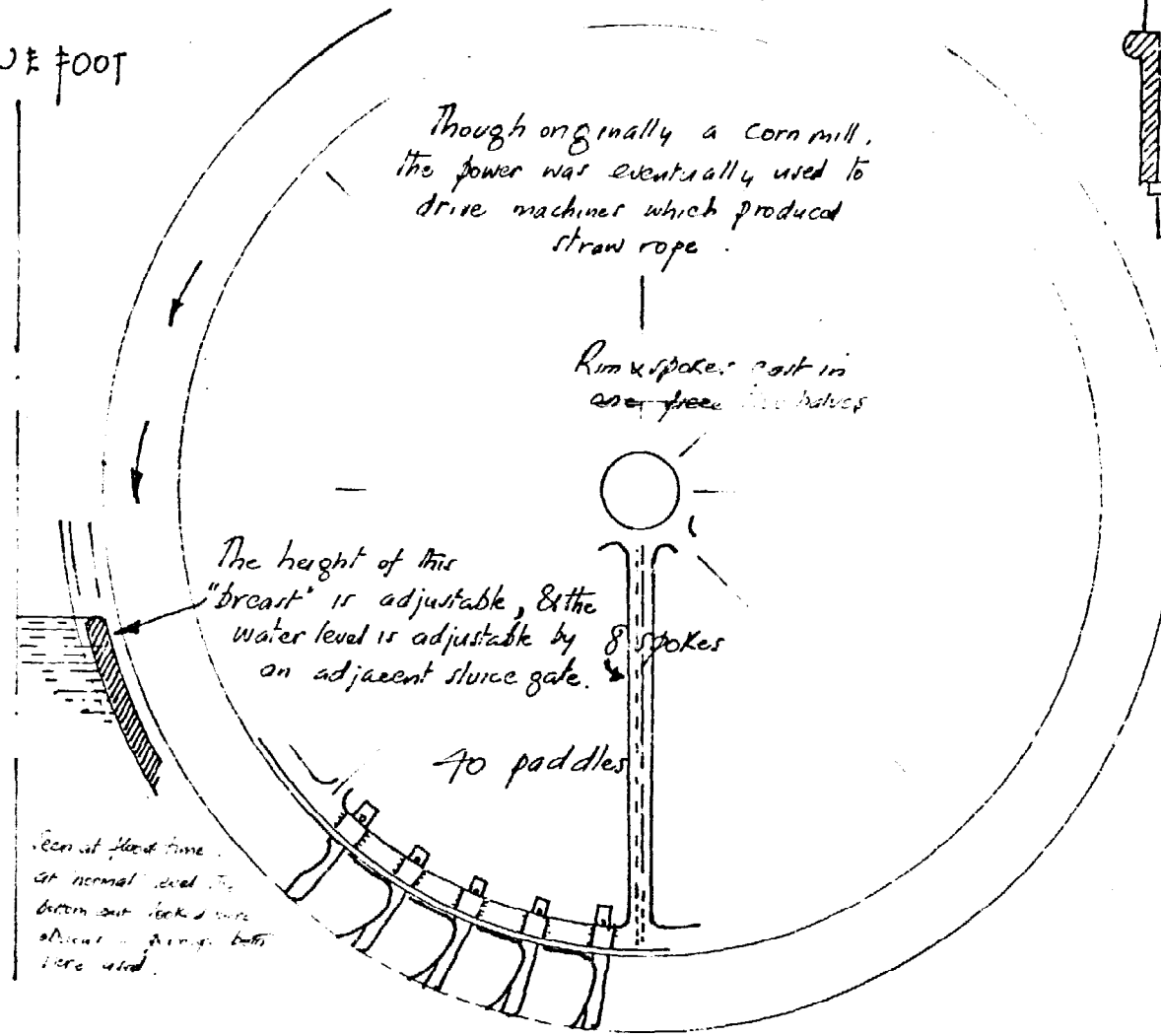
SHEET 157 256 025

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



Though originally a corn mill, the power was eventually used to drive machines which produced straw rope.

Rim & spoke cast in one piece in cast-iron

The height of this "breast" is adjustable, & the water level is adjustable by 8 spokes on adjacent sluice gate.

70 paddles

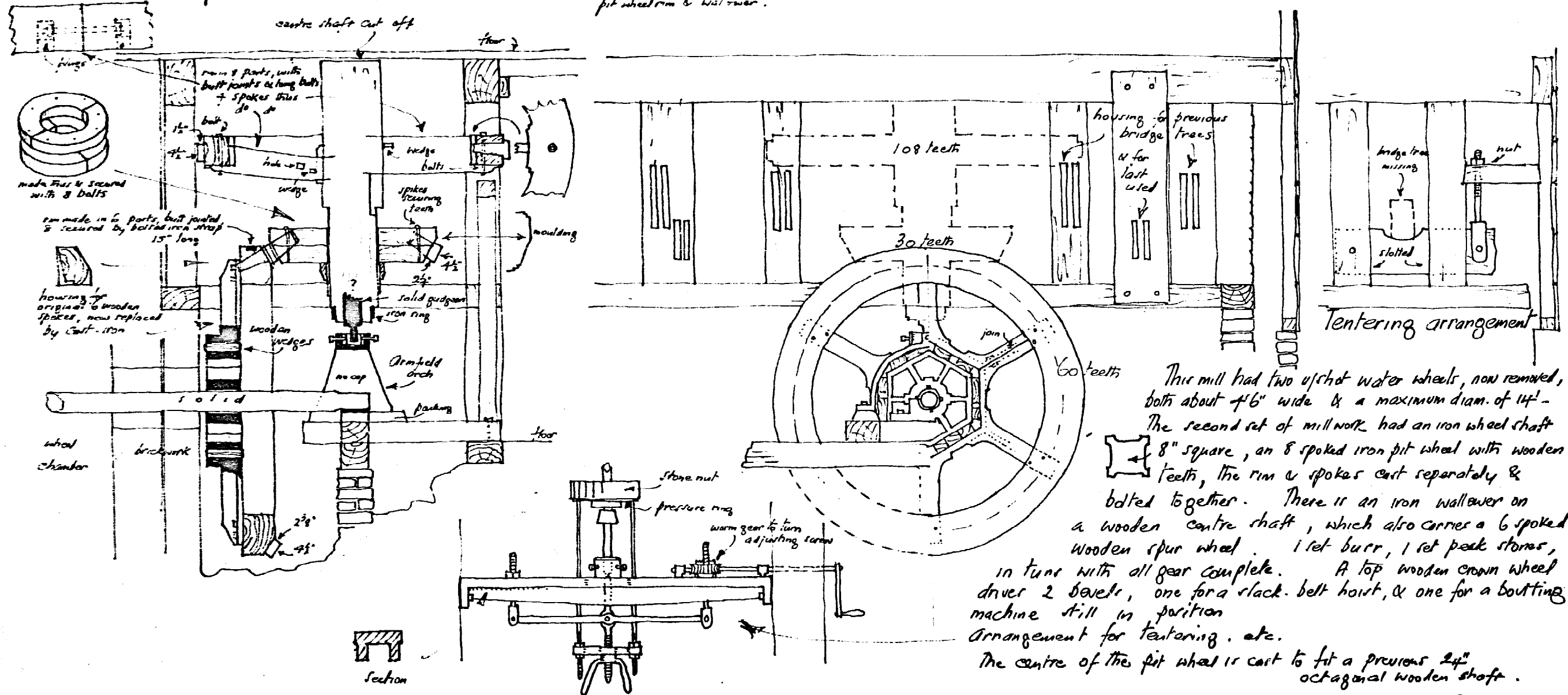
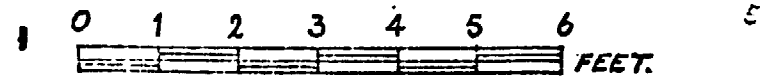
Open at flood time. At normal level the bottom out-lets are closed - 8 spokes both here used.

OVERY MILL . DORCHESTER . OXON .

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

ORIGINAL WOODEN MILLWORK .

fit wheel rim & wallower .



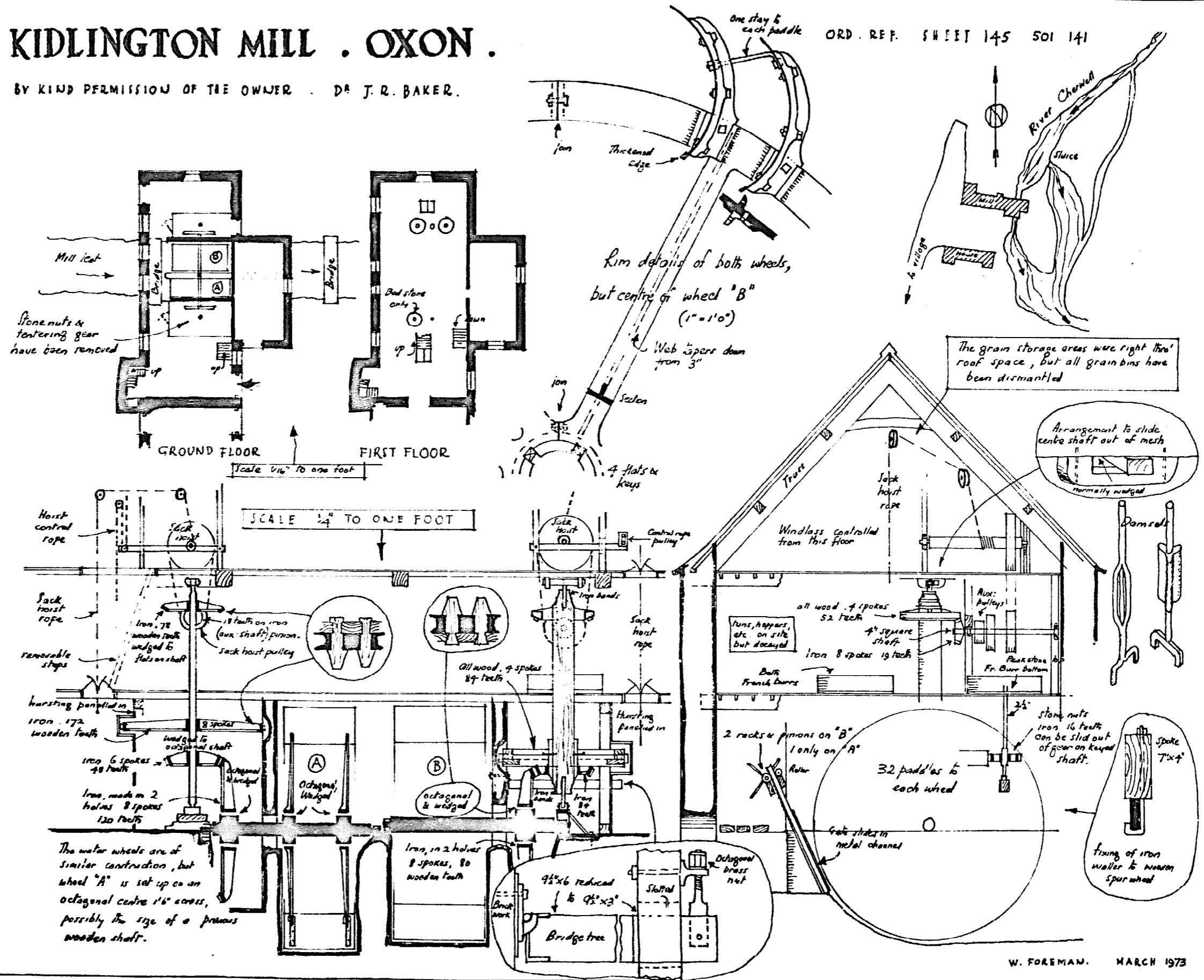
This mill had two upshot water wheels, now removed, both about 4'6" wide & a maximum diam. of 14' -
 The second set of millwork had an iron wheel shaft 8" square, an 8 spoked iron pit wheel with wooden teeth, the rim & spokes cast separately & bolted together. There is an iron wallower on a wooden centre 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



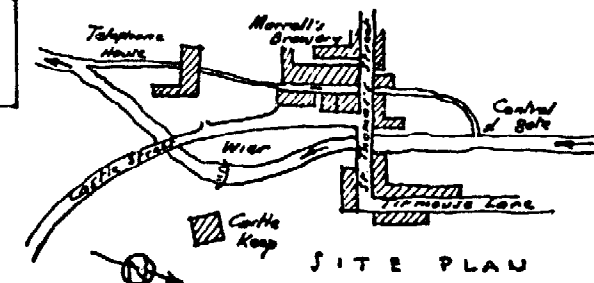
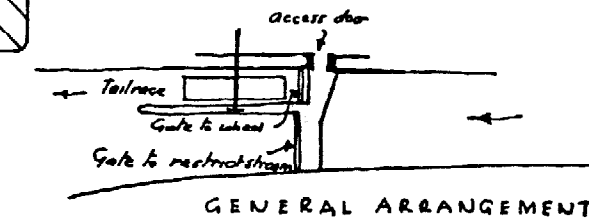
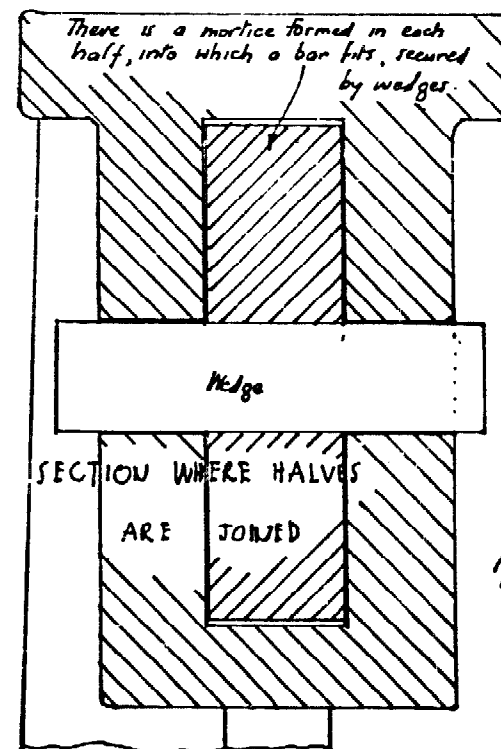
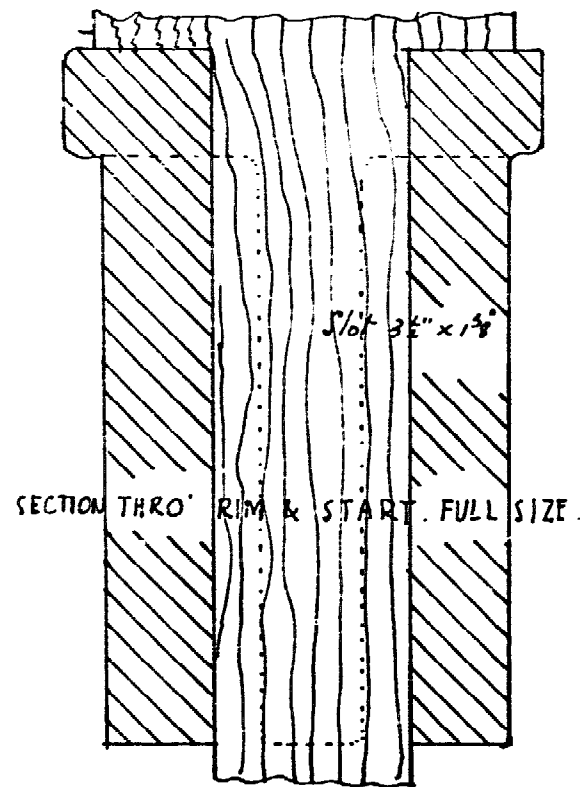
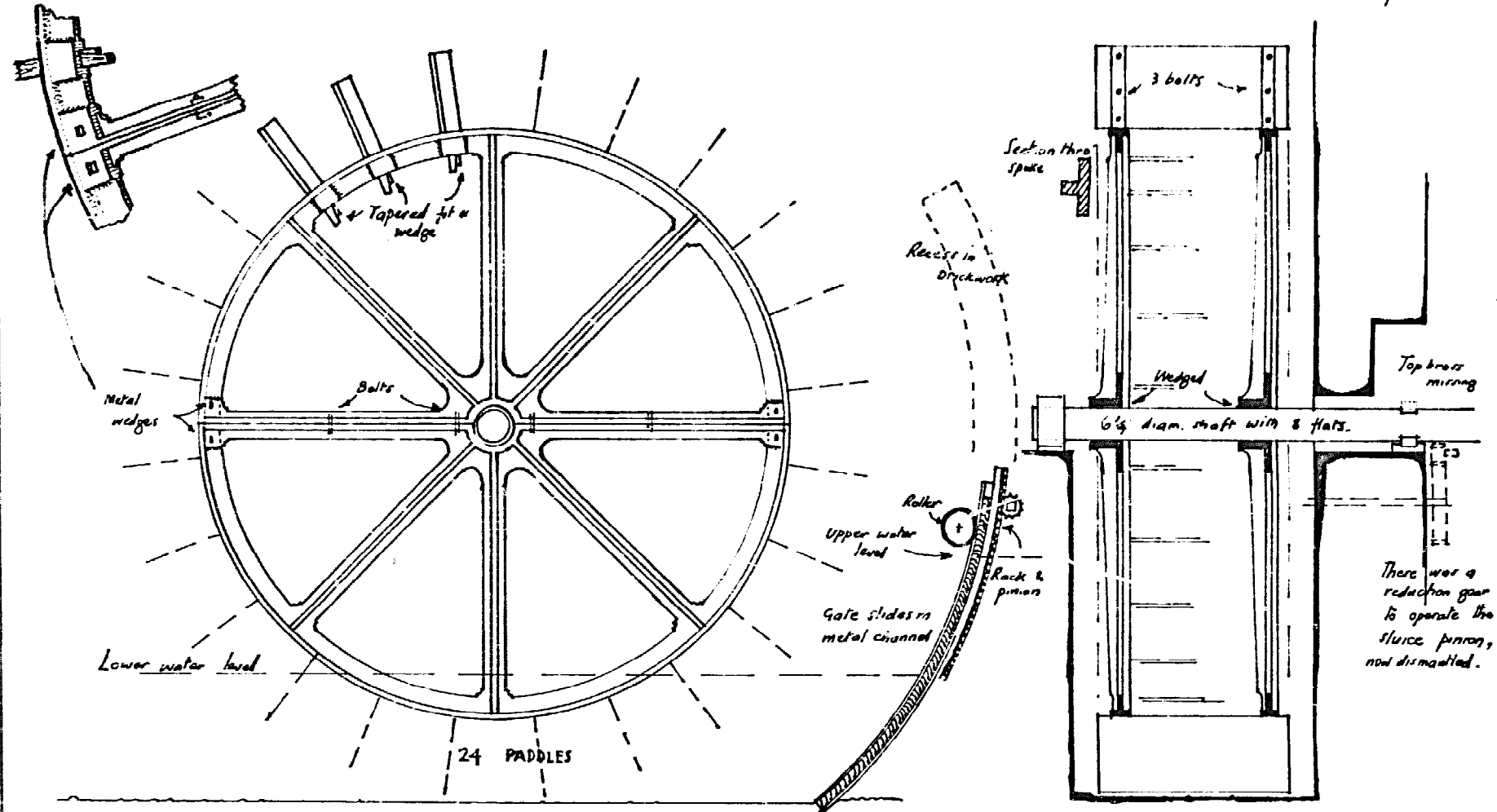
WATER WHEEL .

MORRELL'S BREWERY .

OXFORD

SCALE . HALF INCH TO ONE FOOT.

Cast iron frame with wooden starts and paddles



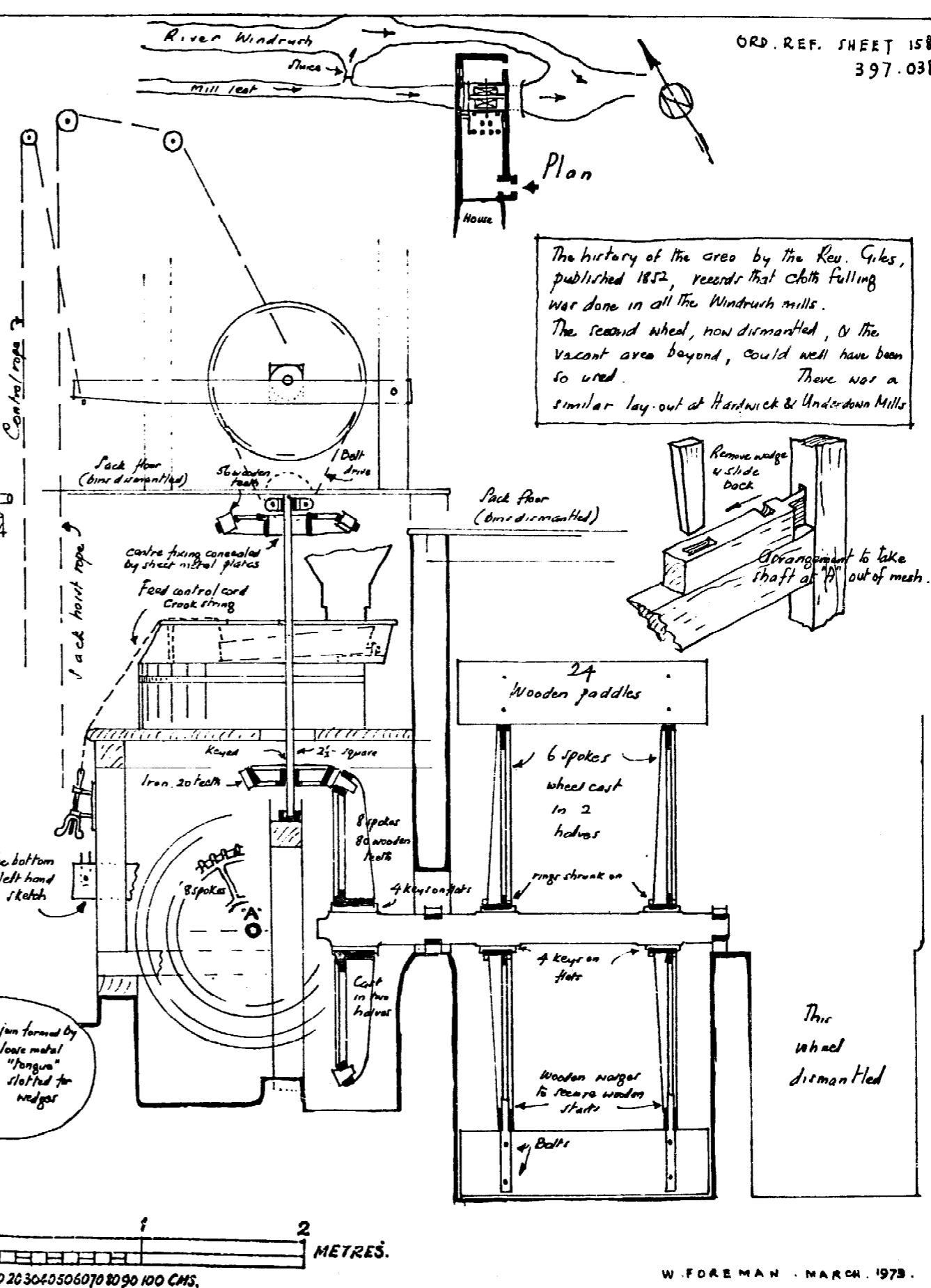
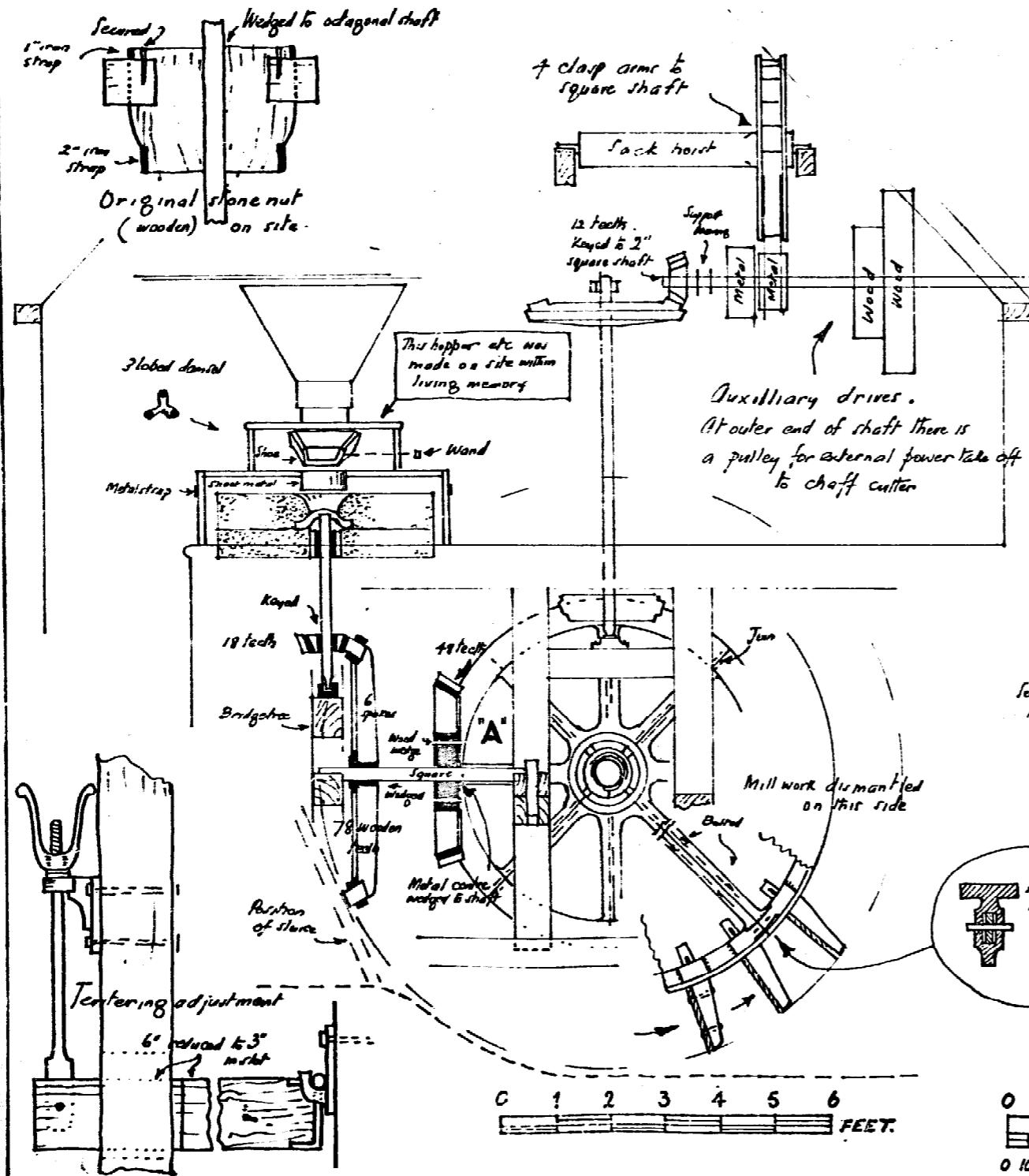
W. FOREMAN. 10.7.72

CHURCH MILL. STANDLAKE.

BY KIND PERMISSION OF MRS H. F. COLLINS.

SCALE 1/2" TO ONE FOOT.

ORD. REF. SHEET 158.
397.038.

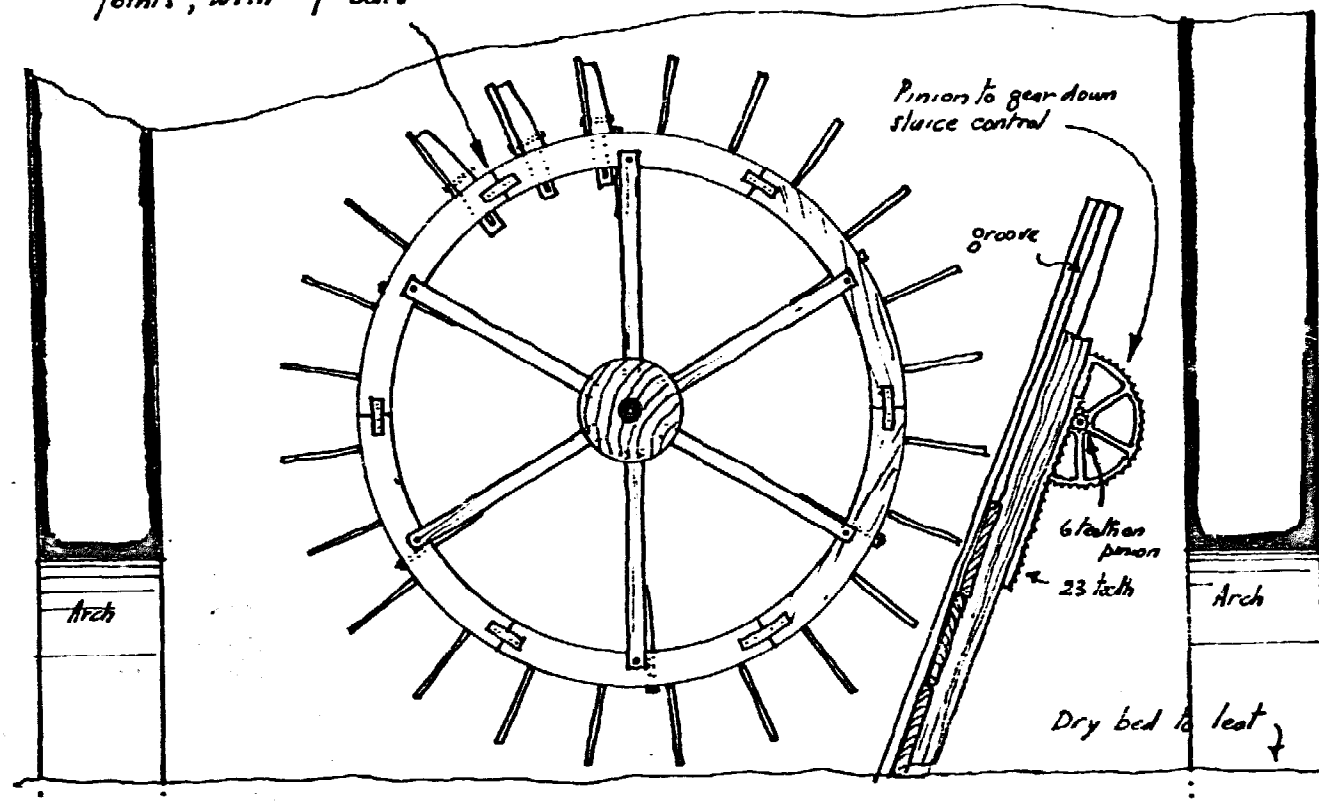
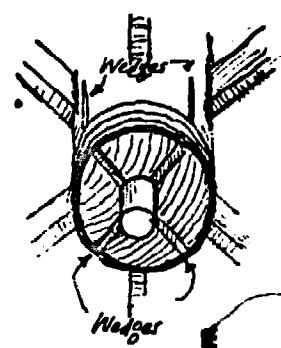


THE FISH HOUSE . N^R. DUCKLINGTON . OXON .

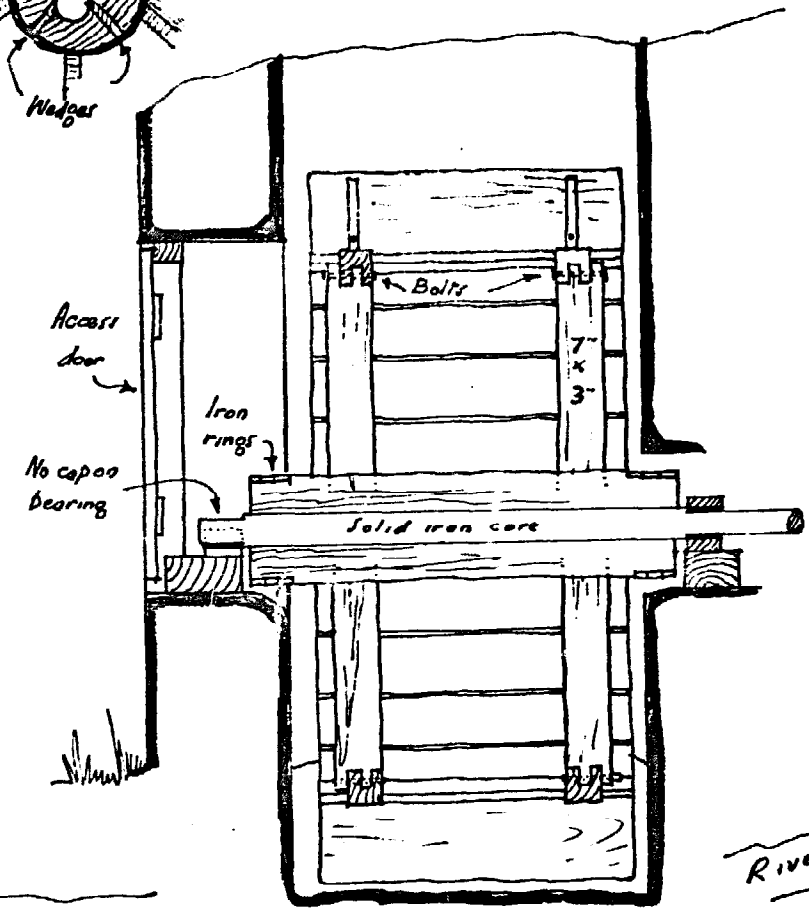
ORDS. REF. S.P. 373 066

SCALE . HALF INCH TO ONE FOOT.

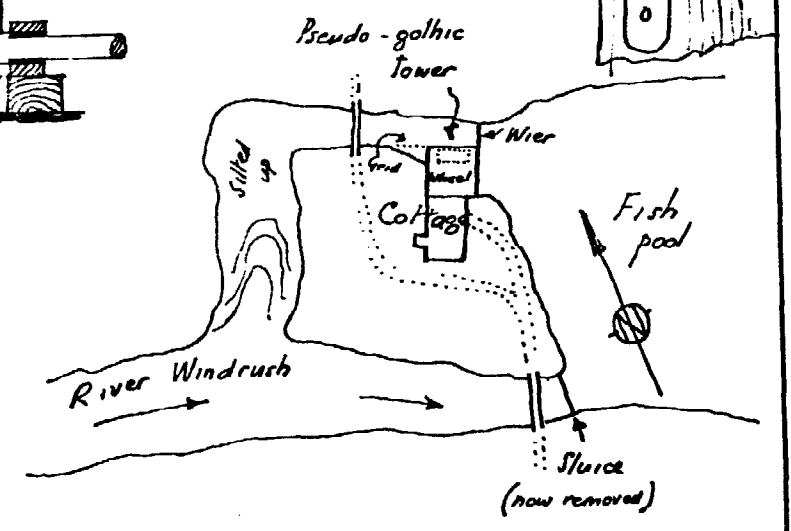
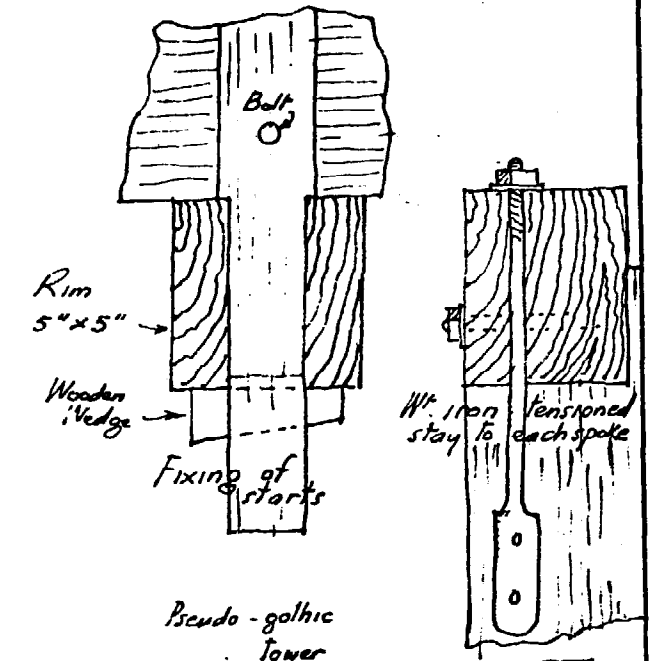
2" iron plates on both sides of rim at butt joints, with 4 bolts



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,

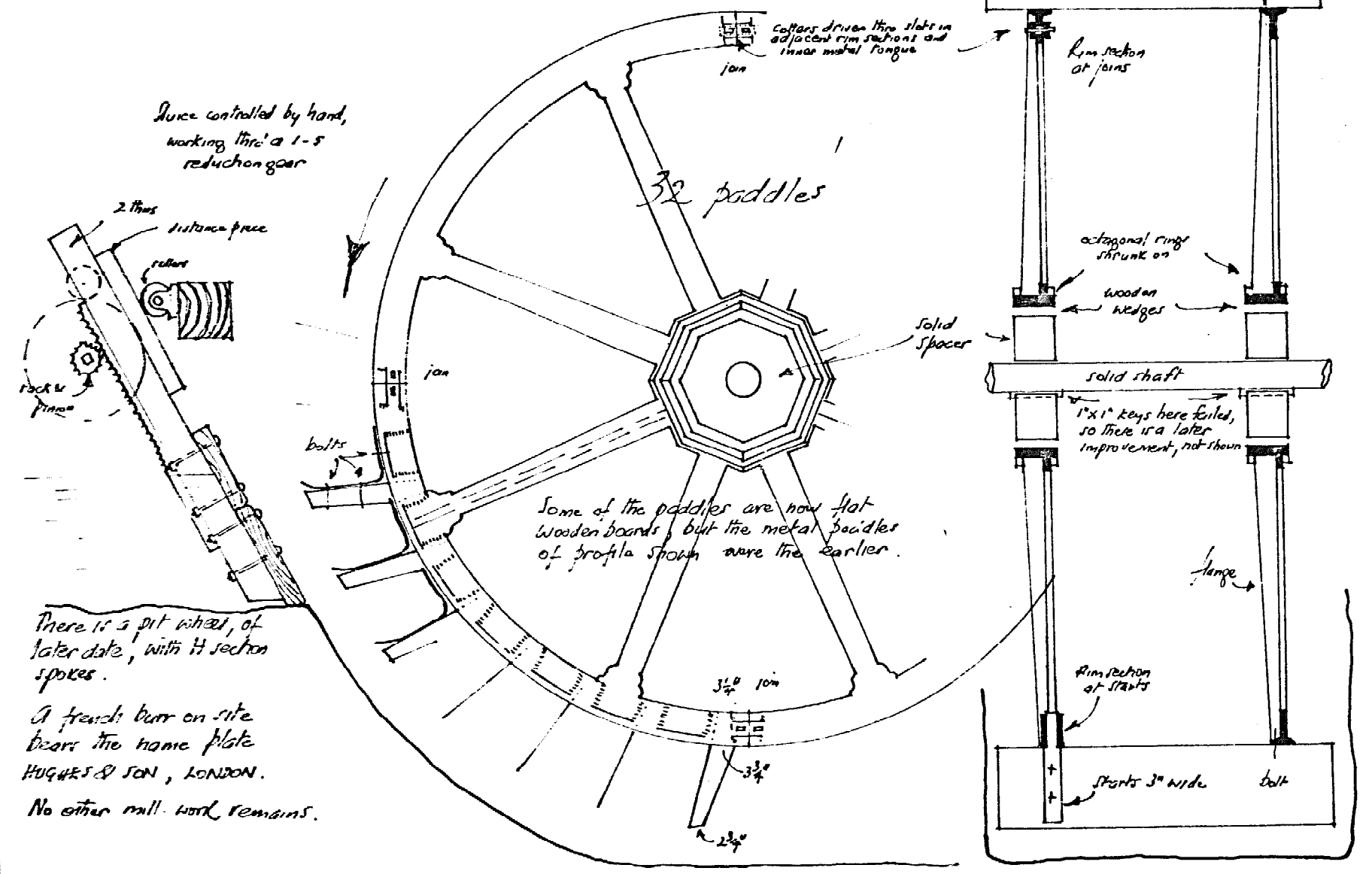
& PUMPED WATER FOR COKE THORPE HOUSE TILL 1950.

W. FOREMAN . JAN. 1973

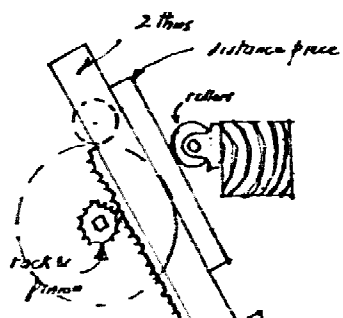
FLIGHTS MILL, KIRTLINGTON. OXON.

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

SCALE HALF INCH TO ONE FOOT.



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



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.

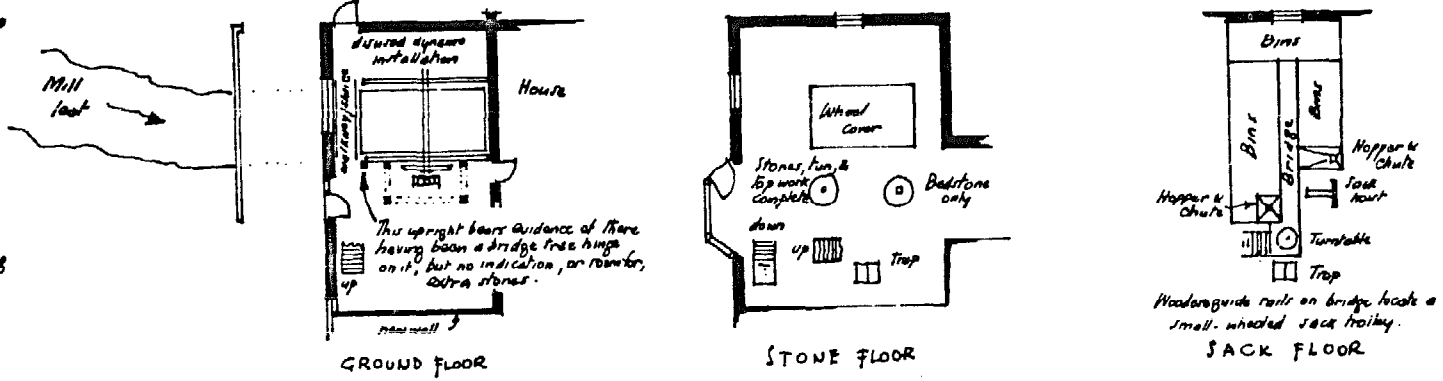
By kind permission of the owner, restorer, Mr. L. J. GILES.

W. FOREMAN JAN. 1974

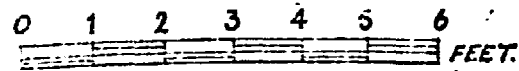
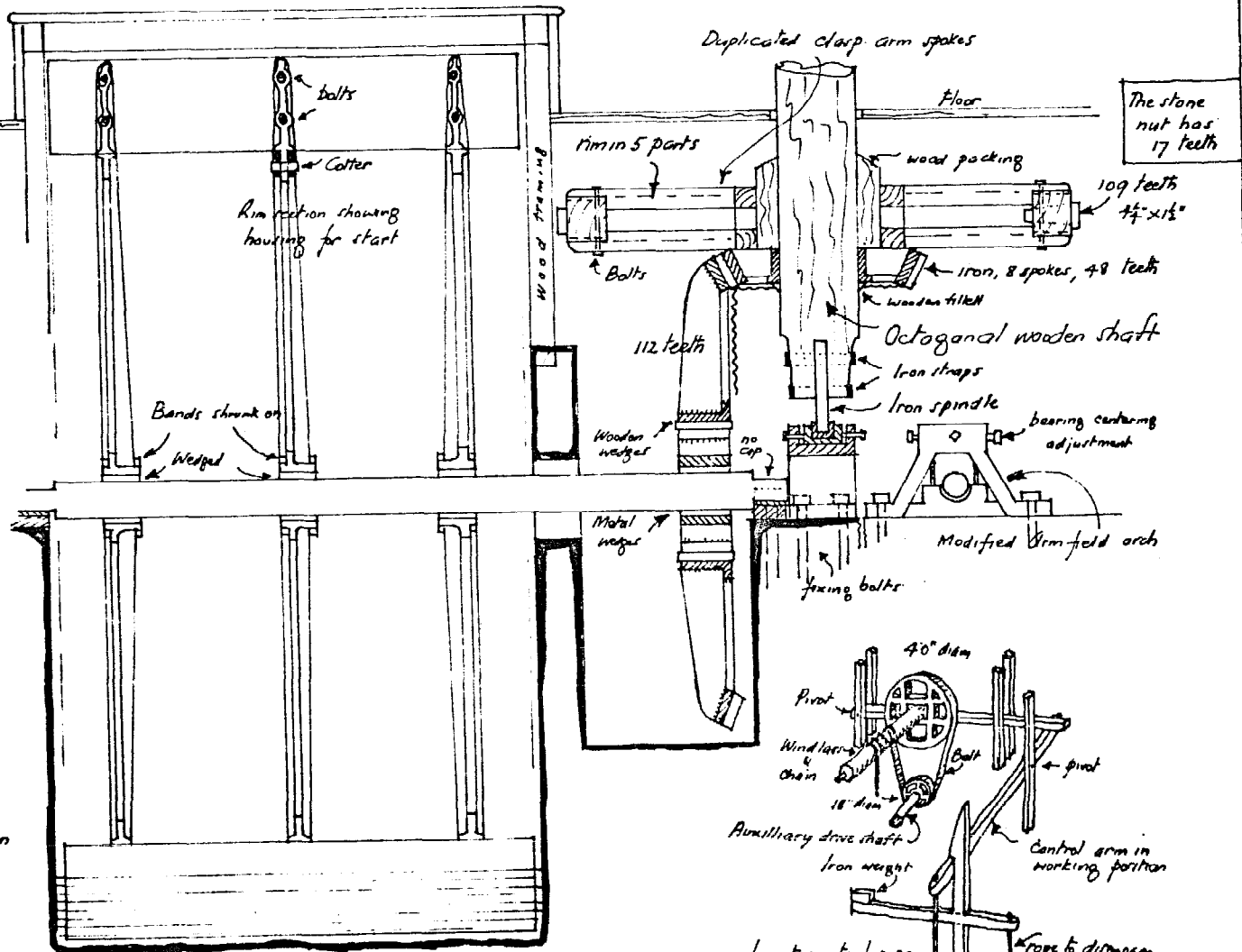
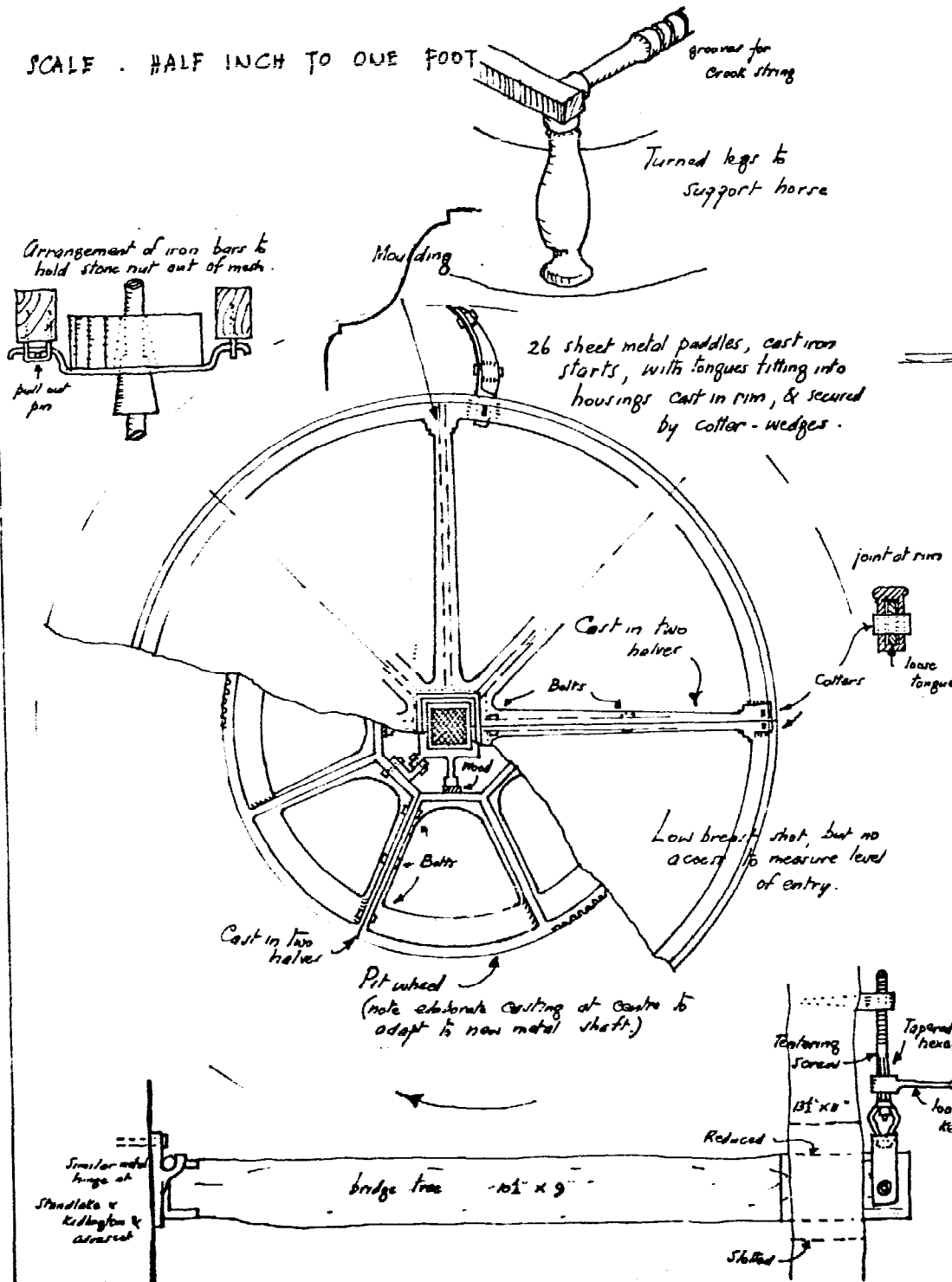
HOLTON MILL, WHEATLEY, OXON.

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

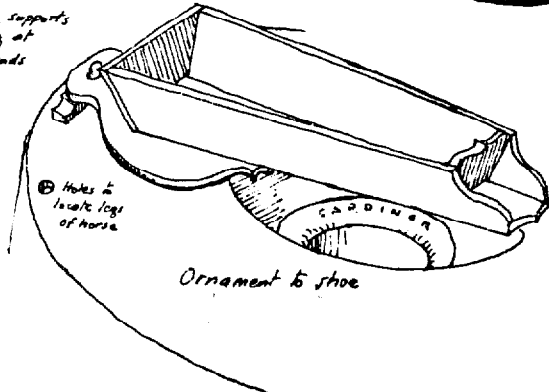
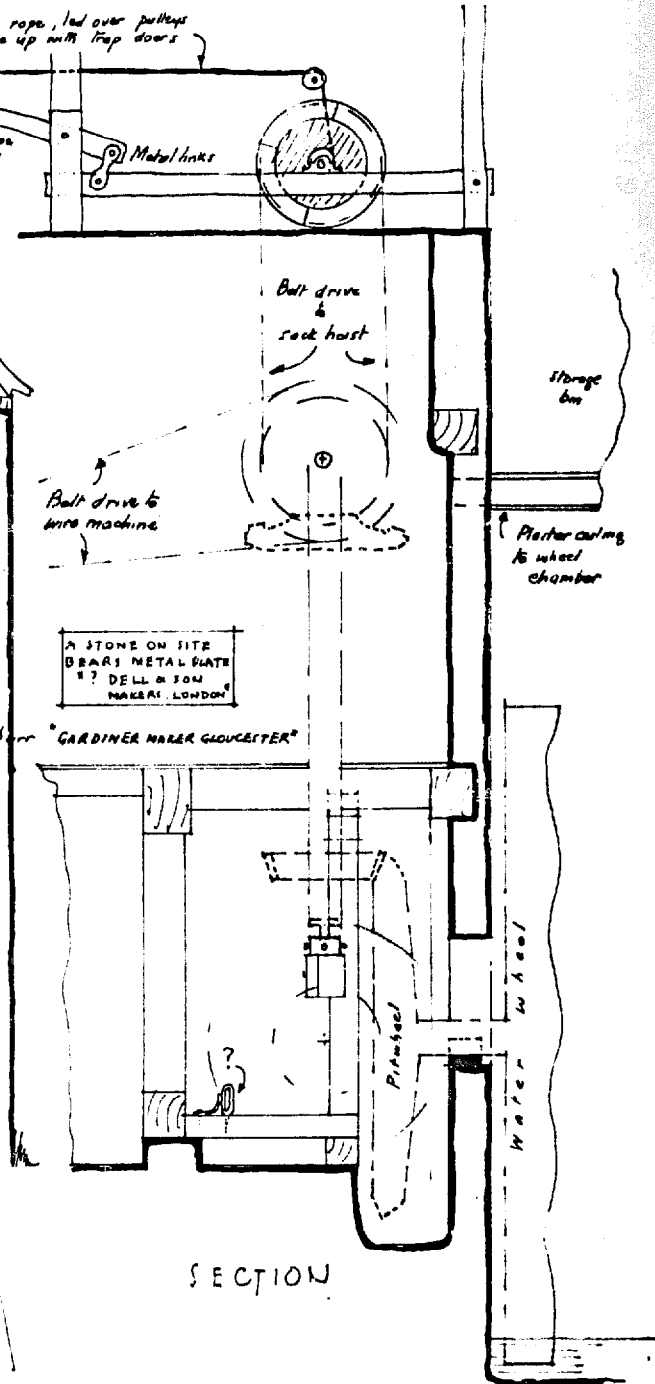
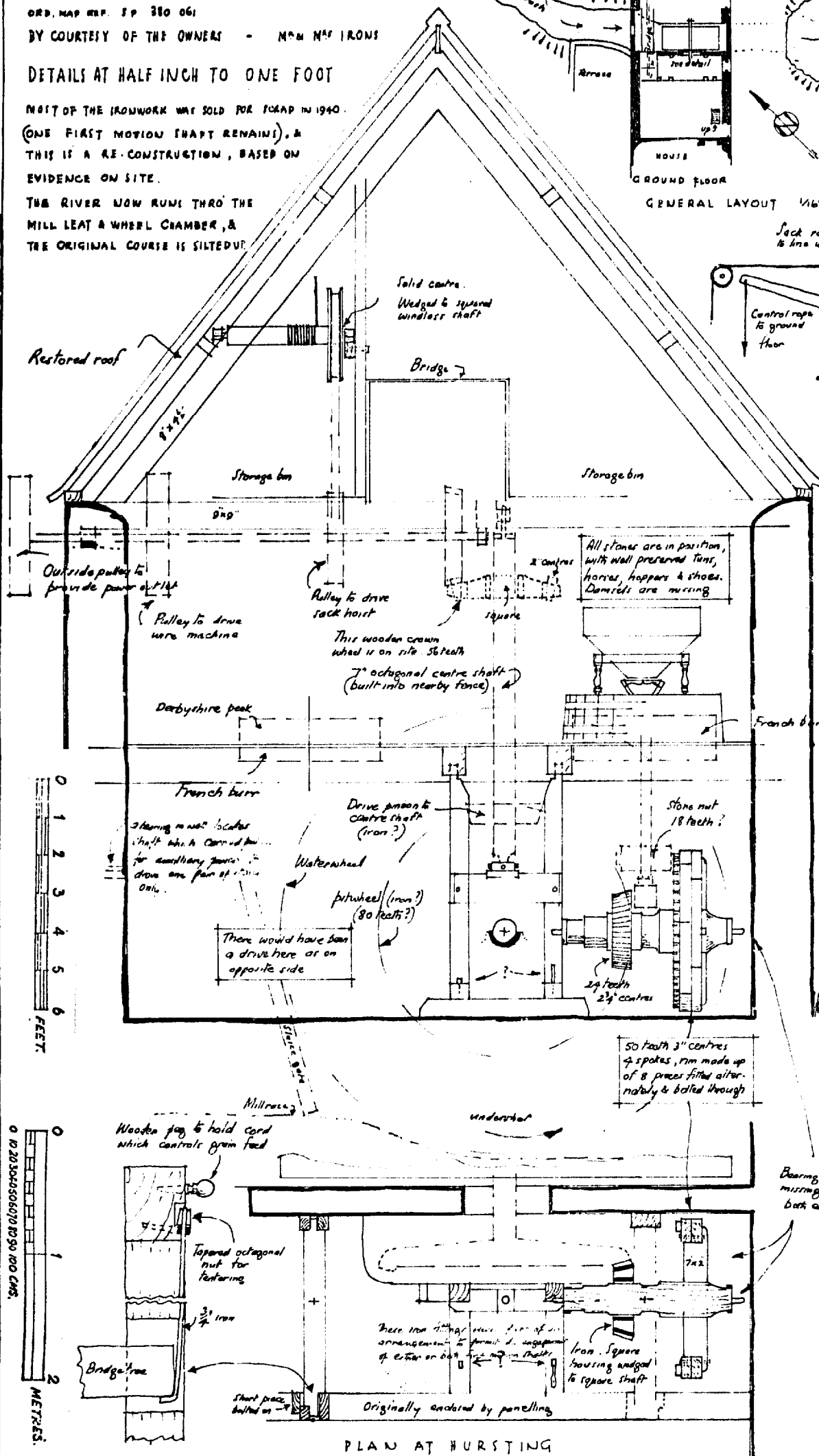
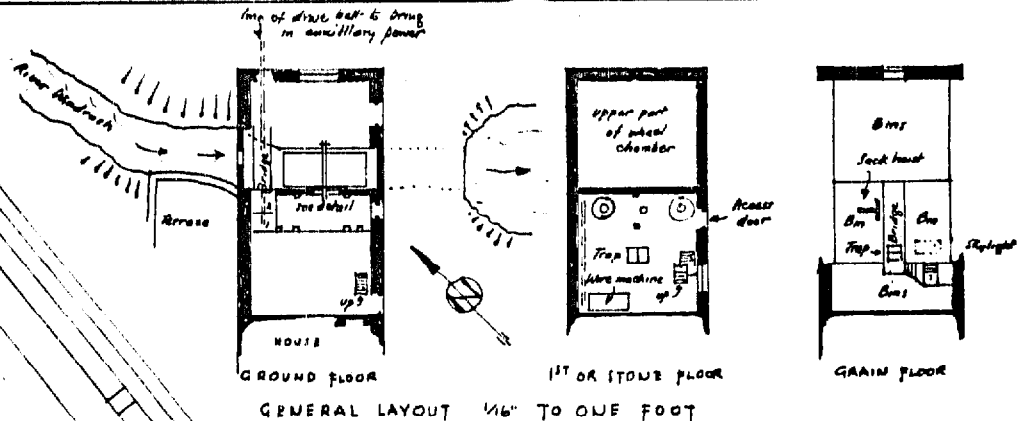
BY COURTESY OF THE OWNERS - M^{rs} M^{rs} IRONS

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.

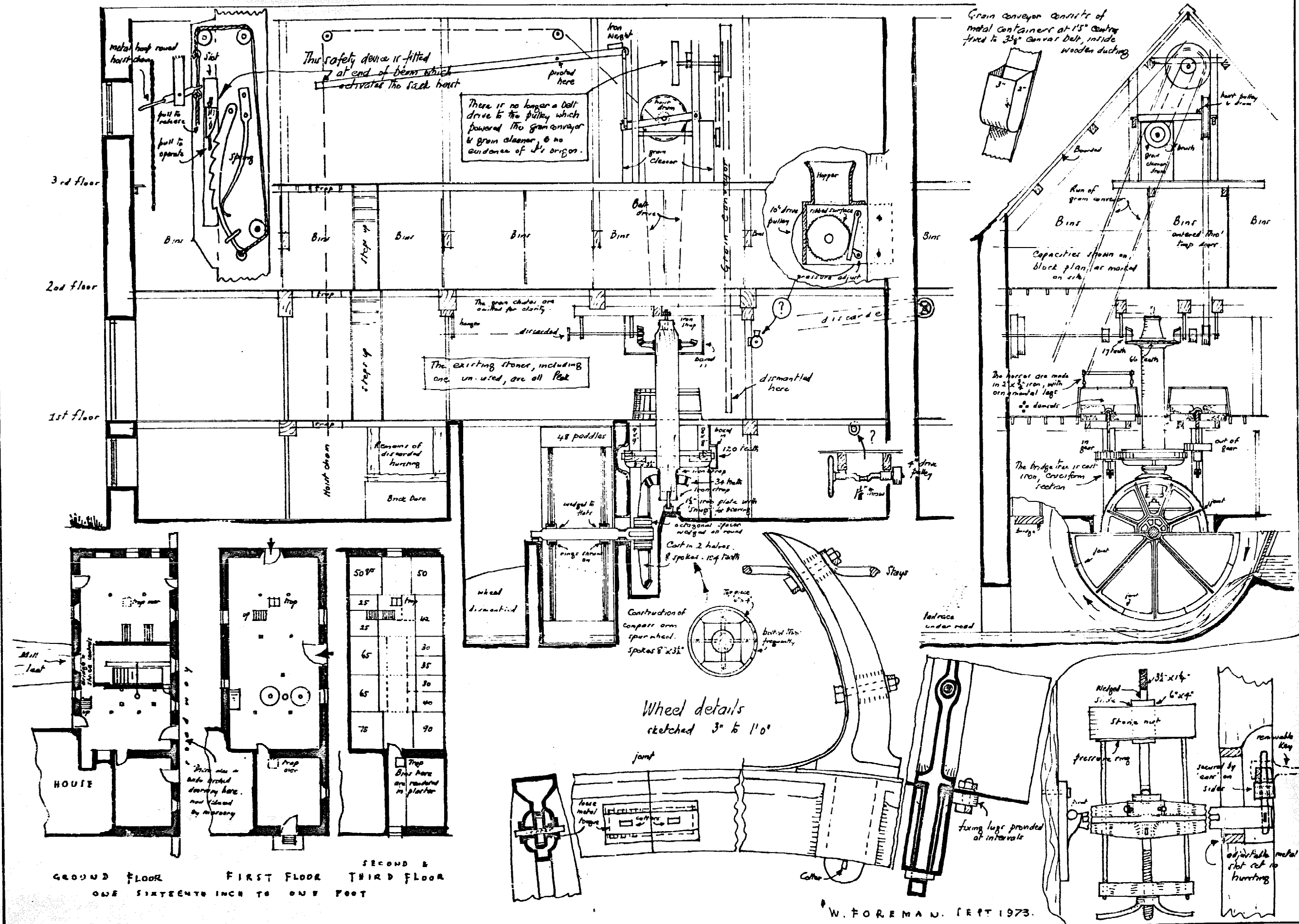
THE RIVER NOW RUNS THRU THE MILL LEAT A WHEEL CHAMBER, & THE ORIGINAL COURSE IS SILTED UP.



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

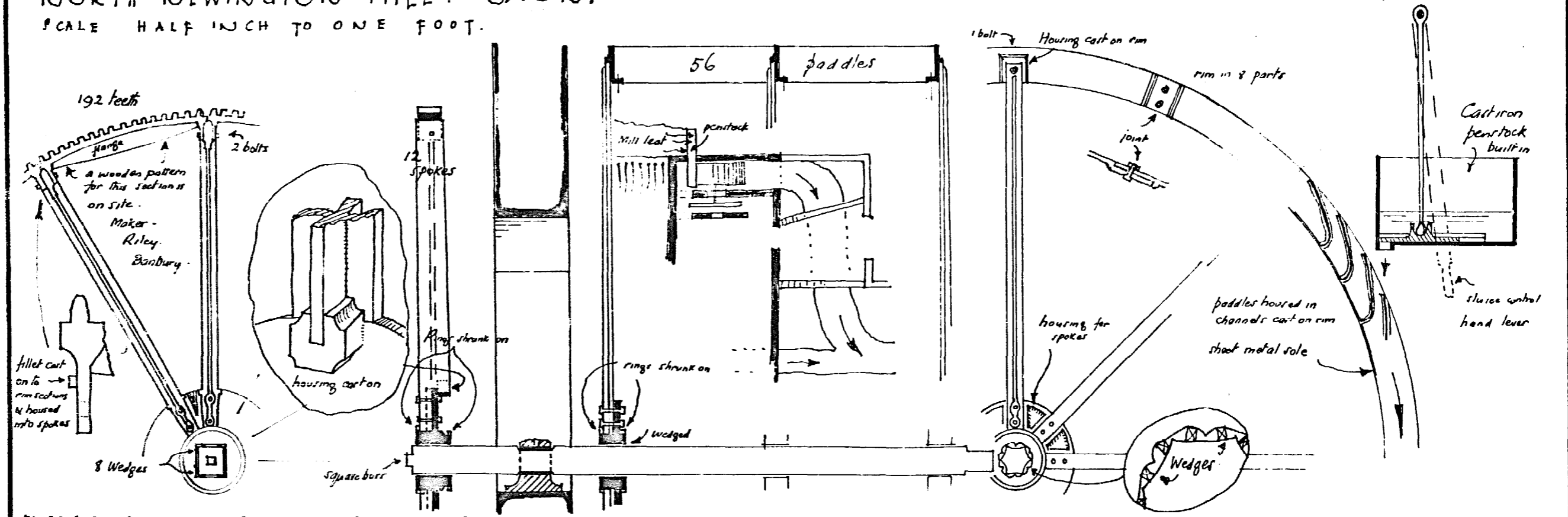


NORTH NEWINGTON MILL. OXON.

WATER WHEEL & PIT WHEEL.

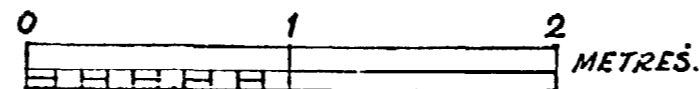
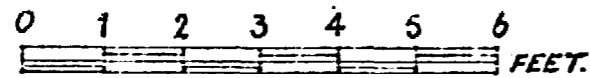
O.S. REF. SHEET 145 S.P. 424 394

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.

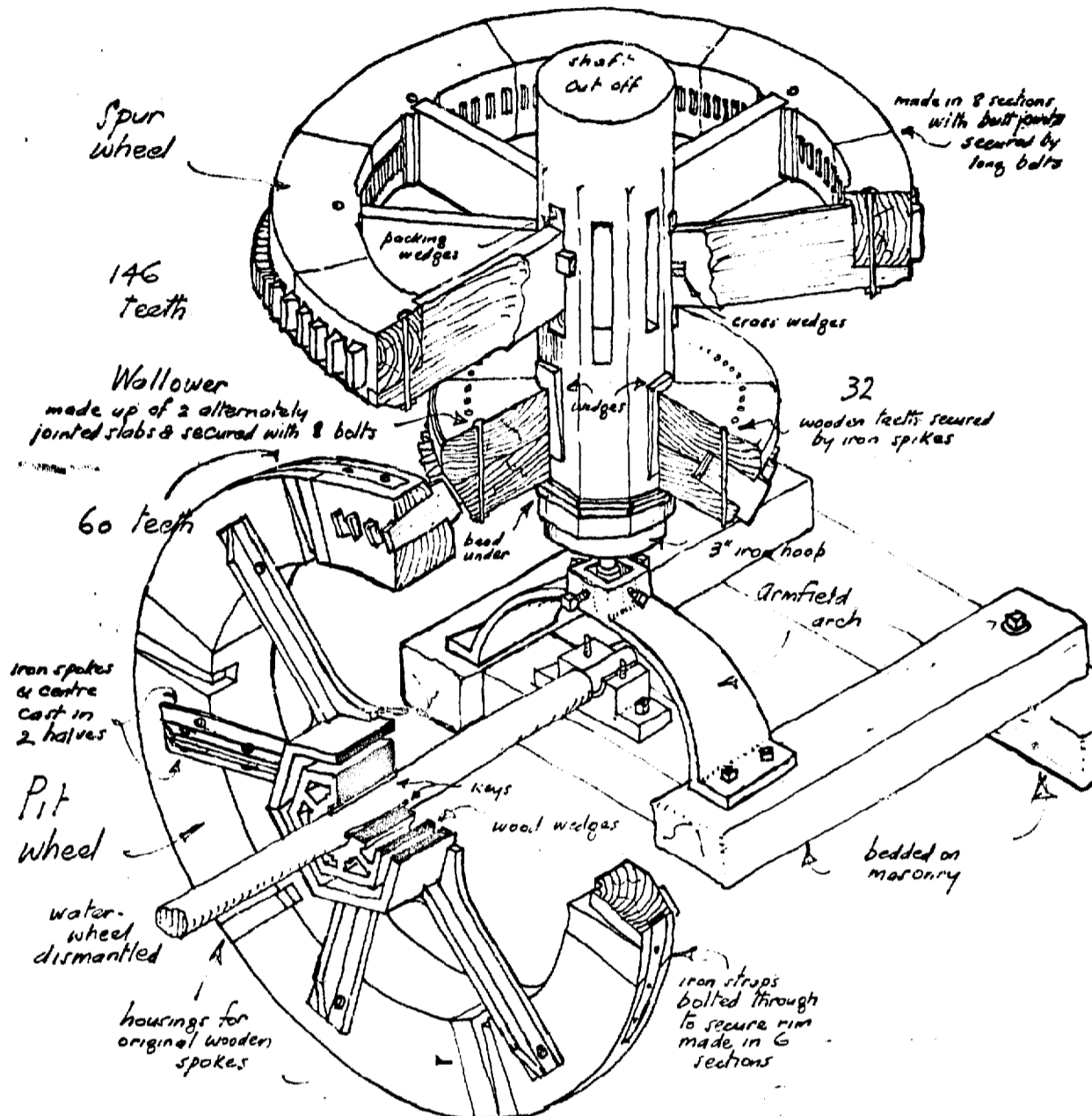


0 10 20 30 40 50 60 70 80 90 100 CMS.

OVERY MILL. DORCHESTER. OXON.

ISOMETRIC SKETCH.

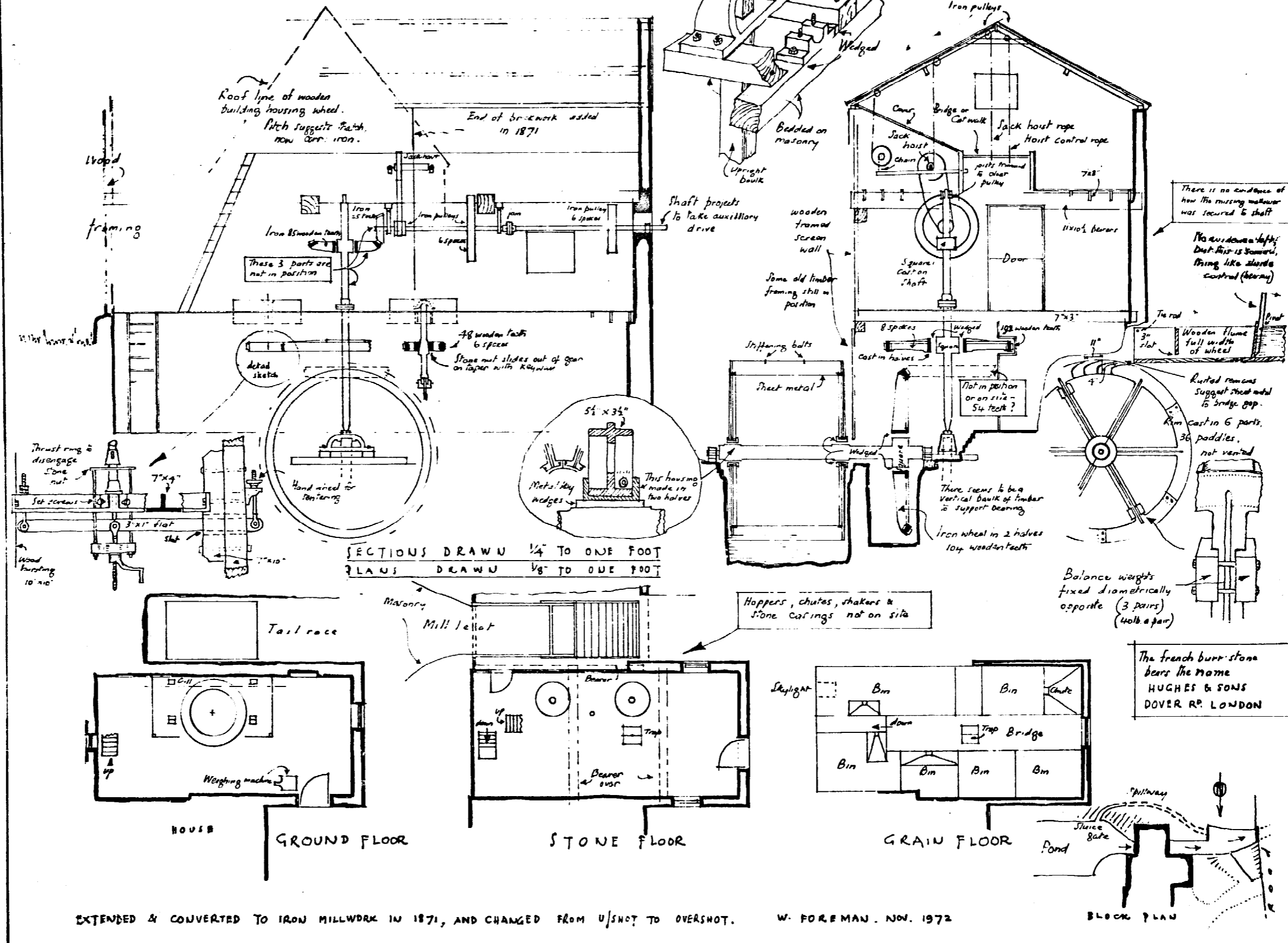
W. FOREMAN



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



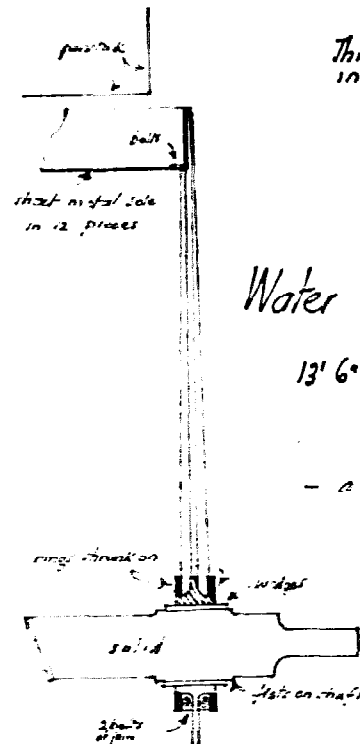
EXTENDED & CONVERTED TO IRON MILLWORK IN 1871, AND CHANGED FROM U/SNOT TO OVERSHOT.

W. FOREMAN . NOV. 1872

SALFORD MILL. N^o. CHIPPING NORTON. OXON.

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

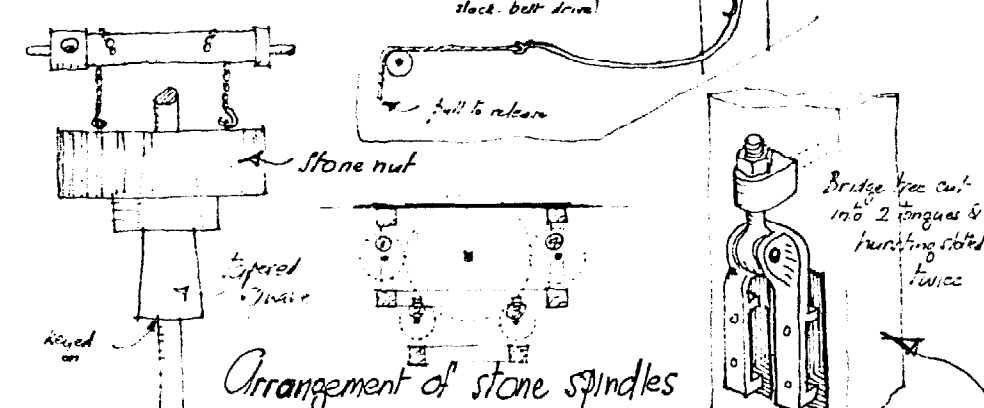
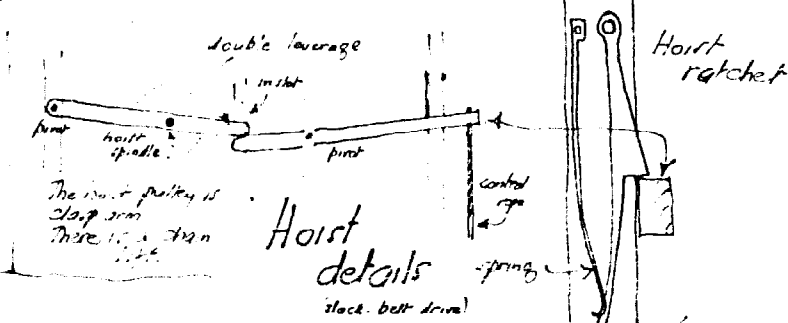
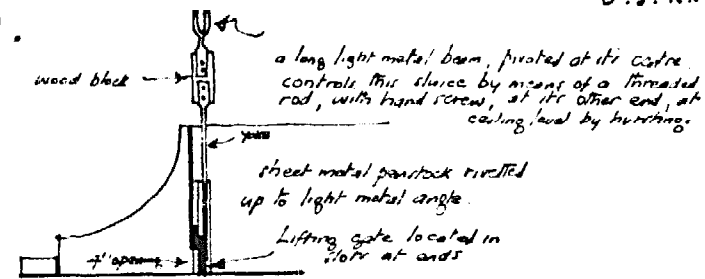
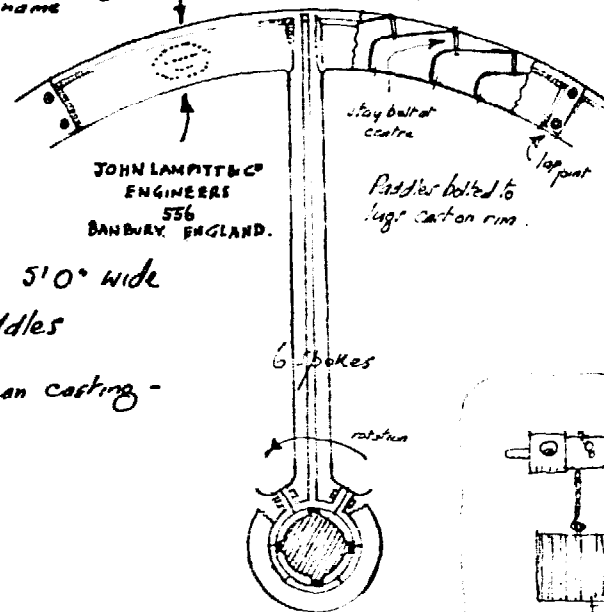
BY KIND PERMISSION OF MR. FAWCETT.



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 -



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.

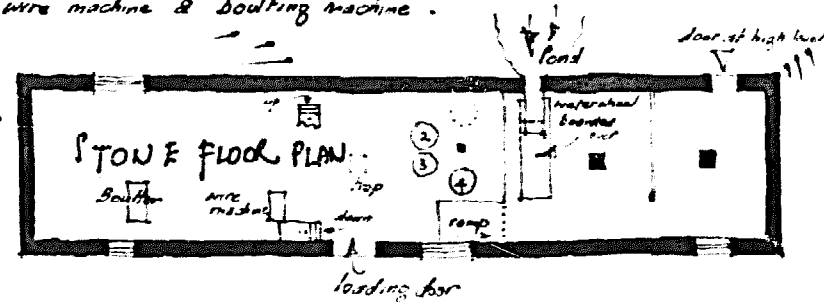
There are 2 fans & hoppers complete, one with peak stones, the other with pair of french burrs from GARDNER & SONS, GLOUCESTER. There is another pair of peak stones in situ & 2 runner french burrs of dark colour stored on site. Two 4 lobed saws in working position.

Barn thresher by GOOD, HARLESTON, NORTHAMPTONSHIRE.

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

Un-named wire machine & bottling machine.

There is a larger than usual storage on sack floor.



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 & 2 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 nut out of mesh, by means of a small tommy-bar operated unidirectionally.

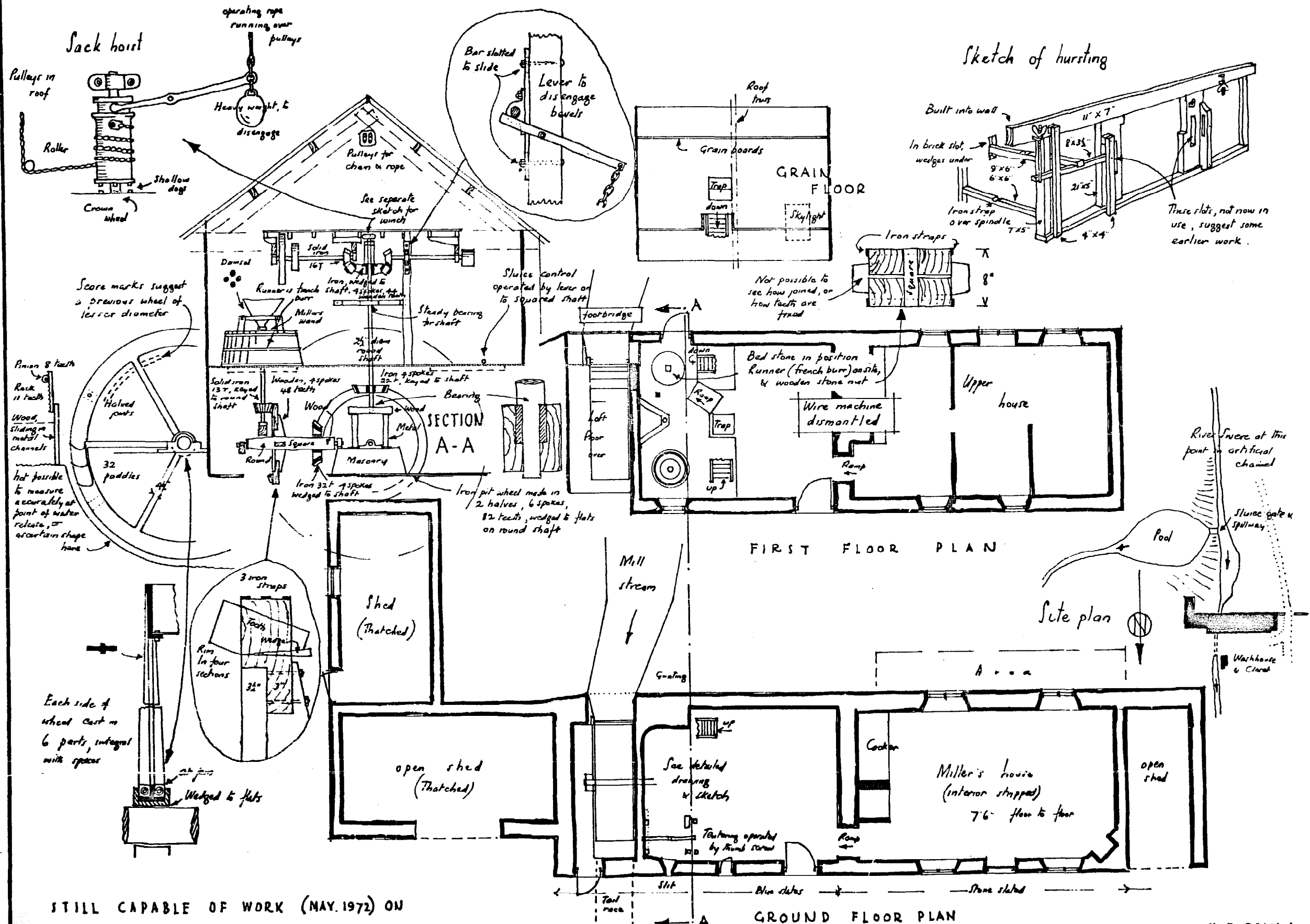
W. FOREMAN. JULY. 1924

MILL BUILDINGS . BARFORD ST JOHN . OXON .

O.S. S.P. 445 330

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

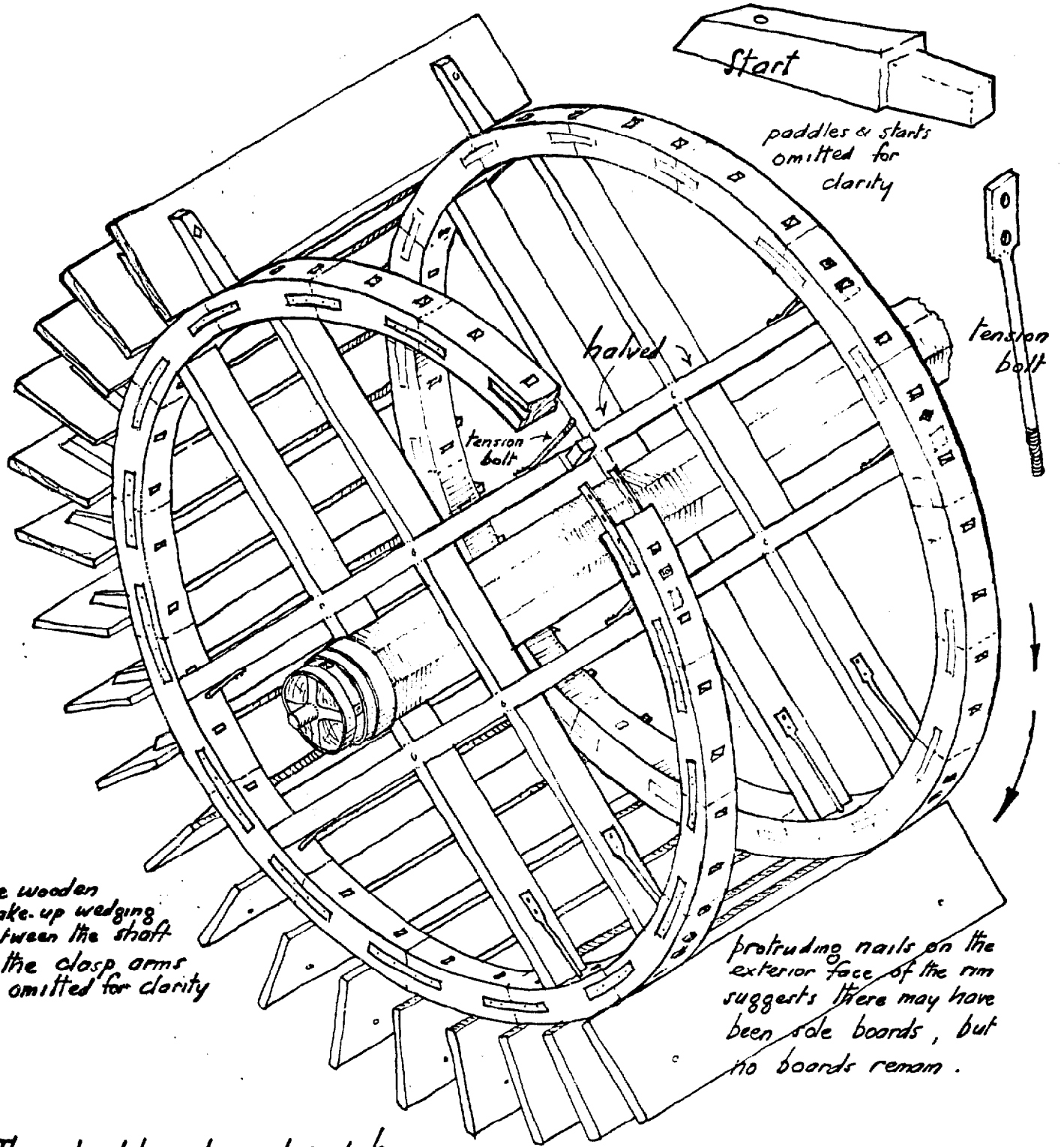
BY KIND PERMISSION OF MAGDALEN COLLEGE, OXFORD. OWNERS & MR F.E. LOVELL, TENANT



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.

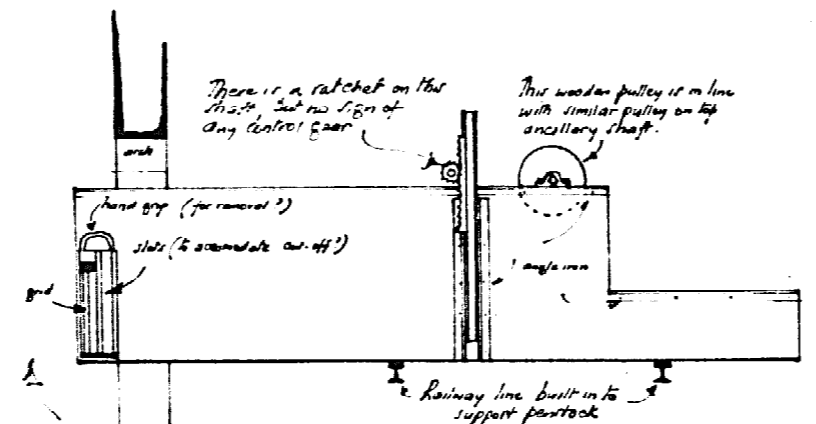
This wheel has decayed and has
collapsed into the wheel chamber.

W. FOREMAN . 74 .

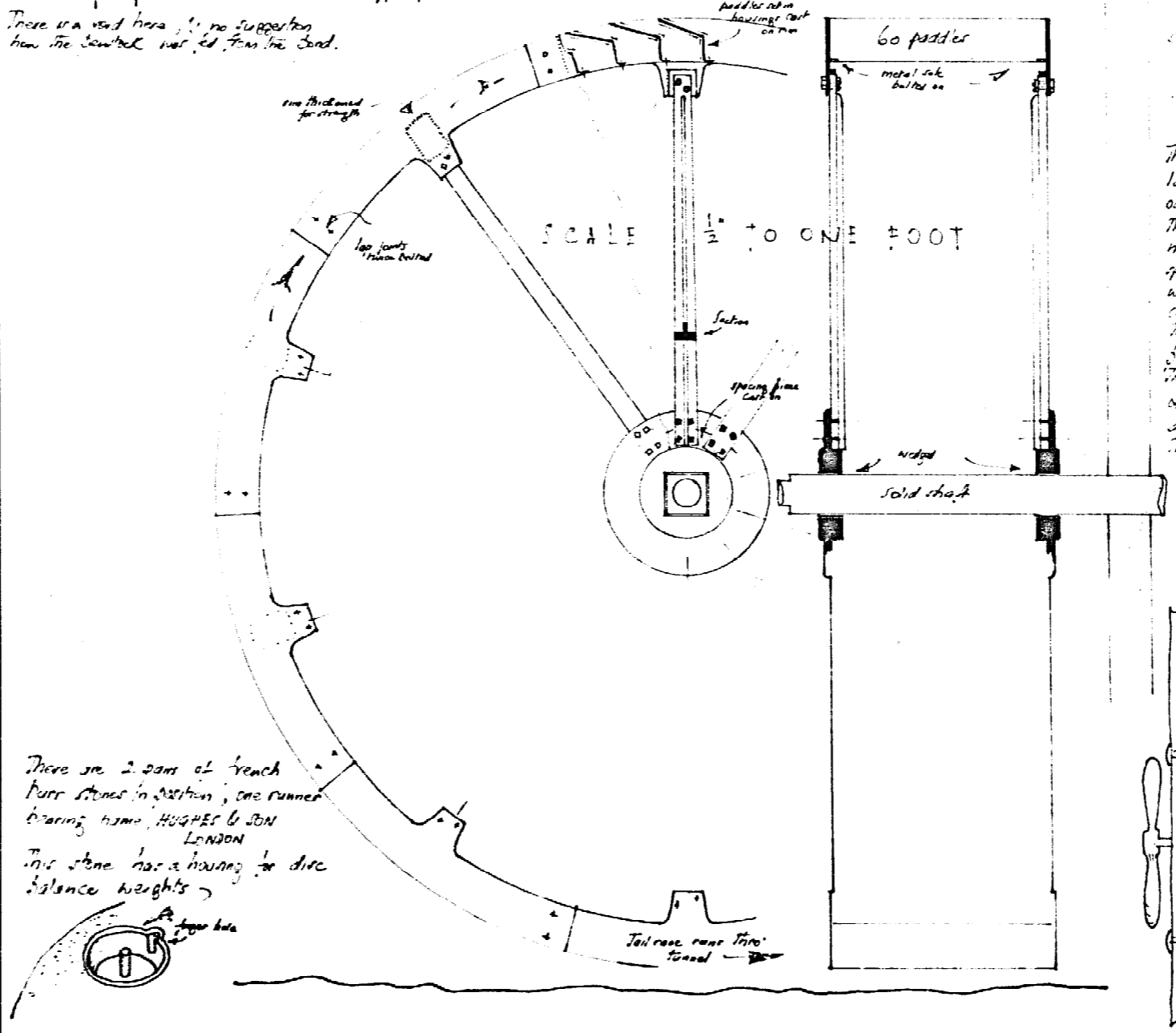
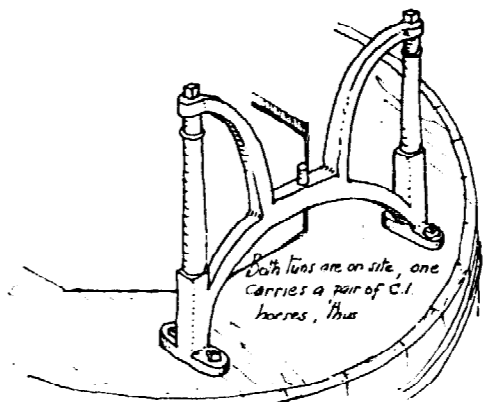
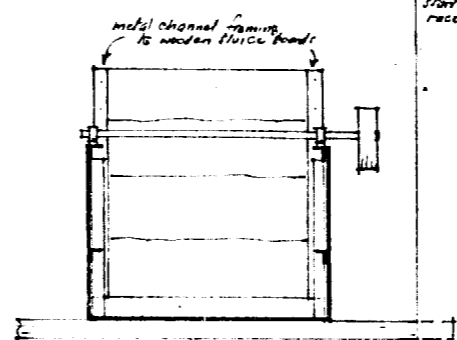
SOUTH WESTON MILL. LEWKWOD. OXON.

BY KIND PERMISSION OF MR R. C. KEEN.

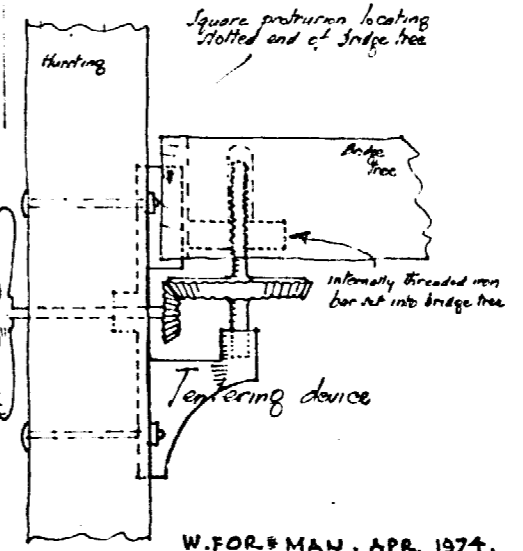
O.S. REF. SHEET 159 S.U. 702. 983.



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



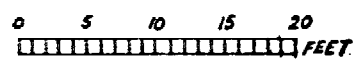
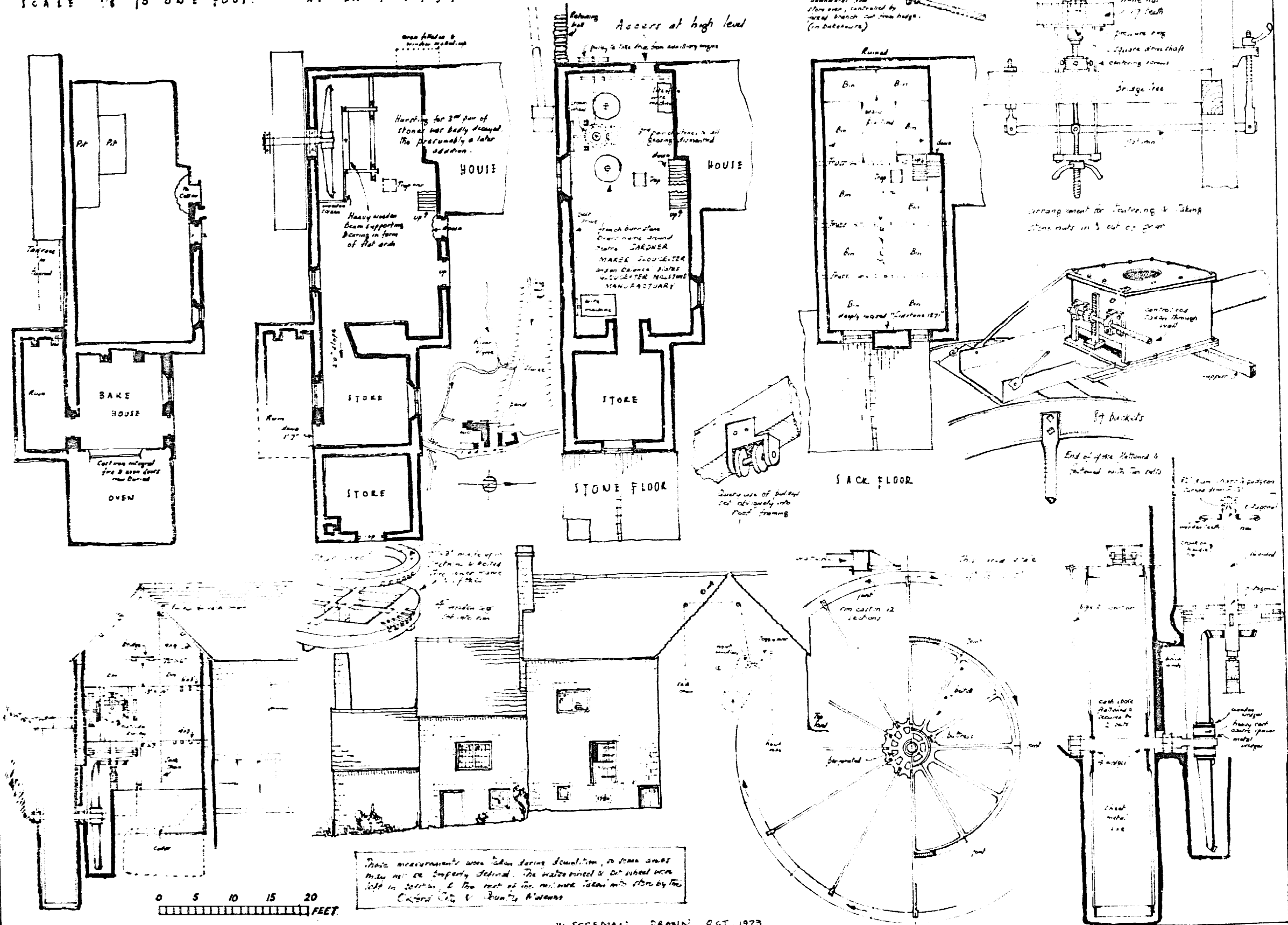
The pit wheel is heavily cast, with wooden cogs. It has a large square open centre, with a cast boss to accommodate a rotating metal water wheel shaft. The wallower is iron, wedged to a 6" square section metal centre shaft, which carries adjacent iron spur wheels, both with wooden cogs. Auxiliary drive 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.



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.



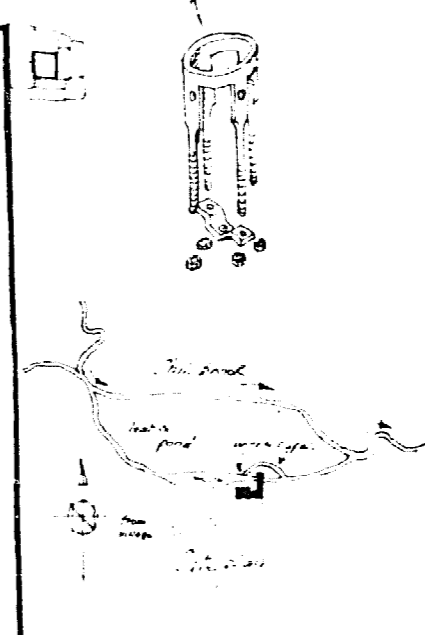
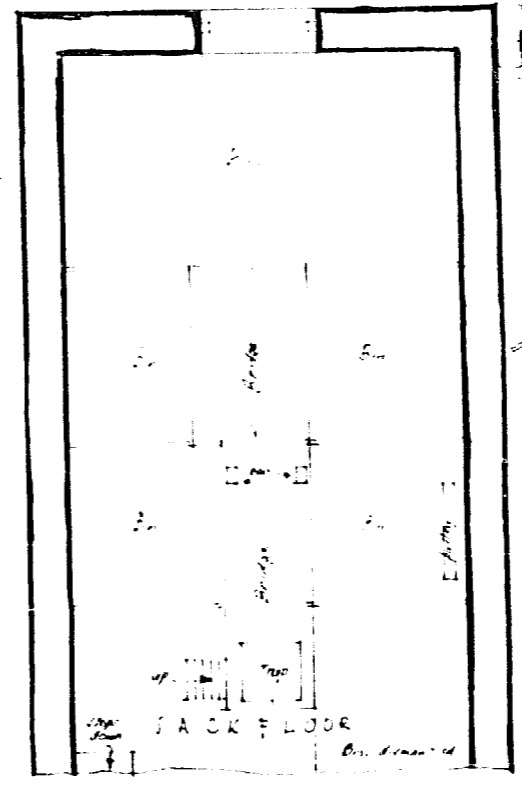
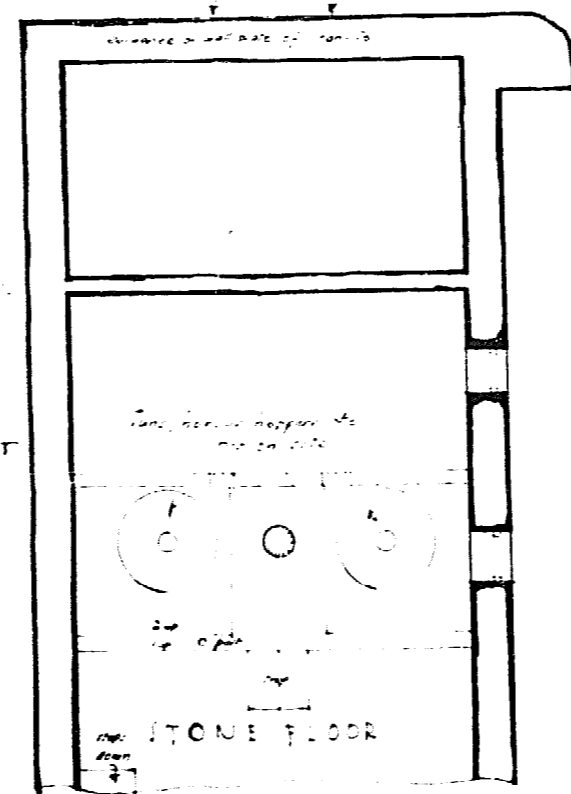
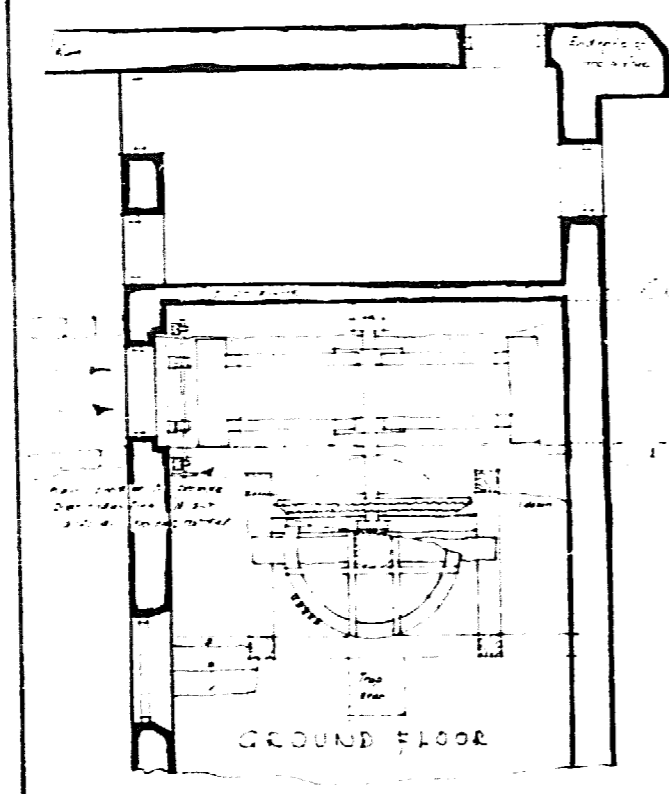
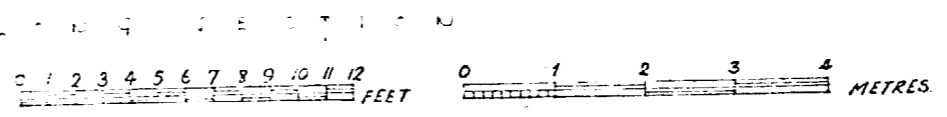
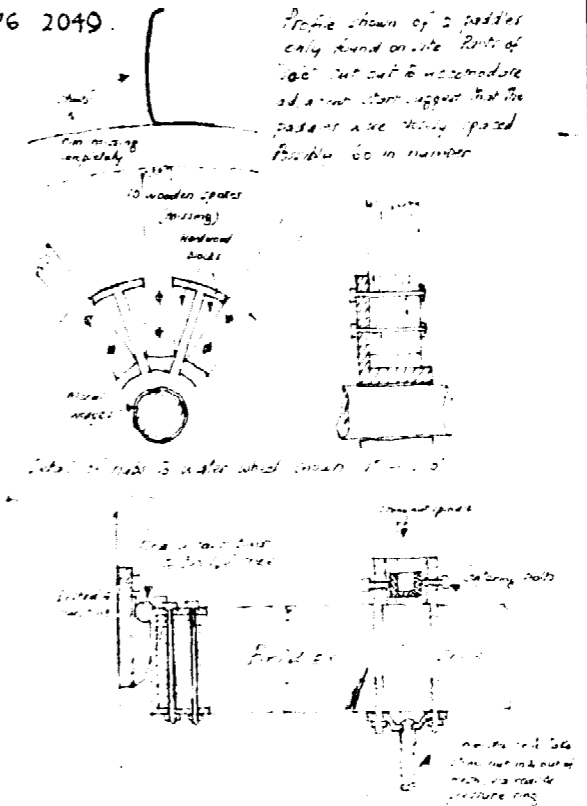
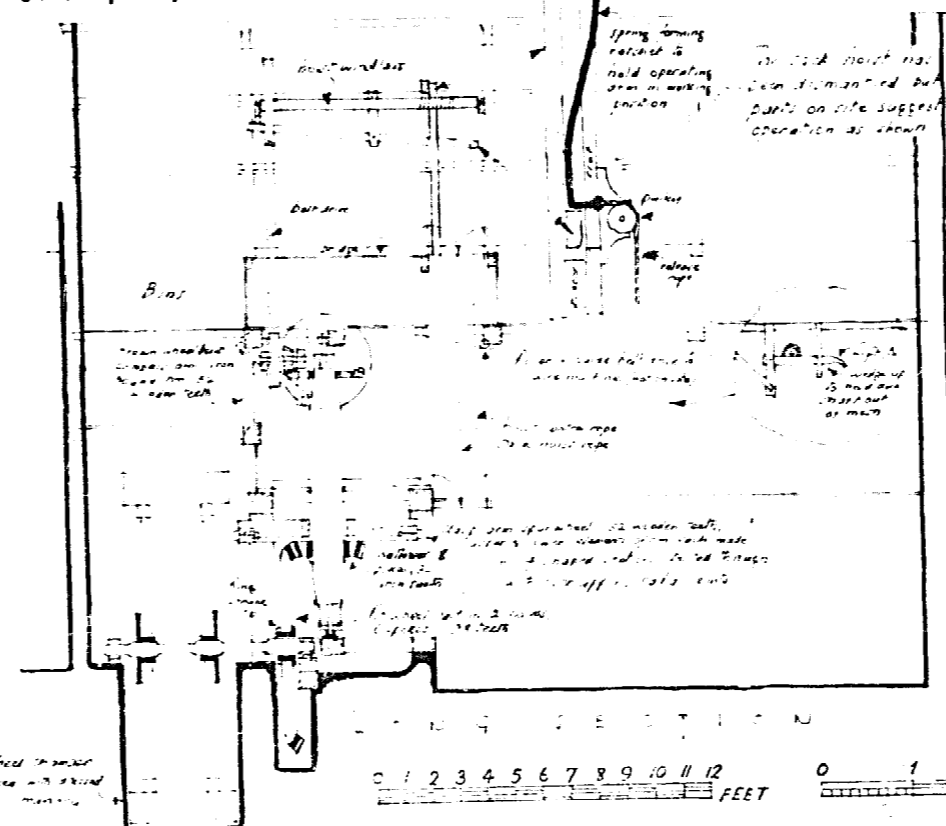
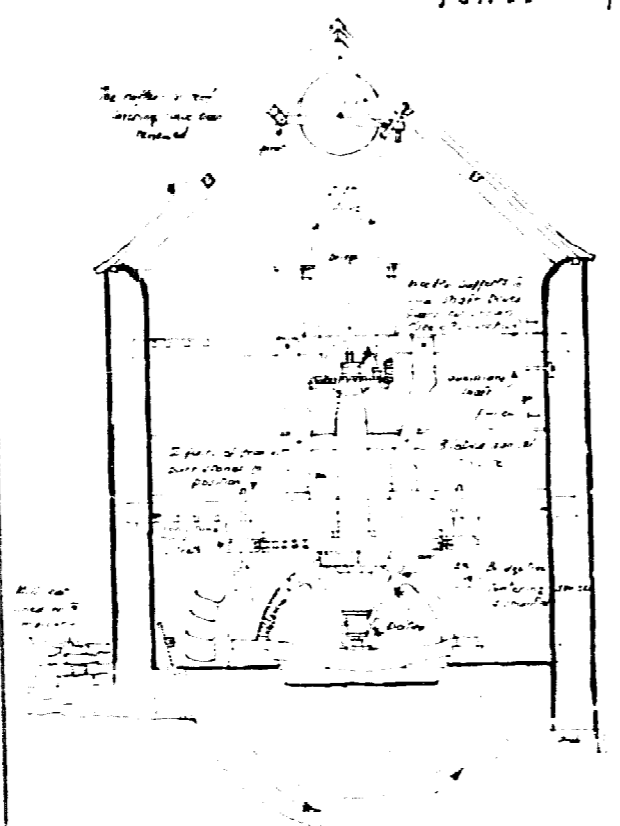
These measurements were taken during demolition, in some cases they are only approximate. The water wheel & its wheel were left in position & the rest of the mill was taken into store by the Oxford City & County Museums.

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.

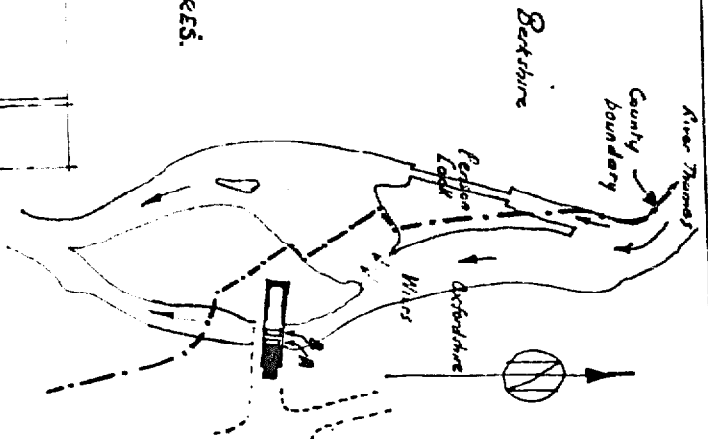
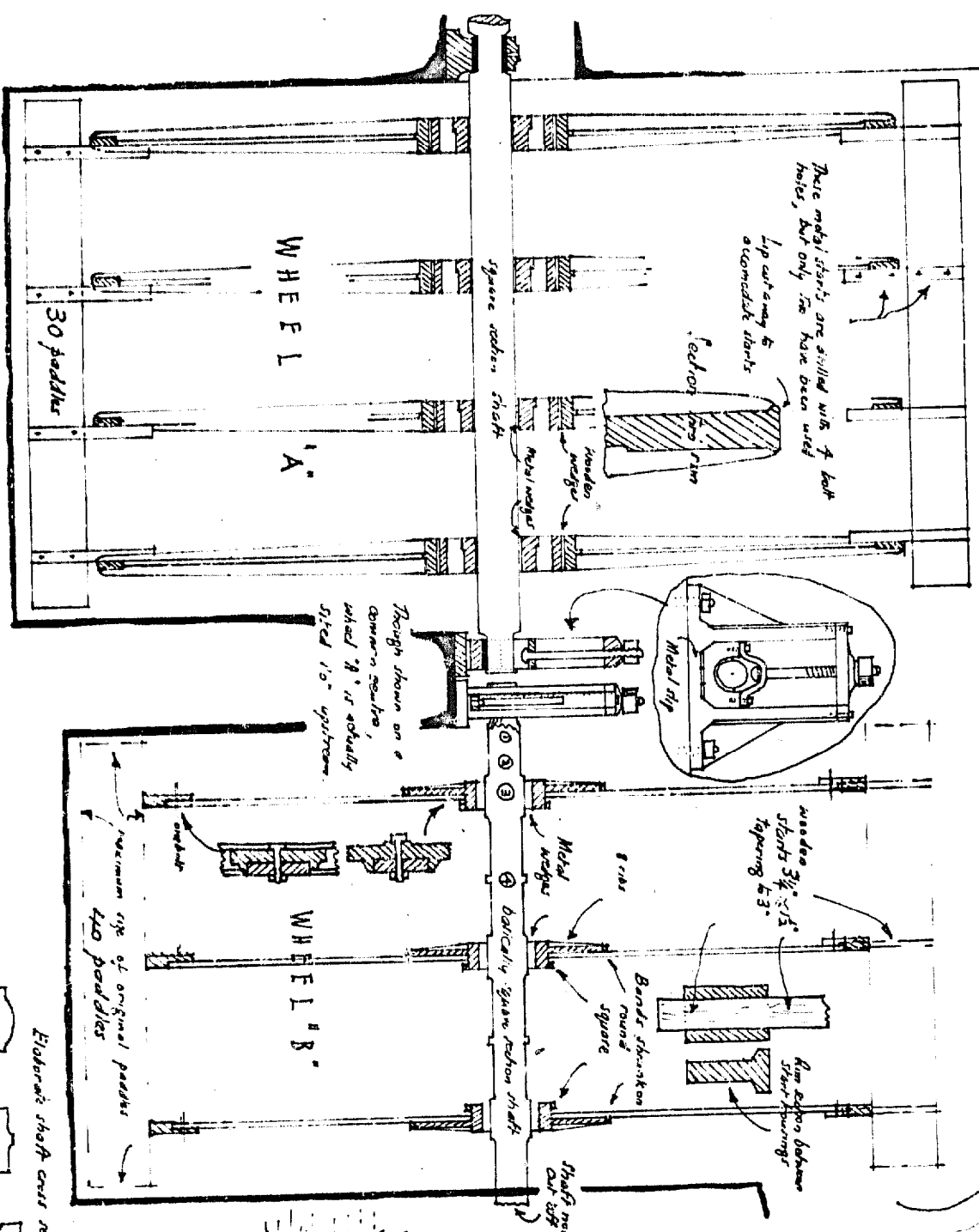
SCALE $\frac{1}{2}$ " TO ONE FOOT.

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

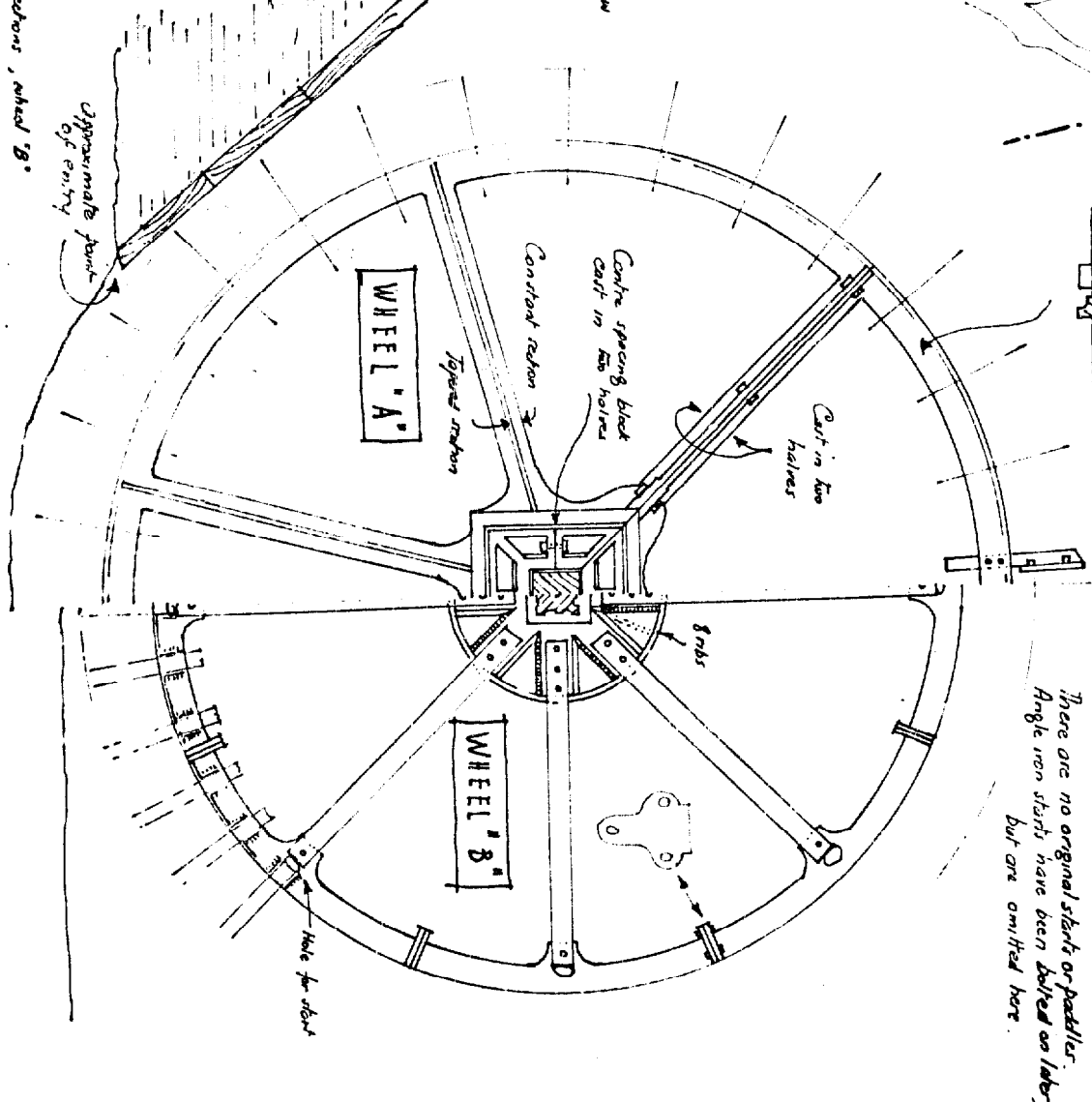
BOTH WHEELS ARE LOW BREAKFAST SPOT. 6" HEAD OF WATER.

0 1 2 3 4 5 6 FEET.

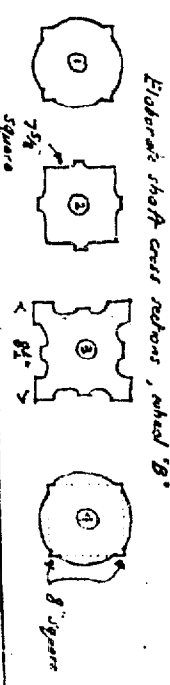
0 1 2 METRES.
0 10 20 30 40 50 60 70 80 90 100 CMS.



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 shafts or paddles. Angle iron shafts have been bolted on later, but are omitted here.

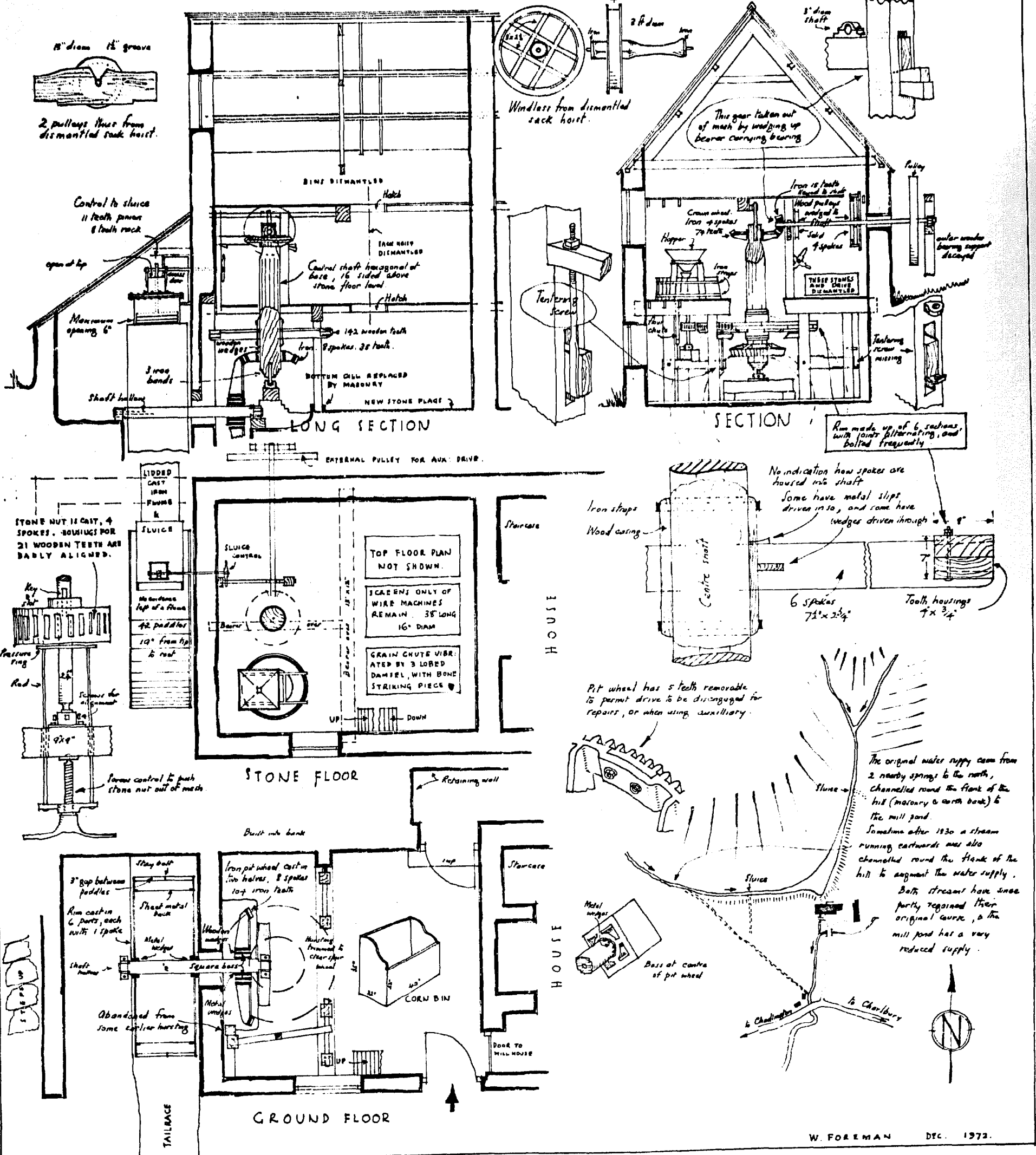


DEAN MILL . OXFORDSHIRE .

SCALE 1/4 INCH TO ONE FOOT

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

BY KIND PERMISSION OF THE OWNERS . M^r & M^{rs} GERRARD.



COMBE MILL. OXON.

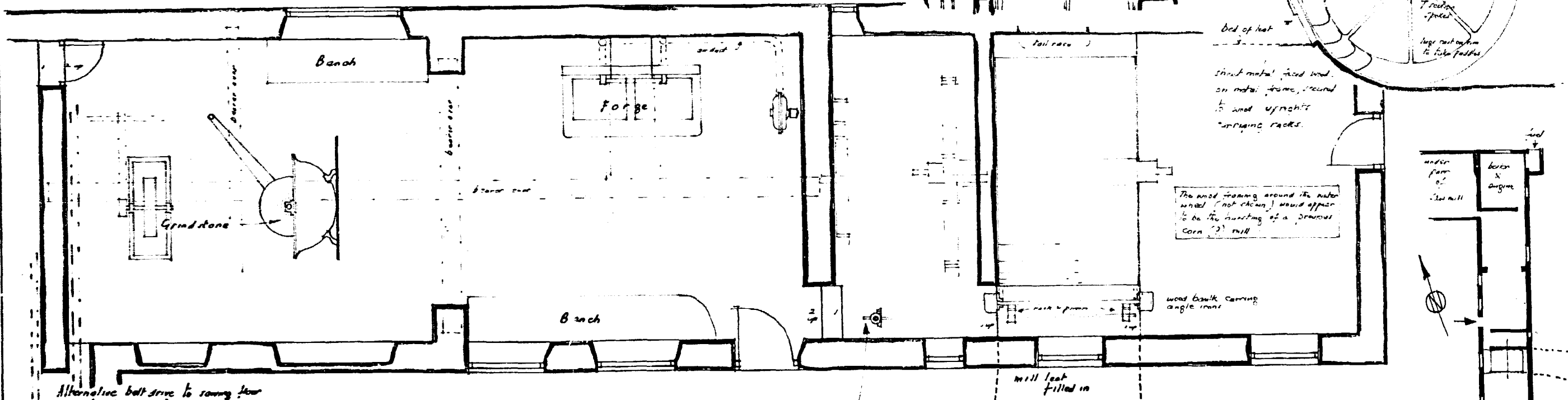
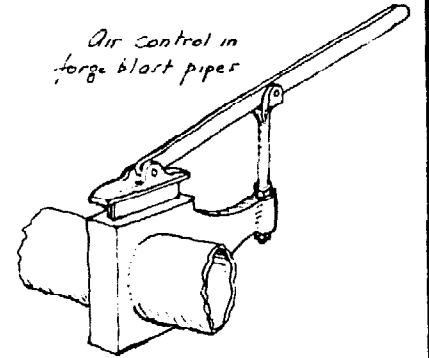
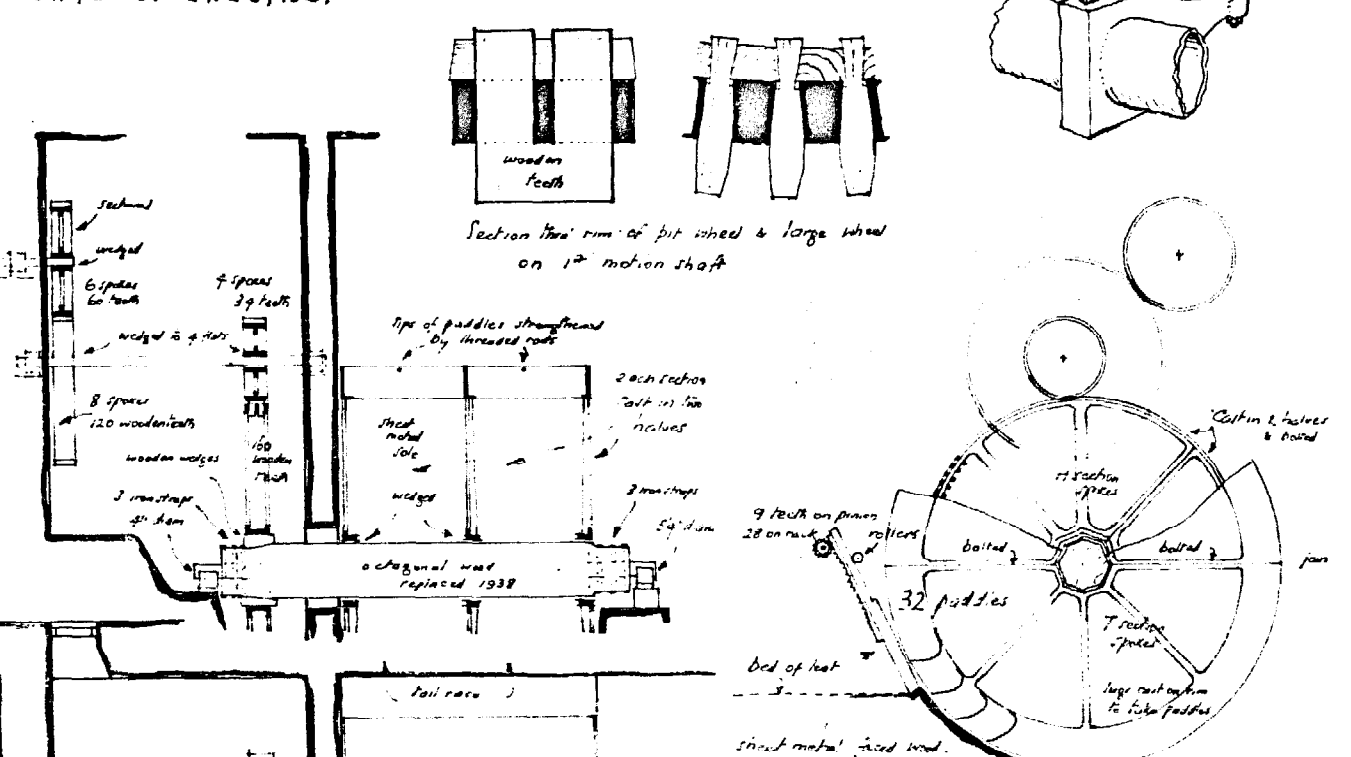
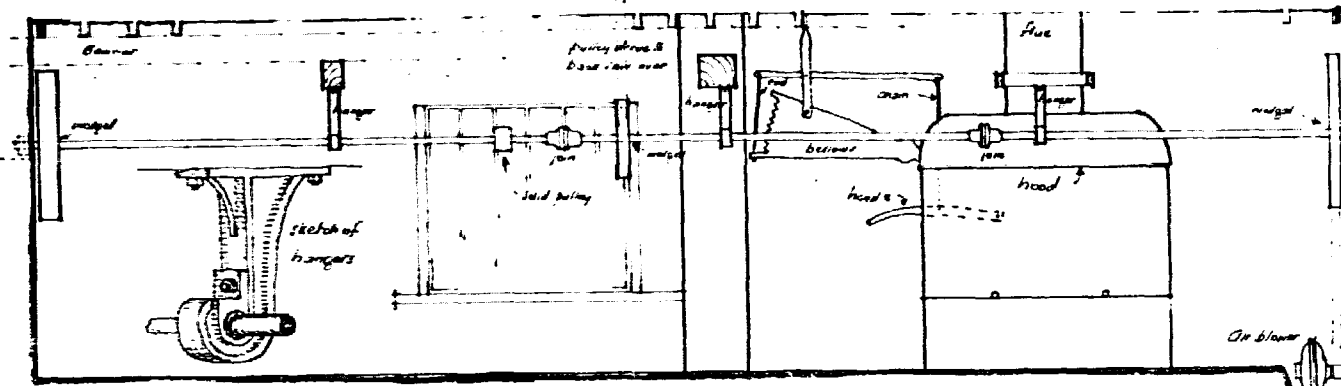
WATER WHEEL POWERING WORKSHOP SHAFTING & SAW MILL.

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.

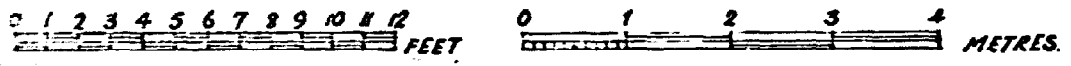
There is a workshop on the first floor.



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

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, LEIS 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 .

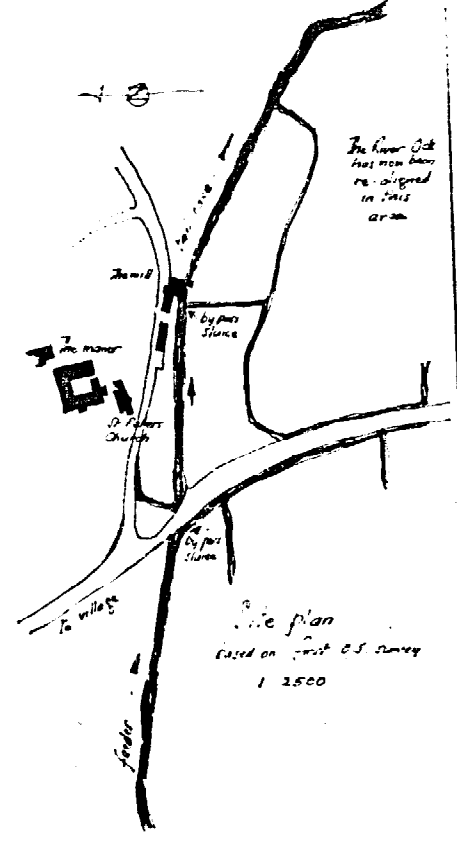
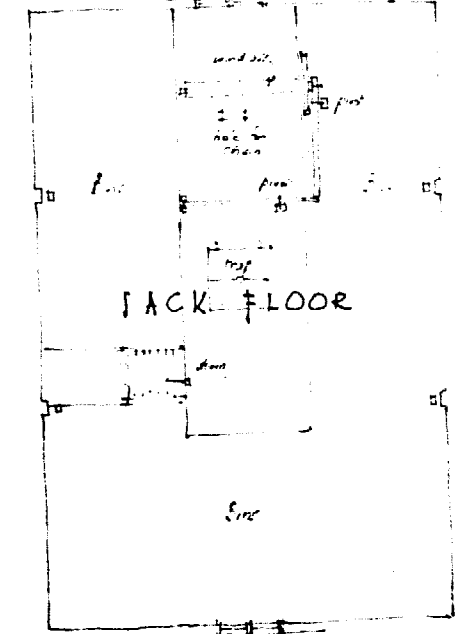
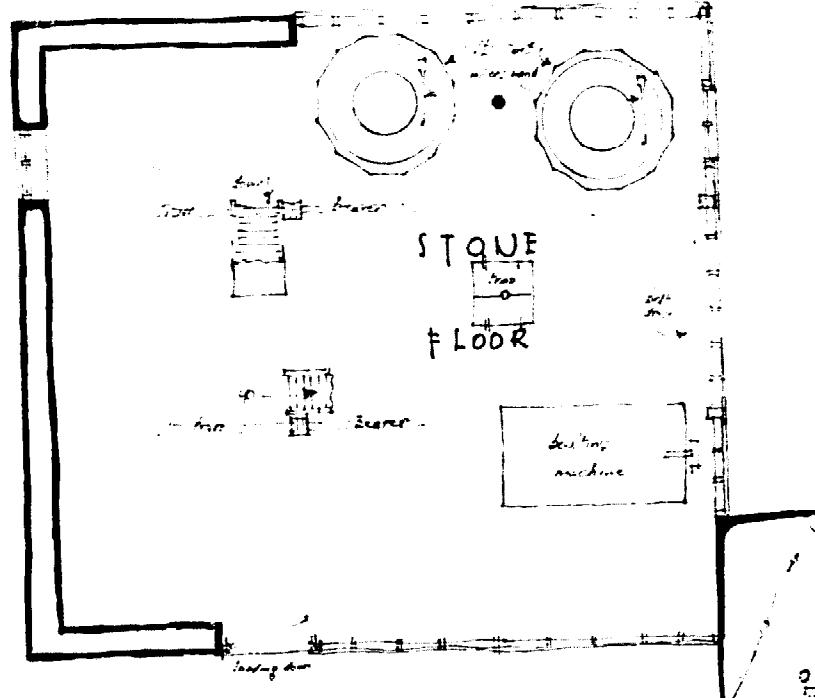
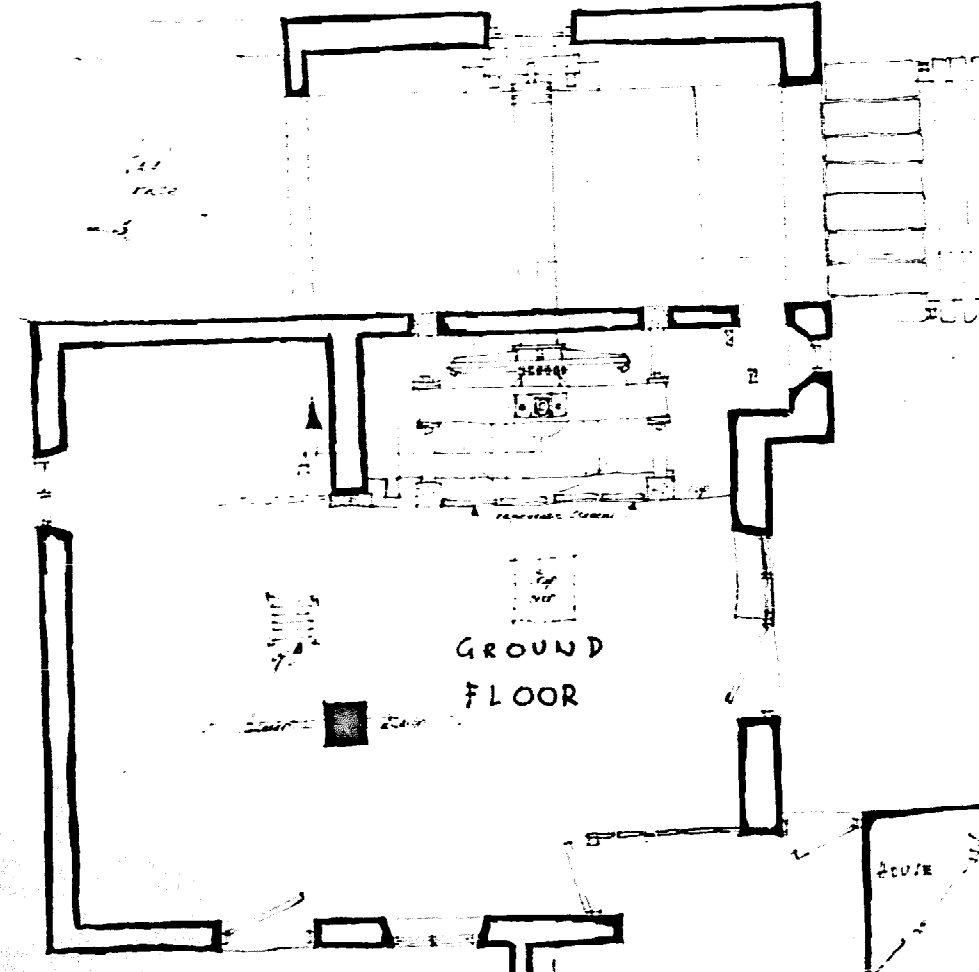
Shed made
to strengthen
the stone

method of
securing
chain

chain to lifting
chain

by pass sluice

cranked shaft
to or out of shaft
tree to central
stone nuts



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

0 1 2 3 4 METRES