

WASC 51/1
WANBD 6/1



WAS WAI 578/1

WANBD 6/1

John Smeaton WAI 578/1

FRS Drawings

Folio 33v For Mr Wallop's double

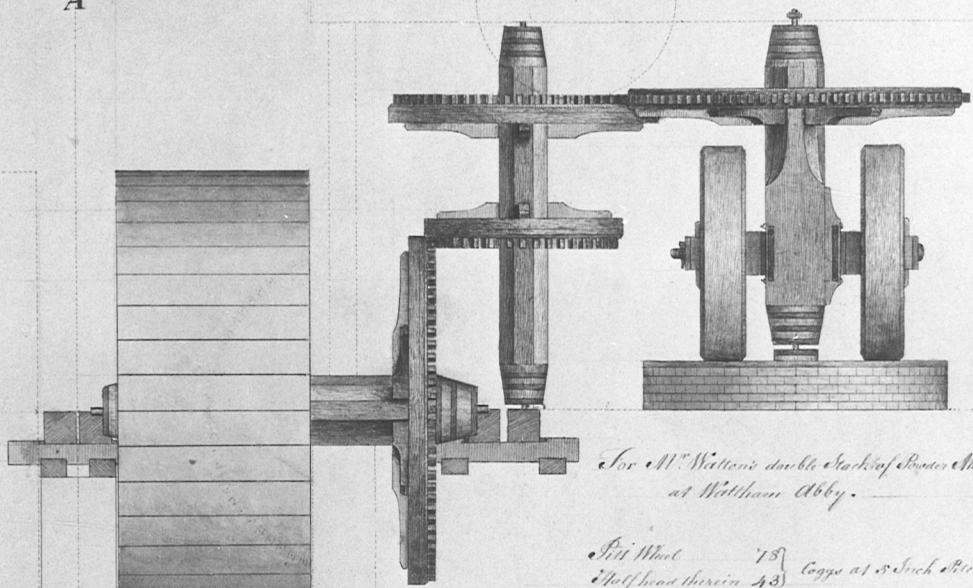
stack of (edge
runner) powder

mills at Waltham Abbey.
Elevation and plan of
gearing

~~SEE OVERSIZE SECTION~~

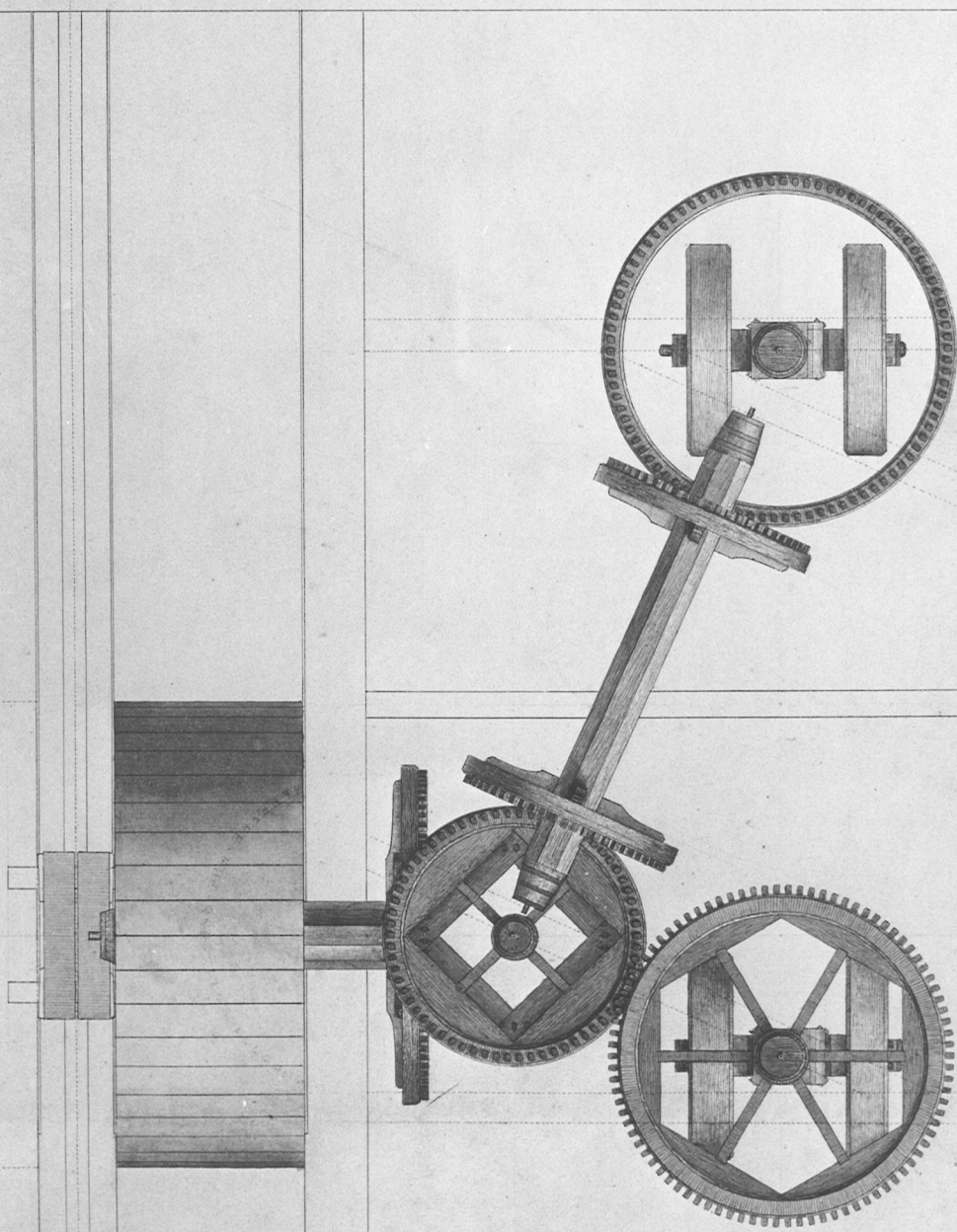
~~ALSO INCLUDED ARE P/COPIES~~

A



For Mr. Willmott's double back of water mill
at Willham Abbey.

Pin Wheel 78 }
 Shaft head therein 43 } Coggs at 5 Inch Pitch
 Crown Wheel 66 }
 Stem Wheel 90 } Coggs at 4 1/2 Inch Pitch.
 Communicating Wheel 57 Coggs at 4 1/2 Inch Pitch.



Scale of Feet which = 3 ft

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

B

The Mill End

34 - 0

WASC 53/22

WASC
WANBD 6/2
WAI 578/2

John Smeaton

F.R.S. Drawings

Folio 34 re. Smeaton's

Nov. (of wheel teeth) for
the Fore mill

Mr. Smeaton's A^o for the Tare Mills

Pitt wheel	78	} gives 1,32 Turns
Half head therein	43	
Crown wheel	66	
Stone wheel	90	

Present A^o

Pitt and wheel therein	84	} gives 1,24 Turns
Swiming wheel over	84	
Nutt therein	38	
Crown wheel on Nutt's shaft	54	
Stone wheel	96	

WASC

WASC 51/3

WANBD 6/3



WANBD

WAI 578/3

John Swanton

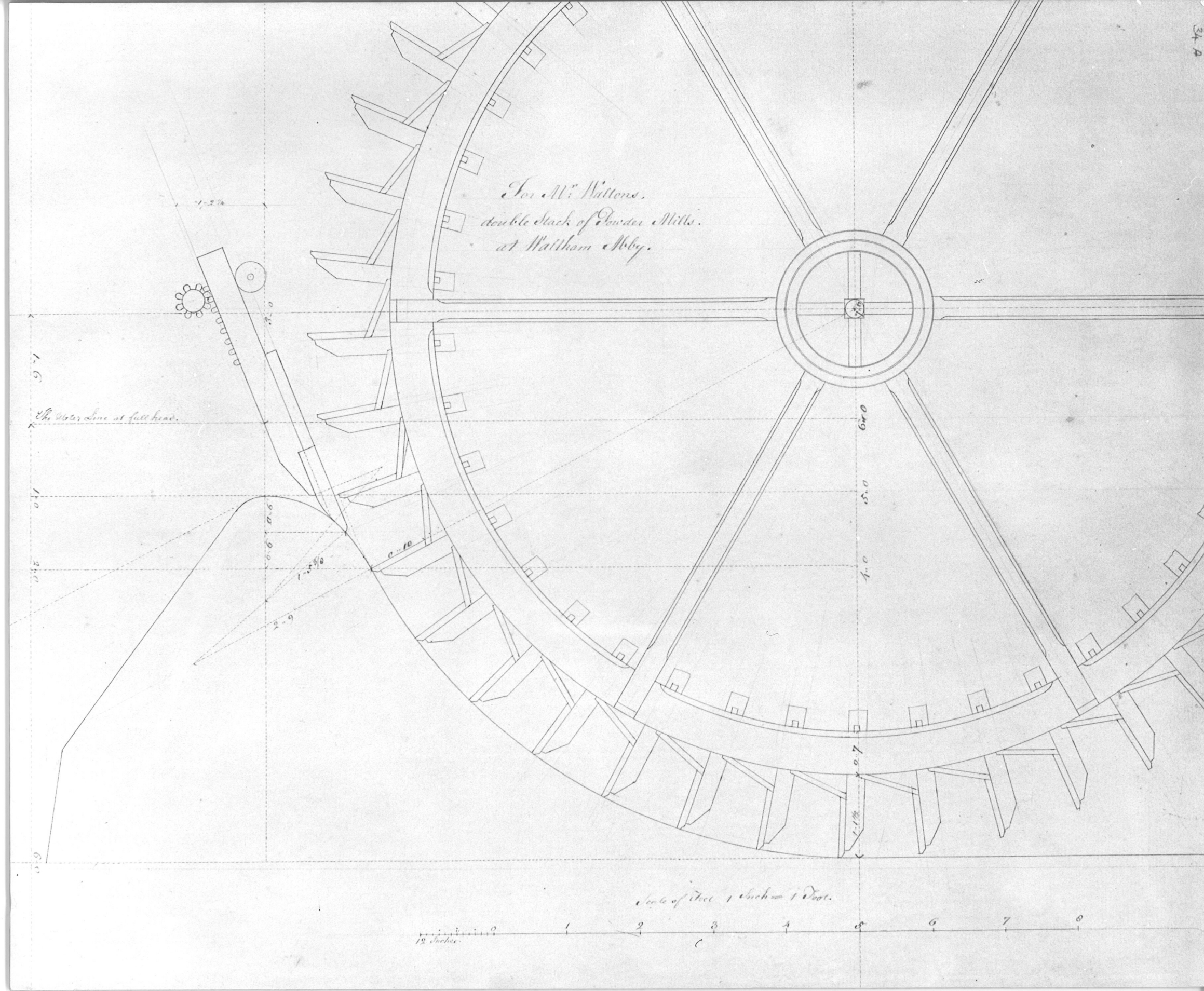
FRS Drawings

ALSO OVERSIZE SECTION

2

Folio 34 v For Mr. Walton's
double stack of powder mills
at Waltham Abbey
Elevation of water wheel

For Mr. Wallens,
double Stack of Powder Mills.
at Waltham Abbey.



~~WASC~~

WASC 51/4
WANBD 6/4

W91 57²/4

WANBD 6/4

John Smeaton
FRS Drawings

~~WASC OVERSIZE SECTION 2~~

Folio 35 Elevation
of (water) wheel and conduit
of the new powder mills at
Waltham Abbey

Elevation of wheel and arched of the new
pond on side of westwardly side shell

Water Line at a full Head, that is
1/4 inch above the top of the Pumping Box
N.B. the cap piece was constructed
according to the dotted lines

Pit wheel 60
Wheel thereon upon the upright 35
shaft
Upper wheel upon the upright 53
shaft
Wheel upon the lower shaft 90

by an Inch scale tail water 6 inches

35

7 rows of piles 2 under each pile plate and 8 under the floor

ON HER MAJESTY'S SERVICE

WASC 51/5

WANBD 6/5

WA 578/5

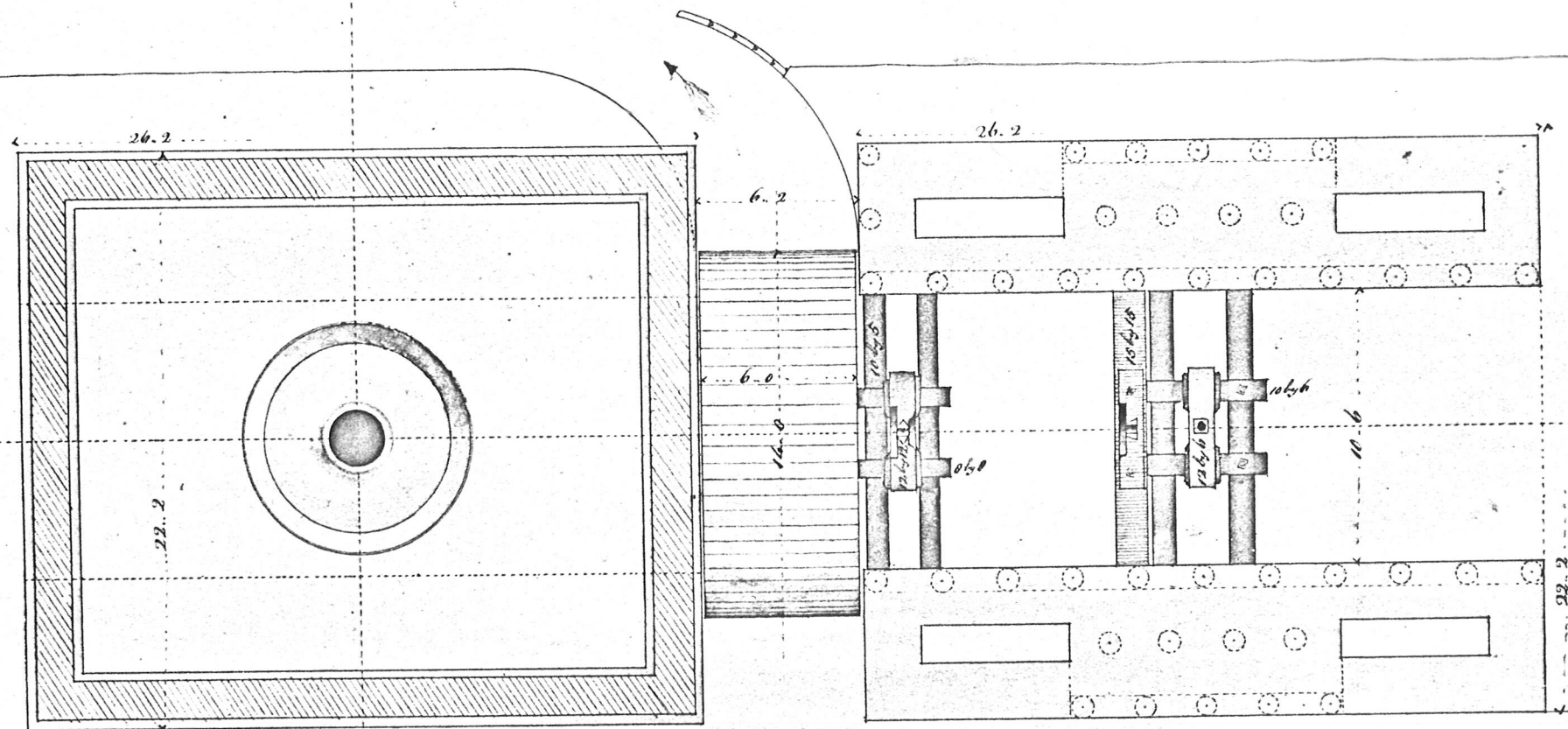
WANBD 36/5

John Swanton
FRs Drawings

Folio 36v Plan of the
building for Mr. Walton's
Powder mill on the west side
of the mill pond

~~XEROGRAPHIC COPIES ONLY~~

Plan of the **BUILDING** for W. Walton's Powder Mill at Waltham Abbey 1771
on the West Side of the Mill Pond.



Scale of Feet. $\frac{1}{4}$ Inch to a Foot.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 feet.

Shingleton 1771.

ON HER MAJESTY'S SERVICE

WASC 51/6

WANBD 6/6

WA1578/6

WANBD 51/6

John Swanton

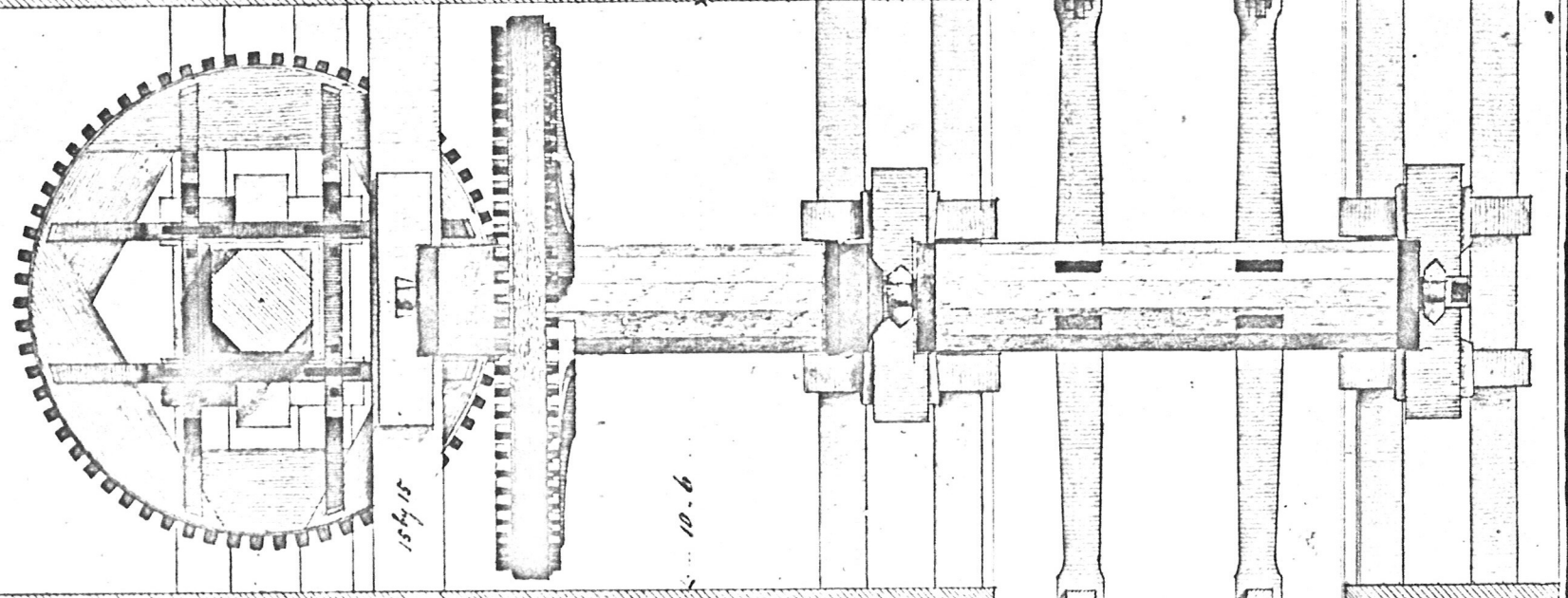
FRS Drawings

Folio 37 Plan for Mr
Walton's powder mill
at Waltham Abbey

XEROGRAPHIC COPIES ONLY

F 37 WASS 57/6

PLAN
for M. Walton's
POWDER MILL
at Waltham Abbey.



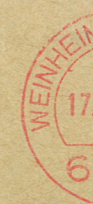
22. 2

Scale of feet 0 1 2 3 4 5 6 7 8 9 10

W. Walton 1771



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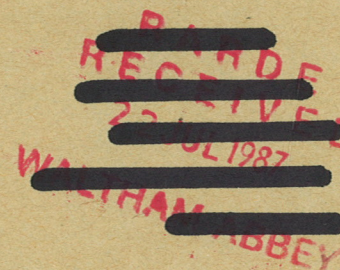


WASC 51/7
WANBD 6/7

WA1570/7

John Smeaton
FRS Drawings
WASC 51/7

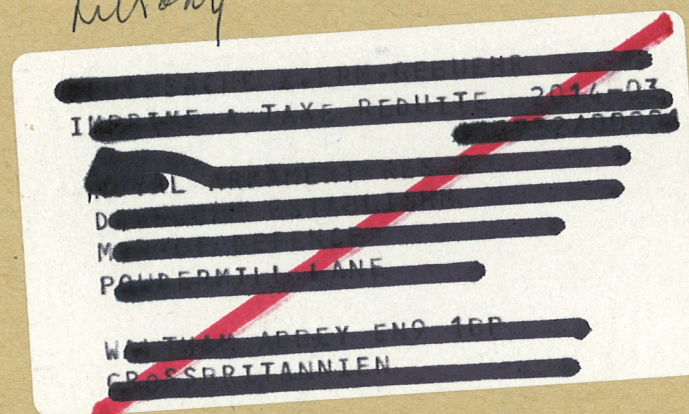
WANBD 6/7



Folio 38v

Upright for Mr.
Walton's powder
mill at Waltham
Abbey

Library

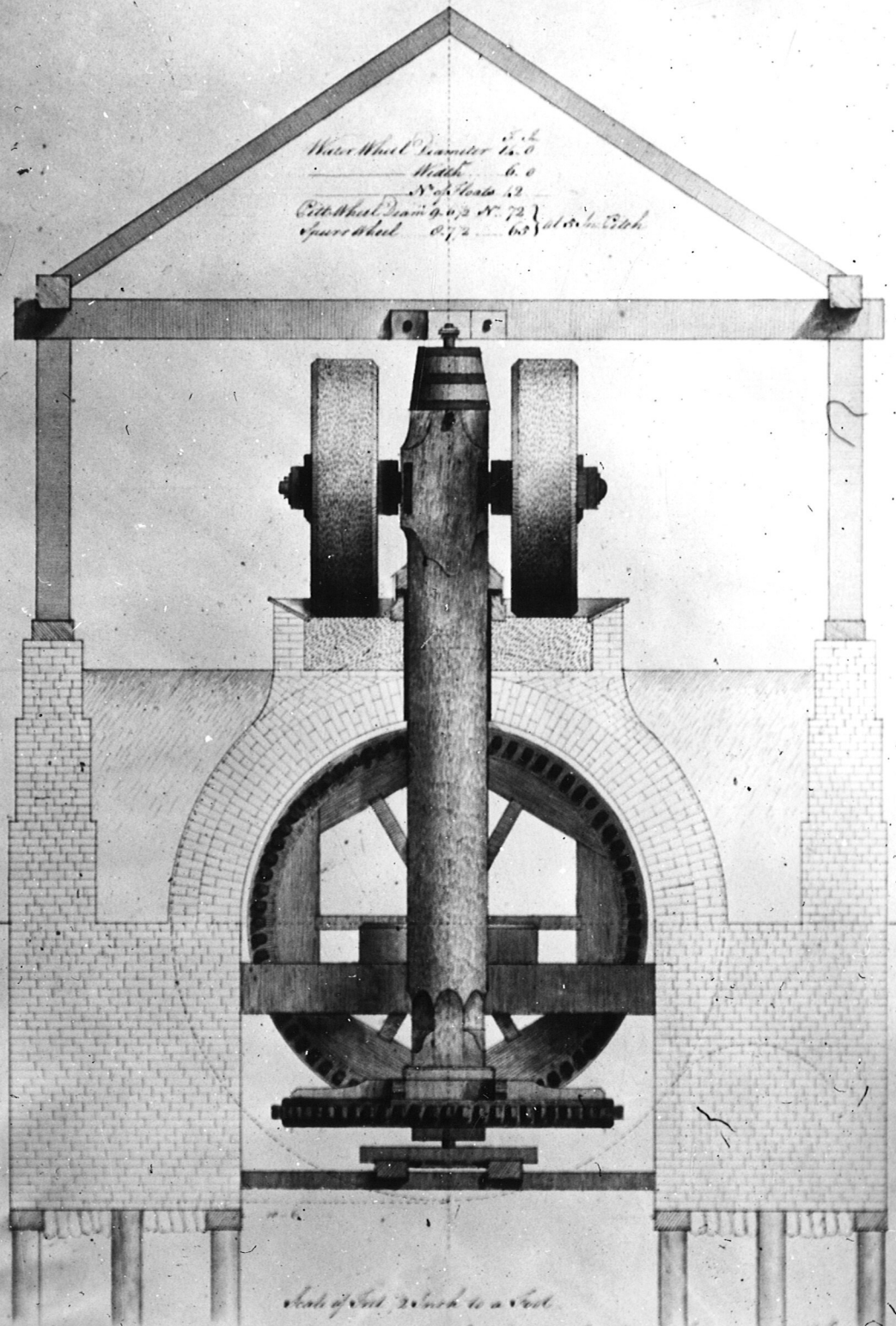


Wertvolle Zeitschrift
Bitte nicht knicken

Valuable journal
Please do not bend

Upright for W. Walton's **POWDER MILL** *at Haltham Abbey.*

Water Wheel Diameter 12.0
 Width 6.0
 No. of Teeth 32
 Pitt Wheel Diam 9.0, 8.72 } at 10 in. 12 in.
 Spurr Wheel 0.72 6.5



Scale of Feet 2 inches to a foot

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

W. Walton

WASC 51/8

WASC 51/8
WANBD 6/8

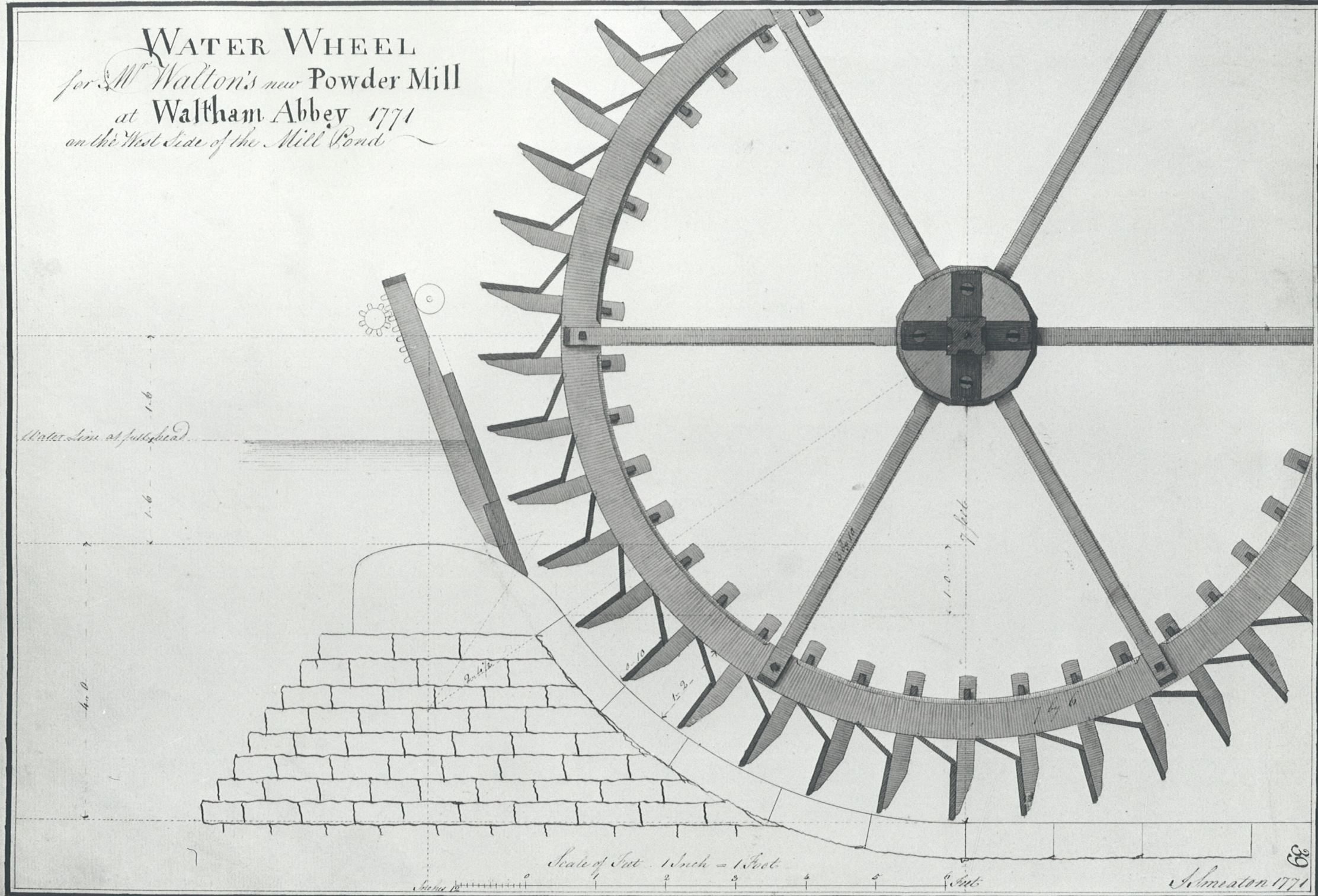
WANBD WAI 57⁸/8

John Smeaton
F&S Drawings

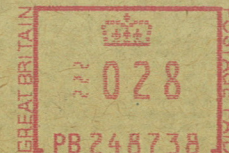
Folio 39 Water wheel
for Mr. Walton's

~~Mr. Walton's~~
new powder mill
at Waltham Abbey on
the west side of the
mill pond

WATER WHEEL
for Mr Walton's new Powder Mill
at Waltham Abbey 1771
on the West Side of the Mill Pond



1
05
92
20
43
76



WASC 51/9

WANBD 6/9

WAI 578/9
John Smeaton

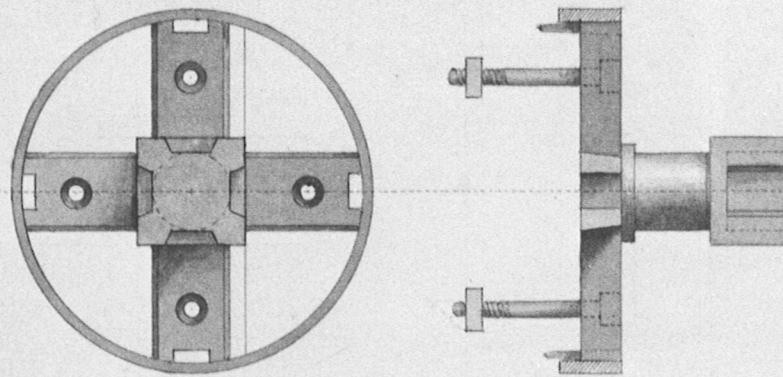
FRS Drawings

Folio 39v Design for connecting
the water wheel axis with the
tumbling shaft for Mr. Walton's
powder mill at Waltham Abbey

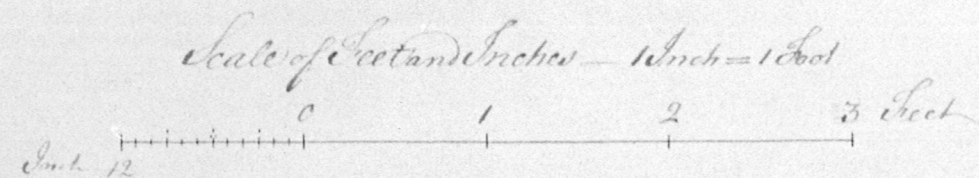
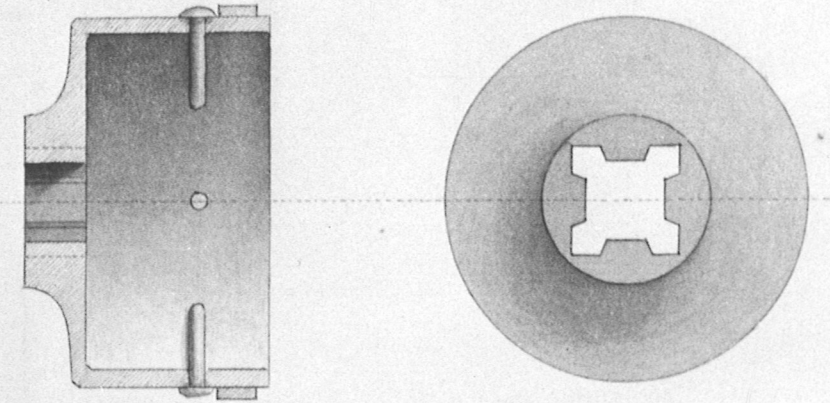
Mr. J. L. Tucker
The Heights
Loughton
Essex
Essex

*Design for connecting the Water Wheel Axis with the Tumbling Shaft
for M^r Walton's POWDER MILL at Waltham Abbey*

*Plan and Profile
of the Cross Gudgeon and Sloop
for the Water Wheel Axis*



*Section and Plan
of the Cast Iron Box for the
Tumbling Axis*



J. Smeaton 1771.

On Her Majesty's Service

WASC 51/5 10

WANBD 6/5 10

WA 578/10

~~WASC 51/5 10~~

~~WANBD 6/5 10~~

WANBD 6/5 10

John Smeaton

FRS Drawings -

List

WASC 51

10



WITH THE COMPLIMENTS OF
THE LIBRARIAN

as requested, 30.12.70

A stylized red ink signature, likely of the Librarian, is written over the date. The signature is fluid and cursive, with a prominent loop at the end.

The Royal Society,
6 Carlton House Terrace,
London, S.W.1.

A CATALOGUE
OF THE
CIVIL AND MECHANICAL
ENGINEERING DESIGNS
1741 - 1792

OF
JOHN SMEATON, F.R.S.

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LONDON

1950

SMEATON'S DESIGNS, VOLUME TWO

Folio

29 Design for the oil press for Shepley's mill at Ca[r]shalton.
Front and side elevation (showing wedges). 1:12. Ink wash. Sgd. 1778.

29v Upright of the main frame for supporting the great axis that carry the stones for Shepley's oyl-mill at Ca[r]-shalton,

Elevation, 1:36. Ink wash. Sgd. 1778.

2nd Sketch for the new disposition of the presses for Shepley's oil mill at Ca[r]shalton.

Elevation of gears, 1:36. Ink. Sgd. 1779.

WATER MILL, CASTLEFORD, YORKS., W.R.

30v Copy of Mr. Crowther's draught for Castleford oil mill.
Elevation, 1:36. Ink. n.d.

WATER MILL, HULL, YORKS., E.R.

31 Ground plan of the water house at Hull.
1:128. Ink. [1776].

31v Design for an oil mill for Mr. Mayson Wright at Hull.
Side and sectional elevation, 1:36. Ink wash. Sgd. 1776.

Inscr.: For the explanation see Book 6th of Repts & Ests page 133.

(F.) Printed Reports II 398.

32 Design for the cast iron axis and rings for Mr. Wright's oil mill at Hull.

End and side elevations, 1:12. Ink wash. Sgd. 1776.

Inscr.: For the explanation see Book 6th of Repts & Ests page 135.

WATER MILL, WALTHAM ABBEY, ESSEX.

33v For Mr. [Bourchier] Walton's double stack of [edge-runner] powder mills at Waltham Abbey.

Elevation and plan of gearing, 1:36. Ink wash. [1771].
[Reports II 282.—Ed].

34 Mr. Smeaton's Nos. [of wheel teeth] for the Fore Mills.
1 leaf MS. Ink. [1771].

SMEATON'S DESIGNS, VOLUME TWO

Folio

- 34v For Mr. Walton's double stack of powder mills at Waltham Abby.

Elevation of water wheel, 1:12. Ink. [1771].

- 35 Elevation of [water] wheel and conduit of the new powder mills at Waltham Abby.

1:12. Ink. [1771].

- 36v Plan of the building for Mr. Walton's powder mill at Waltham Abbey on the west side of the mill pond.

Ground plan, 1:48. Ink wash. Sgd. 1771.

- 37 Plan of Mr. Walton's powder mill at Waltham Abbey.

Plan, 1:24. Ink wash. Sgd. 1771.

- 38v Upright for Mr. Walton's powder mill at Waltham Abbey.

Sectional elevation showing edge-runners, 1:24. Ink wash. Sgd. 1771.

- 39 Water wheel for Mr. Walton's new powder mill at Waltham Abbey on the west side of the mill pond.

Sectional elevation, 1:12. Ink wash. Sgd. 1771.

- 39v Design for connecting the water wheel axis with the tumbling shaft for Mr. Walton's powder mill at Waltham Abbey.

Plan and profile of the cross gudgeon and hoop for the water wheel axis; section and plan of the cast iron box for the tumbling axis. 1:12. Ink wash. Sgd. 1771.

WATER MILL, HOUNSLOW HEATH, MIDDLESEX.

- 40 For the upper stack of powder mills on Hounslow Heath belonging to Saml. Underhill, Esqr.

Sectional elevation of water wheel, 1:12. Ink wash. n.d.

Inscr.: The inside machinery the same as Mr. Walton's at Waltham Abby.

- 41 [Lay-out of mill.]

Plan, 1:48. Pencil. n.d.