

CONFIDENTIAL

Forth Bridge Construction Photographs 1884-1885

From thirteen 10x8 inch nominal glass plate negatives attributed to professional photographer Philip J Phillips by Professor Roland Paxton with explanatory comment.

- [1] 'Forth Bridge Works. General View. June 84. No.7.' Looking northeast during construction of the viaduct piers [*No. 5].
- [2] 'Forth Bridge Works. No.2 caisson day of launch July 23 84 No. 82'. Also showing the internal construction of the caissons generally [*No. 2].
- [3] Building of Inchgarvie northeast main pier in 1884. Numerous workmen. Not previously published?
- [4] General view looking north from the top of the bank at South Queensferry with Nos. 1 and 2 caissons in position. October 1884. [*No. 9].
- [5] Close up of fabrication (of skewback?) in steel yard in 1884 or 1885 with crane and four workmen. Not previously published?
- [6] Skewback under fabrication in steel yard at South Queensferry 1885? Not previously published?
- [7] 'Forth Bridge Works. Girders looking south. 24 May 85. No.1.' These viaduct girders are 168 ft. span (22 ft. deep and 16 ft. centre, and are continuous over alternate piers, each span containing about 200 tons of metal; they were built complete at the height shown in the picture ready to be raised by hydraulic power to their ultimate height of 141 ft., the piers being built as the girders were lifted [*No. 12].
- [8] 'Forth Bridge Works. No.5. caisson just launched. 29 May 85.'. When launched this caisson had a draught of about 10 ft. and a total height of 56 ft., with an external diameter of 70ft. tapering to 60 ft. at the top [*No. 15].
- [9] 'Forth Bridge Works - No.4 Caisson. 8 July 85. No. 37.'. Showing top and temporary bracing and waling for keeping the vertical timbers in position whilst raising this tilted caisson. On 1st January 1884 an exceptionally high tide occurred followed by an equally exceptional low ebb and the caisson sank deeply into the mud with a pronounced list. It was rectified before mid-February 1886. [see Westhofen p.26 for a description and engraving illustrating this difficult operation] [*No. 27]
- [10] 'Forth Bridge Works - Interior of 12 foot tube. 9 July 85. No. 89.'. The tube shown is being taken to pieces, the plates being removed and the rings split up into segments. The style of marking for re-erection is also shown [*No. 25].
- [11] Steam Launch (for carrying officials and visitors?). Not previously published?
- [12] 'Members of the Iron & Steel Institute, on a visit to the Forth Bridge Works. 29th August 1885 No.1A.'. 49 members present. Not previously published?
- [13] 'Members of the Iron & Steel Institute, on a visit to the Forth Bridge Works. 29th August 1885 No.2A.'. 67 members present. Not previously published?

*First published in PHILLIPS, Philip J. *A series of descriptive photographs by Philip J. Phillips illustrating processes and progress of work on the Forth Bridge in course of construction over the Firth of Forth, Scotland. Engineers. Sir John Fowler & Mr. B. Baker. Contractors. Messrs Tancred Arrol & Co. 1884 1885.* [Edinburgh, 1885]

[WESTHOFEN W.] *The Forth Bridge. Reprinted from "Engineering," February 28, 1890.*

Provenance. These negatives formerly belonged to the late William Durance, a Nottinghamshire dentist. Following his death in 2005 aged 84 they were given to Professor Paxton on the understanding that he had complete discretion in finding a suitable organisation to take on their ownership, but with the request that if ever the images were publicly displayed an acknowledgment should be made to Mr. Durance's kind donation. Now the plates are being donated to RCAHMS's National Monument Record of Scotland where they, and images from them, will be available for public consultation.

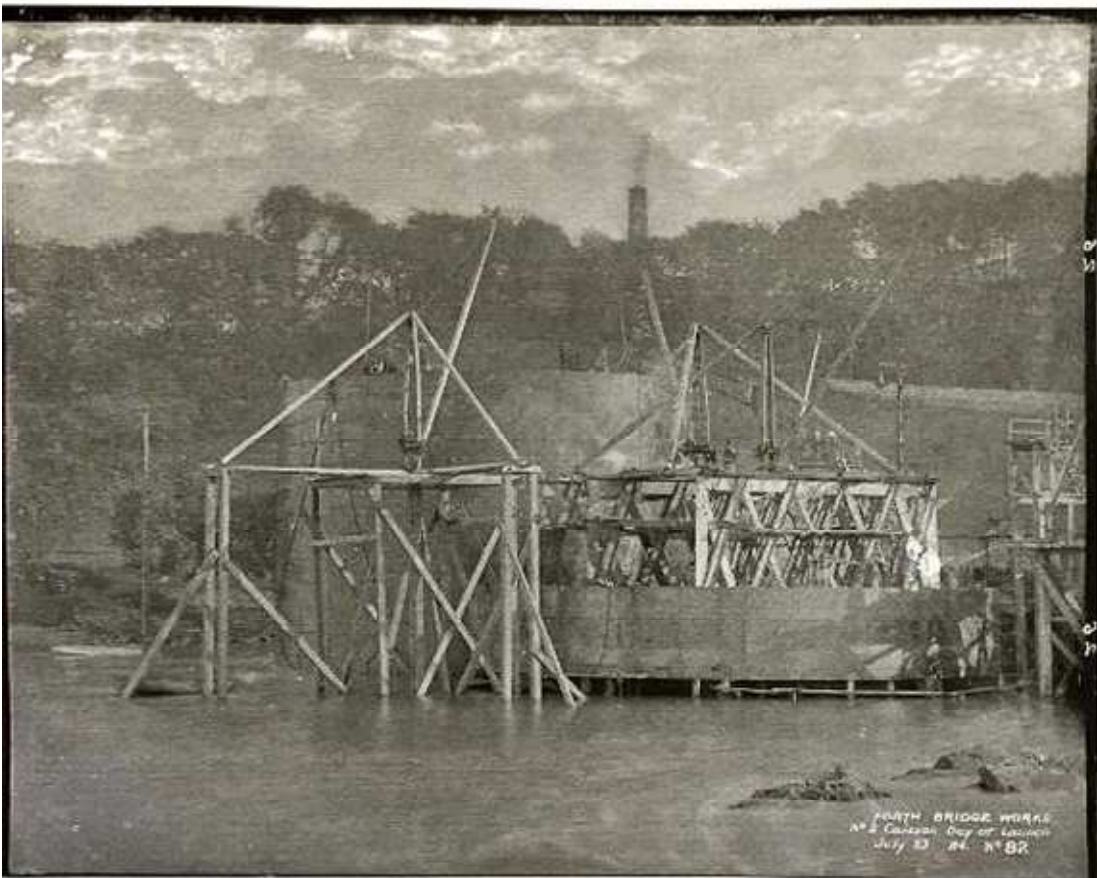
Roland Paxton 15.1.2009



June 84

Philip
J
Phillips
5

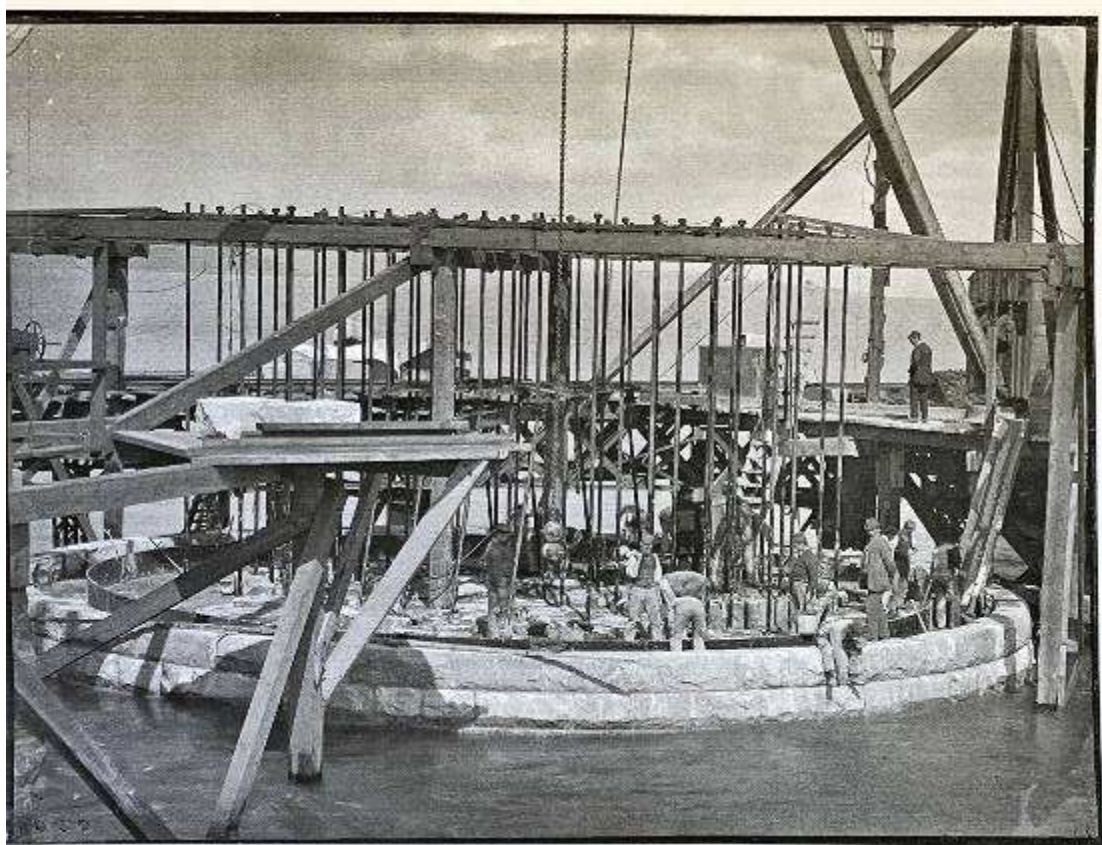
FORTH BRIDGE WORKS
General View
June 84. N57



July 84
2

Philip J
Phillips
2

FORTH BRIDGE WORKS
N. 2. Collieston. Day of building
July 23 84. N58

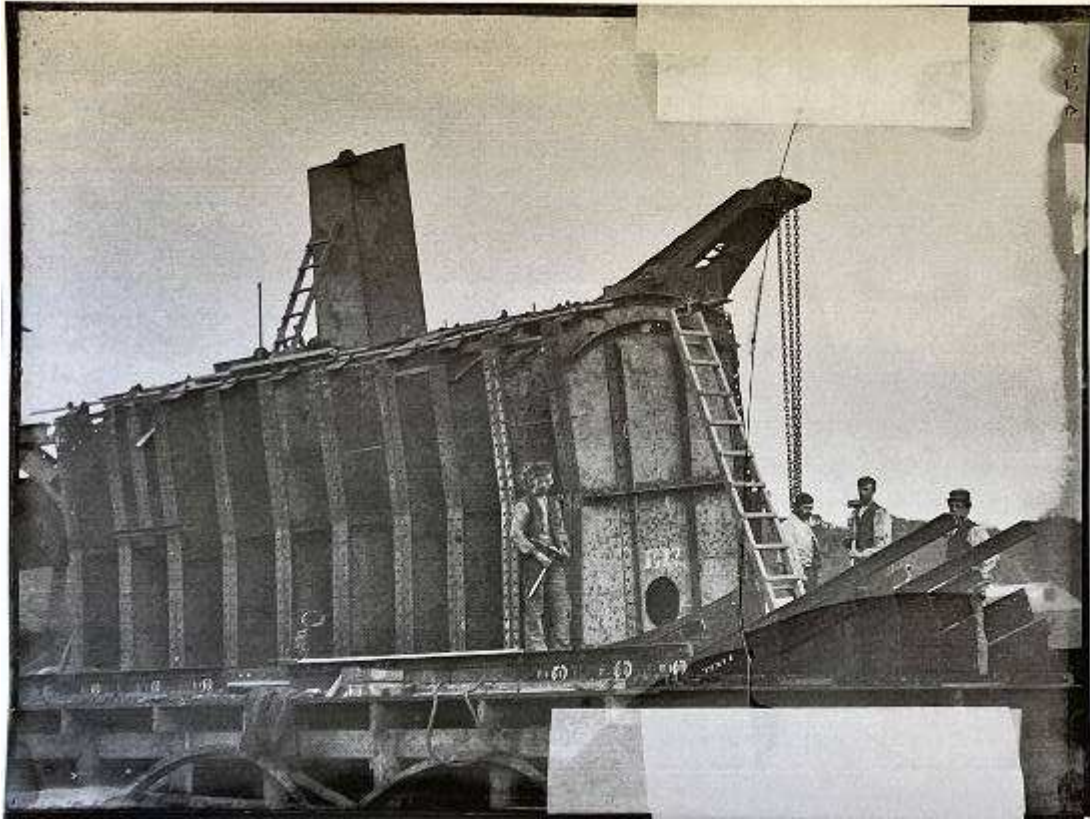


3



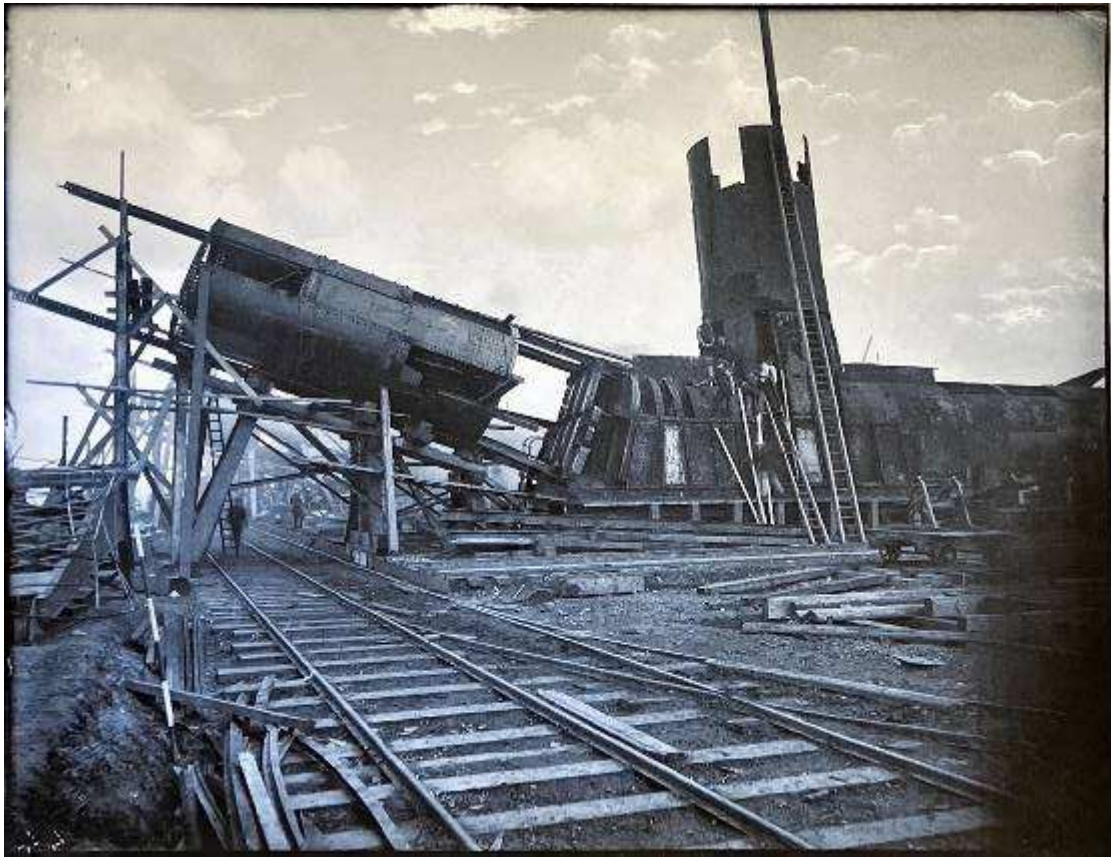
4

Vacant
P. J. P. 9
After 2:30 PM
Water all
F. B. W. 1915
May?



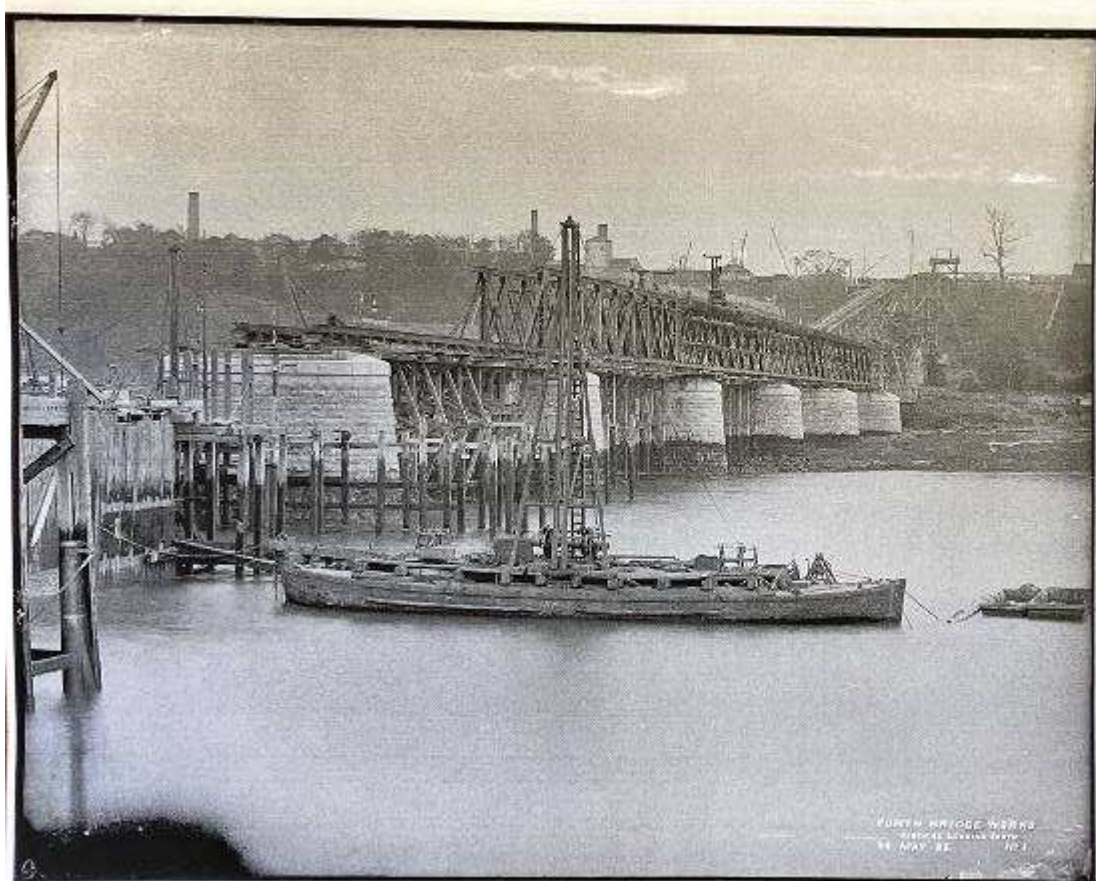
5

PJP
unpublished?



6

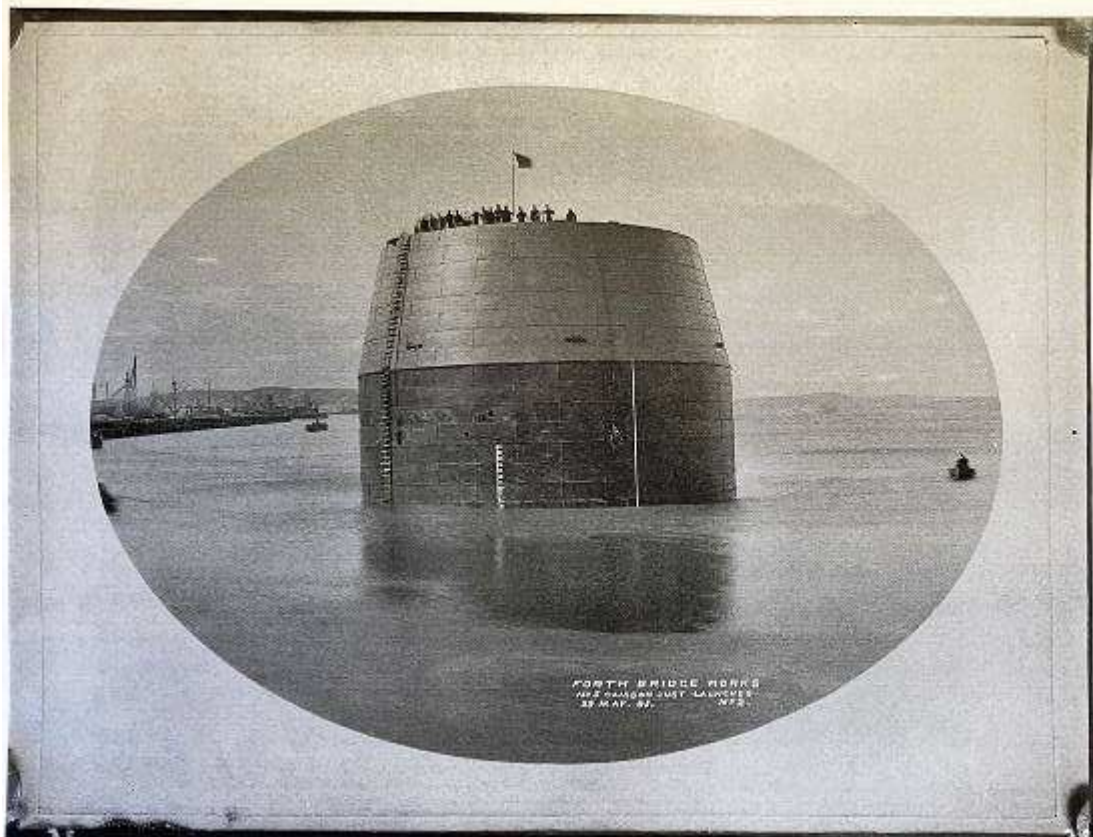
Steel Yard
unpublished?
Vancouver
PJP 16



May 85. 7

PJP
12

FORTH BRIDGE WORKS
HARRISBURG, PENN.
25 MAY. 85. N.Y.S.



May 85 8

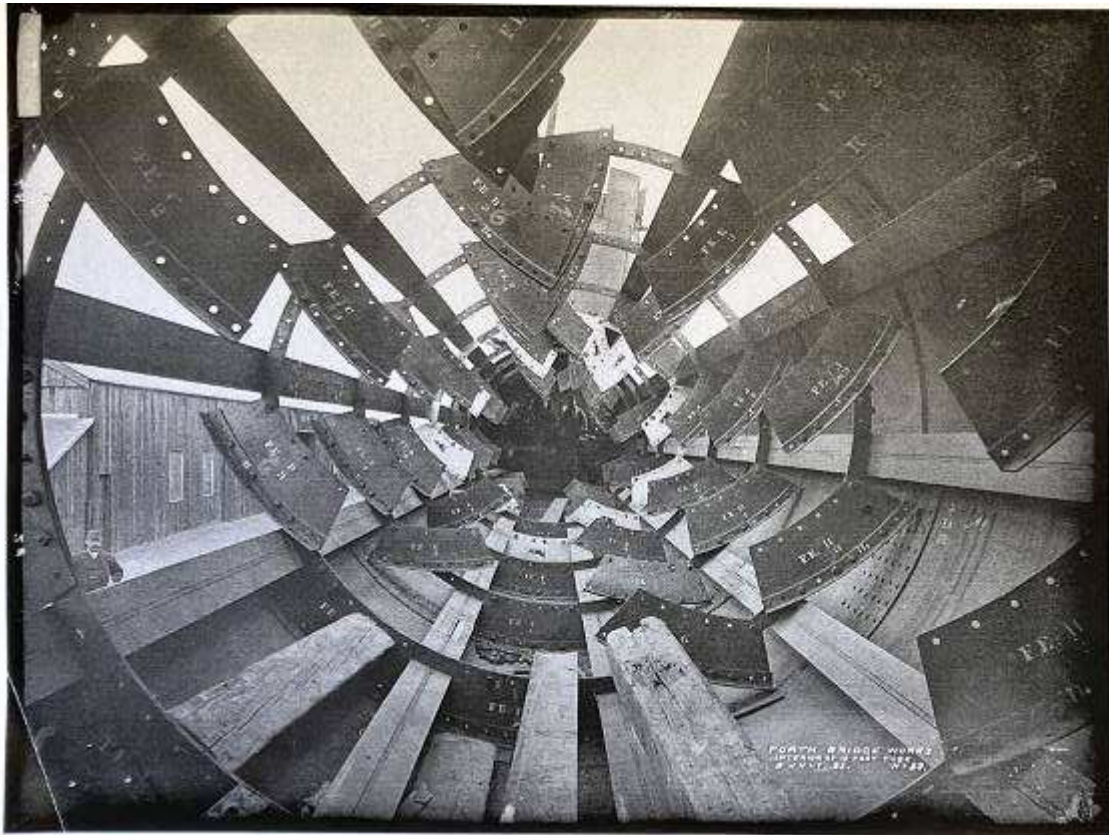
Phillip J.
Phillips
15

FORTH BRIDGE WORKS
HARRISBURG, PENN.
25 MAY. 85. N.Y.S.



July 25 9

Phillip J
Phillips
27



10 July 25

Phillip
I
Phillips
25



11

expedited?



12
Aug 1885

expedited

MEMBERS OF THE HOWLANDS INSTITUTE ON A VISIT TO THE HOWLANDS (1885) AUGUST 1885



Aug 1885

Waukegan

MEMBERS OF THE WAUKEGAN LYCEUM, AUGUST 1885