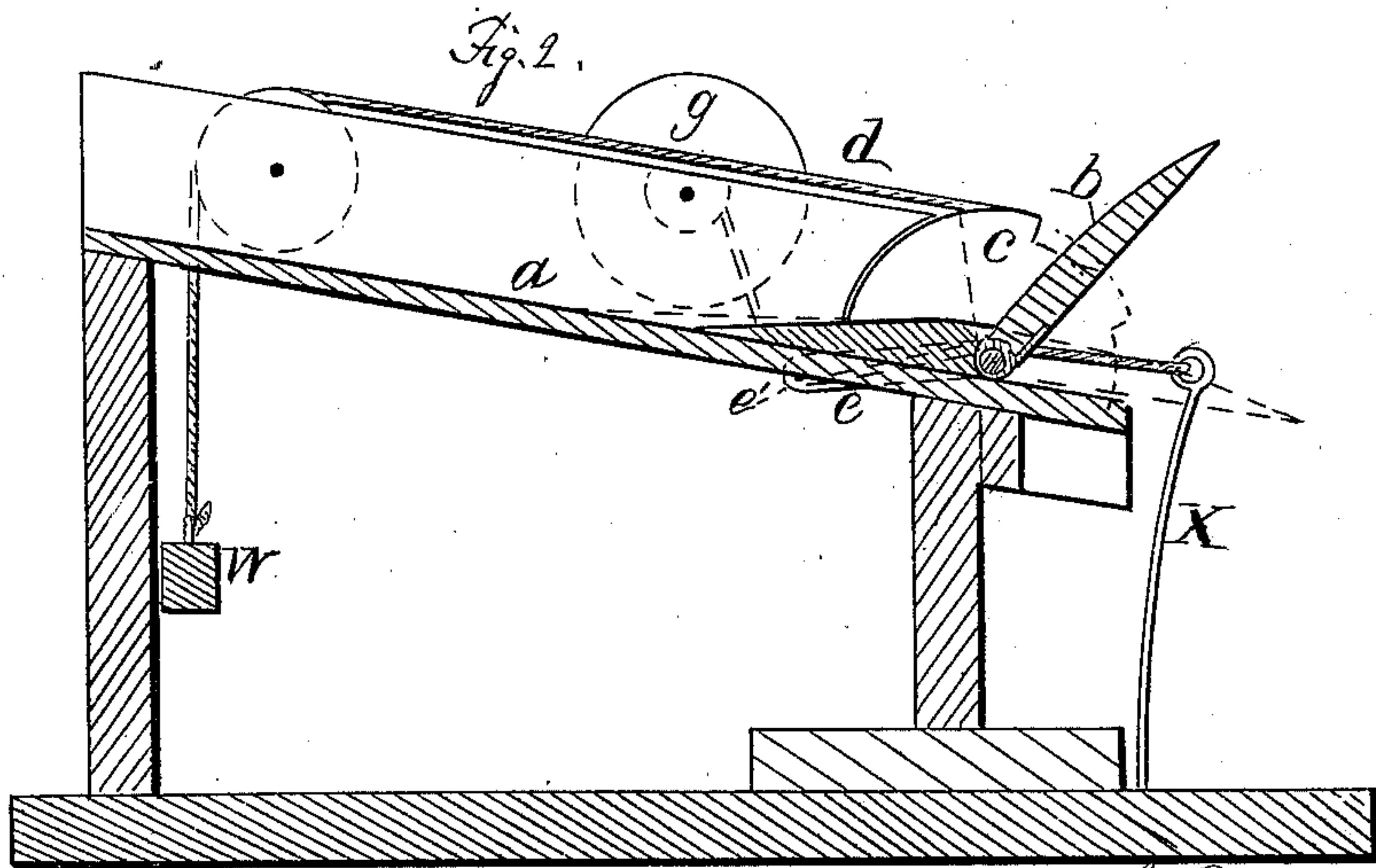
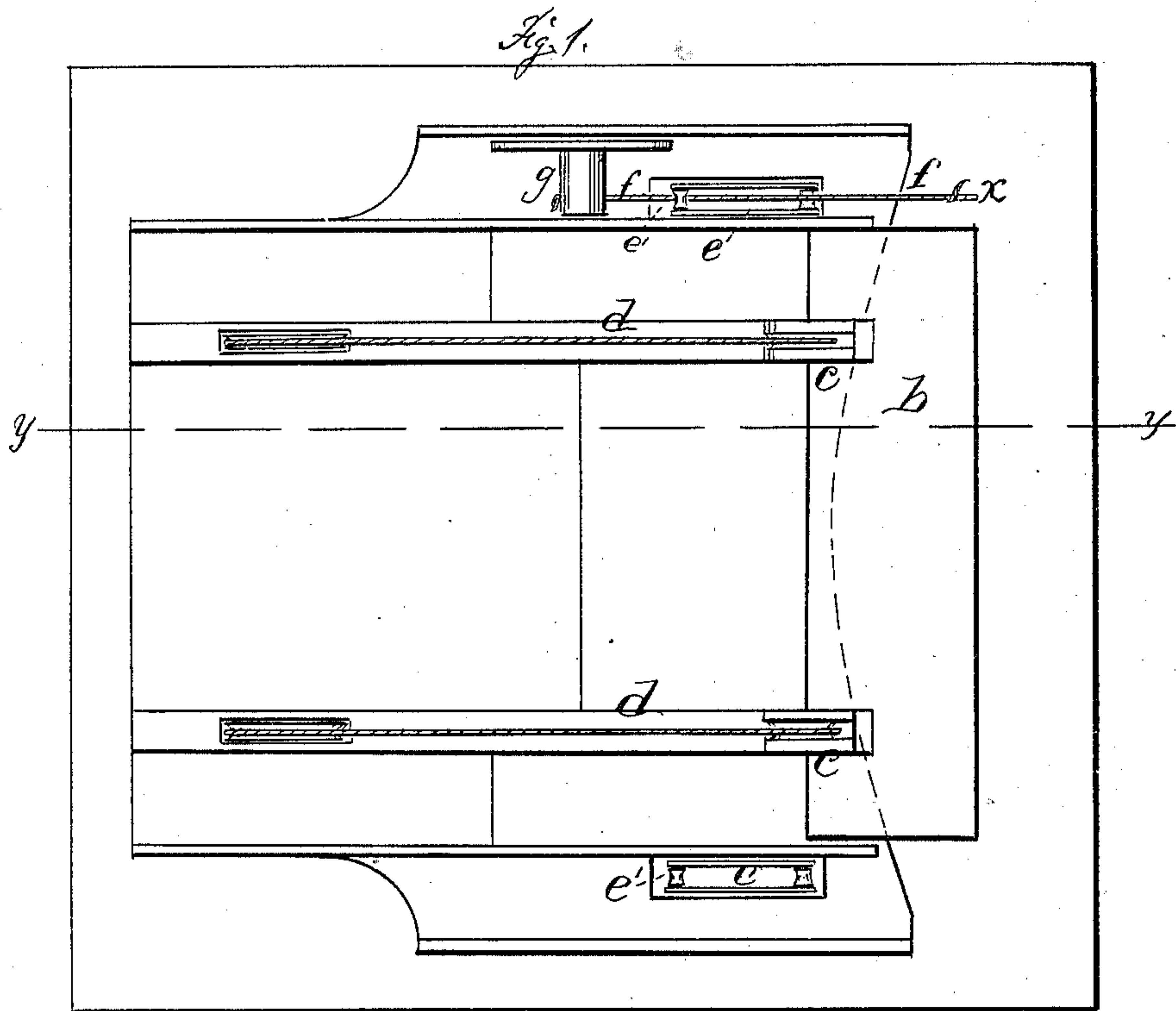


J. A. Clark,
Ferry Guard.

No. 80,391.

Patented July 28. 1868.



J. Williams } witness
Arthur L. Benson }
W. J. D.

James H. Clarke
Re J. Greenough Atty

United States Patent Office.

JAMES A. CLARKE, OF NEW YORK, N. Y.

Letters Patent No. 80,391, dated July 28, 1868.

IMPROVED FERRY-BRIDGE.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, JAMES A. CLARKE, of the city, county, and State of New York, have invented certain new and useful Improvements in Ferry-Bridges and like structures; and I hereby declare and ascertain my invention, referring to the accompanying drawing, in which—

Figure 1 is a plan.

Figure 2 is a vertical section.

Like letters denote like parts in both figures.

Heretofore I obtained Letters Patent for a guard to a ferry-bridge, the said guard consisting of a hinged piece at the end of the floating bridge, next the boat, that was lowered by the boat coming into dock striking a fender. This mode of lowering the guard was deemed objectionable by some, and considered by them liable to get out of order.

To obviate the objections brought against this mode of lowering the guard is the object of my present invention.

The construction is as follows:

a is the ferry-bridge, made in all particulars like the ordinary bridges now in use. At the lower end of bridge a there is hinged a board, b , which I call a guard. This guard has a segment of a circle affixed to it, as at c , to which a cord, d , is attached, passing back over a pulley and down to a weight, w , as clearly seen in fig. 2. This, it will be seen, raises the guard into the position seen in the fig. 2. At the rear end of the segment there is a lever, e , having a pulley on its end at e' , around which the hitching-chain f , from the windlass g , passes to the boat, the action of which is represented by the spring x , which spring is not used in practice, but is merely put there to show the action of the chain f upon the guard as the boat is drawn, in lowering it into place.

Having thus described my improvement, I claim—

The method of lowering the guard on the bridge, by means of the chain f , that draws in and fastens the boat to the bridge, substantially as and for the purposes set forth.

The above I claim as my invention.

In testimony whereof, I have hereto set my hand, this 1st day of April, 1868.

JAMES A. CLARKE.

Witnesses:

J. J. GREENOUGH,

EDGAR M. AMBLEMAN.