

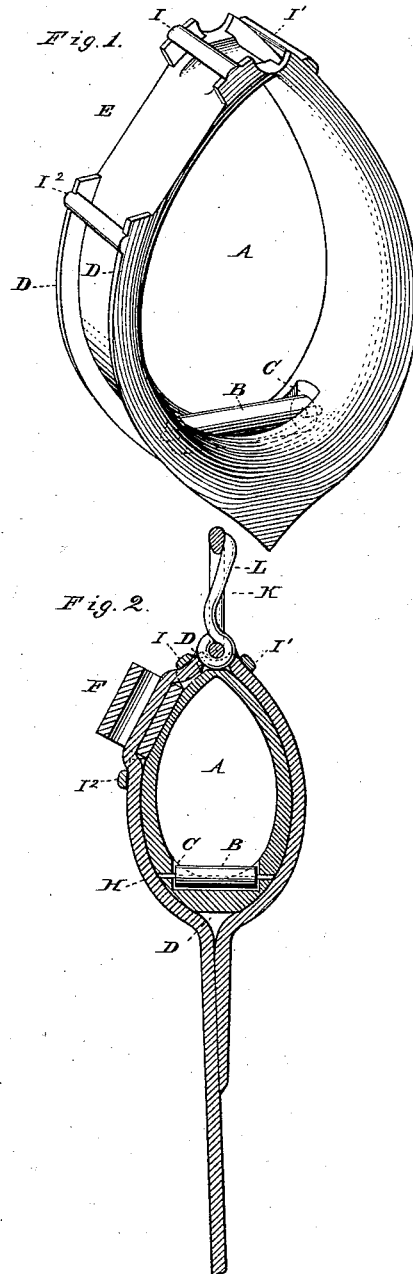
(No Model.)

H. F. WALTER.

SHAFT TUG.

No. 347,670.

Patented Aug. 17, 1886.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SHAFT-TUG.

SPECIFICATION forming part of Letters Patent No. 347,670, dated August 17, 1886.

Application filed June 3, 1886. Serial No. 204,038. (No model.)

To all whom it may concern:

Be it known that I, HAMILTON F. WALTER, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Shaft-Tugs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a perspective view of the metal eye. Fig. 2 is a vertical section.

My invention relates to shaft-tugs; and it consists in the construction and novel combination of parts, as hereinafter described, and pointed out in the claim.

Referring by letter to the accompanying drawings, A designates the eye in which the shaft is supported. Said eye A is made of cast malleable iron, and is provided on its lower inner face with a friction-roll, B, which is supported over a depression, C, in the inner face of the eye A, and upon this roll B the shaft rests when in place. The eye A is pro-

vided with rim-flanges D D along its edges, except at the point E, where the guard-loop F comes, and between these flanges D D the strap H, which encircles the eye A, rests. The strap H is held in place in its seat around the eye A by cross-bars I I' I'', secured to or cast with the eye A. The strap H is provided with a buckle, K, and a tongue, L, by which it is connected to the harness. The cut-away portion or depression at E forms a recess in which the under or inner portion of the guard-loop F rests, said loop F being held in place by the strap H, passing through the loop and under the cross-bars I and I'.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the cast malleable-iron eye having the rim-flanges, the friction-roll and the cross-bars on the rim-flanges, of the strap encircling the eye between its flanges, and having the tongue-buckle and guard-loop, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HAMILTON F. WALTER.

Witnesses:

I. C. E. MOORE,
JONATHAN JESSOP.