(No Model.)

J. L. GREGORY.

SHAFT TUG.

No. 482,243. Patented Sept. 6, 1892.

Fig. 1.

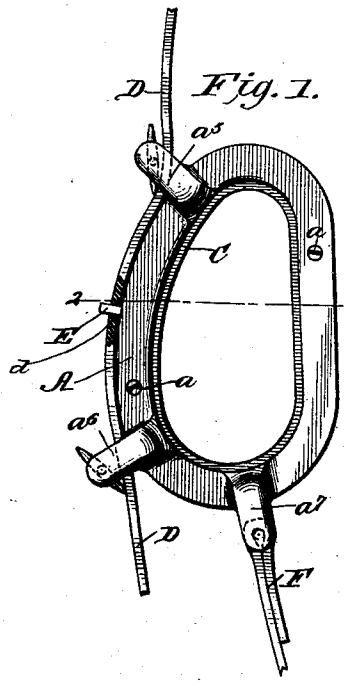


Fig. 2.

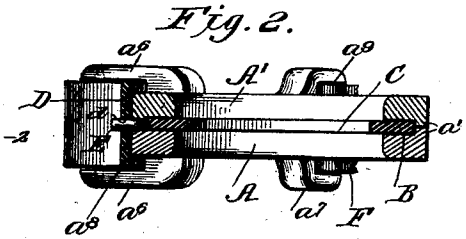


Fig. 3.

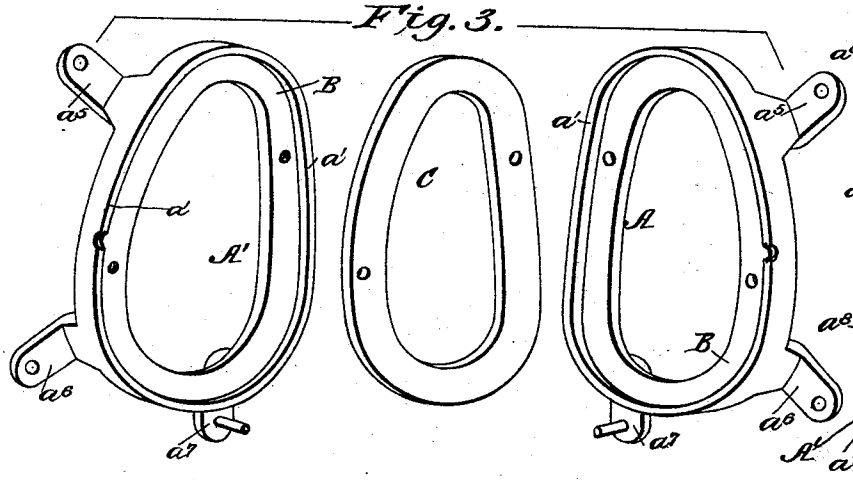
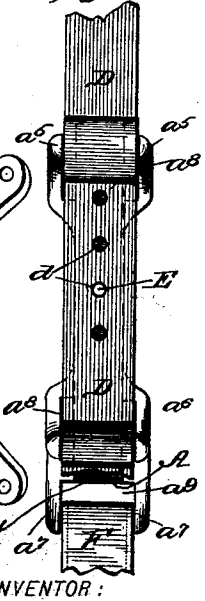


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH L. GREGORY, OF WASHINGTON, MISSOURI.

SHAFT-TUG.

SPECIFICATION forming part of Letters Patent No. 482,243, dated September 6, 1892.

Application filed April 1, 1892. Serial No. 427,417. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. GREGORY, residing at Washington, in the county of Franklin and State of Missouri, have invented a new and Improved Shaft-Tug, of which the following is a specification.

My invention has for its object to provide a simple, inexpensive, and effective anti-rattling shaft-tug; and it consists in the combination and novel arrangement of parts, such as will hereinafter be fully described in the specification, and then pointed out in the claim, reference being had to the accompanying drawings, in which—

Figure 1 is side view of my improved shaft-tug. Fig. 2 is a horizontal section thereof on the line 2 2, Fig. 1. Fig. 3 is a perspective view of the parts detached, and Fig. 4 is an edge view of my improved shaft-tug.

My improved shaft-tug consists of two metal or other hard material frame-sections A A′, which are firmly set one against the other and secured by screws *a*, as shown, or in any other convenient manner. Each of the frames has formed on its inner face at its outer edge a projecting rim *a′*, which rims are set against each other, as clearly shown in Fig. 2, when the two frames are fitted together, whereby a recess or groove portion B is provided, which extends entirely around the inner face of the tug or loop. This groove B forms a seat portion for a leather or other pliable material washer-plate C, the inner edge of which projects inward from the metal frames and forms a cushion upon which the shaft is supported, and against which it will rub and strike when held therein. It will be noticed that by forming the bearing-surface of the tug with a cushion-bearing, as stated, the shaft will be held from contact with the metal frame, and all jar and rattling noise thereby avoided.

The frames A A′ have each three outwardly-projecting coincident curved arms or ears a^5, a^6, and a^7, in the outer ends of which are cross pins or rods which connect such lugs and form loop members a^8 a^9. Between the upper loop members a^8 is passed the lower end of the gig-strap D, which is held on the tug by the pin E, projected therefrom at a point between the loops a^8, which pin enters a hole *d* cut in the strap, as clearly understood from Fig. 1 of the drawings, which serves to firmly hold the strap to the tug-frame without the use of a buckle. Upon the loop-rod a^9 is secured the upper end of the belly-band billet F.

From the foregoing description, taken in connection with the drawings, the complete operation and advantages of my improvement will be readily understood. By securing the gig-strap to the tug-frame in the manner stated the use of a buckle is entirely avoided, which in itself is of a great advantage on account of the fact that all the strain which in the use of a buckle falls on the strap at the point where the buckle-tongue passes through is by my contrivance divided and falls part in the leather strap where it bears against the upper loop cross-pin and part against all that part of the strap which under a pull will from its position bear strongly against the outer surface of the shaft-tug.

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

An improved shaft-tug consisting of the metallic sections A A′, having coincident flanges *a′* *a′*, extending entirely around the inner edges thereof, whereby to form a groove B, a packing-ring C, held in such groove and projected beyond the inner edges thereof, each of such sections having coincident laterally-extending lugs a^5 a^6 a^7, connected to form guide-loops a^8, and means for securing such sections together, substantially as and for the purpose described.

JOSEPH L. GREGORY.

Witnesses:
JOS. STAMM,
EDMUND KREKEL.