

No. 606,870.

Patented July 5, 1898.

C. R. MACCALL.

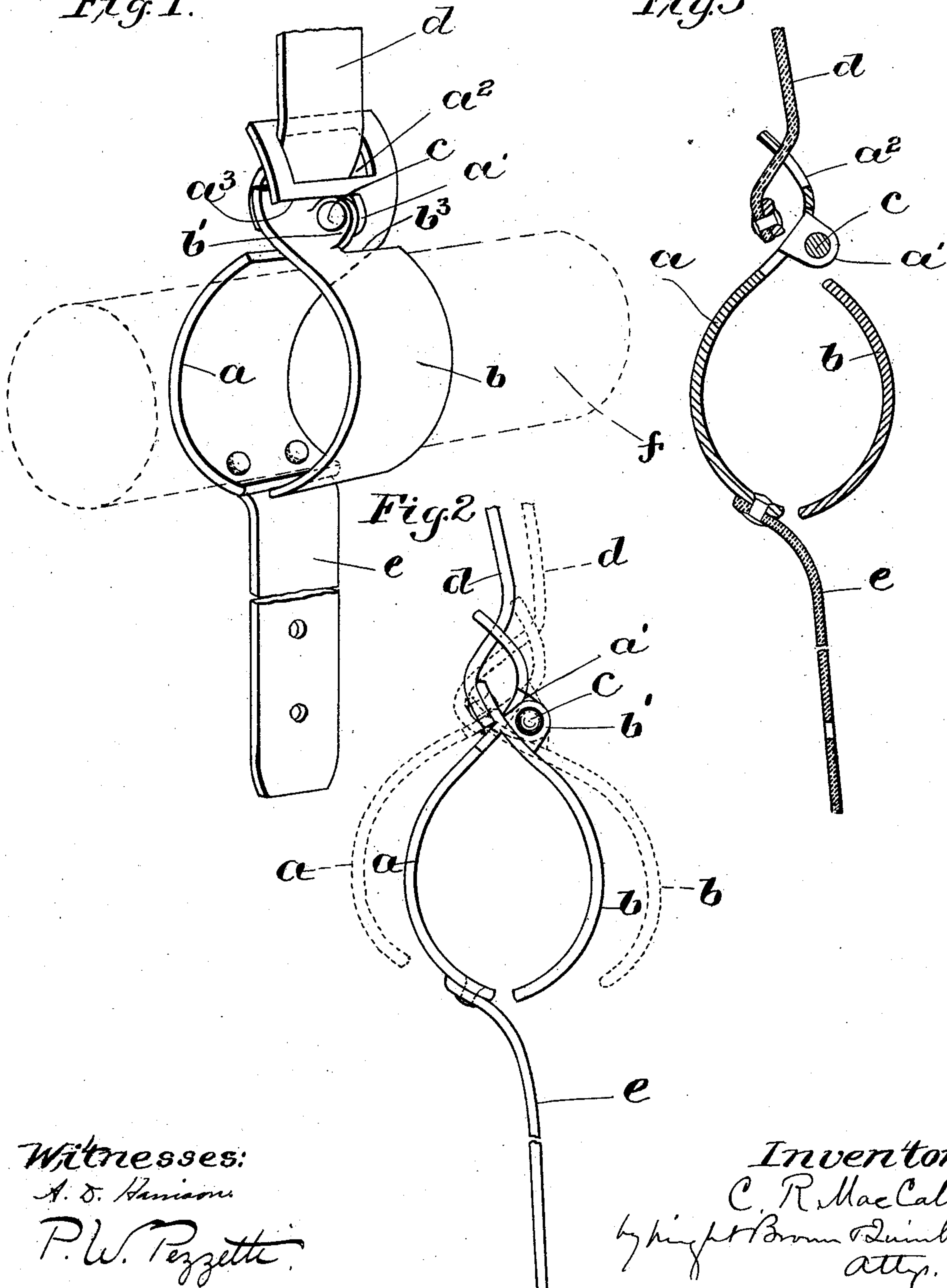
THILL TUG.

(Application filed July 21, 1897.)

(No Model.)

Fig. 1.

Fig. 3.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## THILL-TUG.

SPECIFICATION forming part of Letters Patent No. 606,870, dated July 5, 1898.

Application filed July 21, 1897. Serial No. 645,315. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES R. MACCALL, of Howland, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Thill-Tugs, of which the following is a specification.

This invention relates to a thill-tug or shaft-holder for vehicles, and has for its object to provide a simple, inexpensive, durable, and easily-applied device of this class, such as will be hereinafter described and claimed.

Of the accompanying drawings, forming part of this application, Figure 1 represents a perspective view of a thill-tug constructed according to my invention. Fig. 2 represents an end view of the same. Fig. 3 represents a median vertical section.

The same reference characters indicate the same parts in all the figures.

Referring to the drawings, the letters *a* and *b* designate the two members or jaws of my improved thill-tug, the said jaws being composed of metal and hinged together near their upper ends by means of a stud *c*, which passes through ears *a'* *b'*, formed on the respective jaws. The jaw *a* is made somewhat longer at its upper end than *b*, and is provided above the hinge with an eye or slot *a<sup>2</sup>*, through which passes a strap *d*, attached to the upper end of the jaw *b*. The strap *d* forms a part of or is secured to the saddle-strap of a harness, and the member *a* is provided with a strap *e*, adapted for attachment to the girth-strap or belly-band of the harness. These connections may be made by rivets, buckles, screws, or in any other suitable manner, and the connection of the straps *d* and *e* with the jaws may also be accomplished in any desired manner, though riveting is the preferable method in the latter case.

The two jaws comprising the tug are curved to conform to the contour of a wagon or carriage shaft, and they operate to hold said shaft or thill somewhat after the manner of ice-tongs, as will readily be seen in the drawings, the broken-line body *f* representing the shaft.

The members *a* and *b* may be cast in the desired shape, or they may be stamped, cut, filed, or otherwise formed from sheet metal. The method of stamping will be particularly

convenient, since the ears *a'* *b'* may be bent up from the strips caused by forming the complementary recesses *a<sup>3</sup>* *b<sup>3</sup>* in the two jaws.

In the operation of hitching it is only necessary to open the jaws of the tug, as indicated by the broken lines in Fig. 2, and insert the shaft between them. They will close of their own weight around the shaft and cannot be opened when the harnessing is complete by any of the ordinary motions of the vehicle or horse, since if slackness occurs in the saddle-strap the girth-strap will keep the jaws together, and vice versa.

The facility with which my improved tugs may be coupled to shafts renders them particularly serviceable for hose-cart harness for fire departments, where despatch in hitching the horse is of great importance.

By reason of its metallic construction the tug will wear evenly on the shaft-leather, since it may slip freely thereon, and for the same reason will relieve the saddle-strap and the horse's back from the unnecessary strain which is often caused by using leather tugs, which are apt to cling and remain in one position on the shaft-leather. The jaws may be made slightly convex on their inner sides to increase the slip. It is of course possible to line the inner sides of the two jaws with leather or rubber if this should be desired in any case.

The above-described construction is selected only as illustrating the essential features of my invention and is capable of modification in various details without departing from the spirit of the invention.

I claim—

1. A thill-tug comprising two coacting metallic members curved to conform to a vehicle thill or shaft and hinged together above the shaft, one of said members having an upwardly-extending portion provided with an opening, and having a strap attached to its lower end, and the other member having its upper end extending beyond the hinge and provided with a strap passing through the opening of the first-mentioned member.

2. A thill-tug comprising two coacting metallic members or jaws curved to conform to a vehicle thill or shaft and having ears formed on or attached thereto, and a stud pivotally



connecting said ears together above the shaft,  
one of said members being adapted for attachment  
at its lower end to the girth-strap of a  
harness and having at its upper end an eye  
5 or slot, and the other being adapted for attachment  
to the saddle of the harness by  
means of a strap passing through said eye or  
slot.

In testimony whereof I have signed my  
name to this specification, in the presence of 10  
two subscribing witnesses, this 19th day of  
May, A. D. 1897.

CHARLES R. MACCALL.

Witnesses:

JOSEPH A. STEVENS,  
CHAS. F. PLUMLY.