

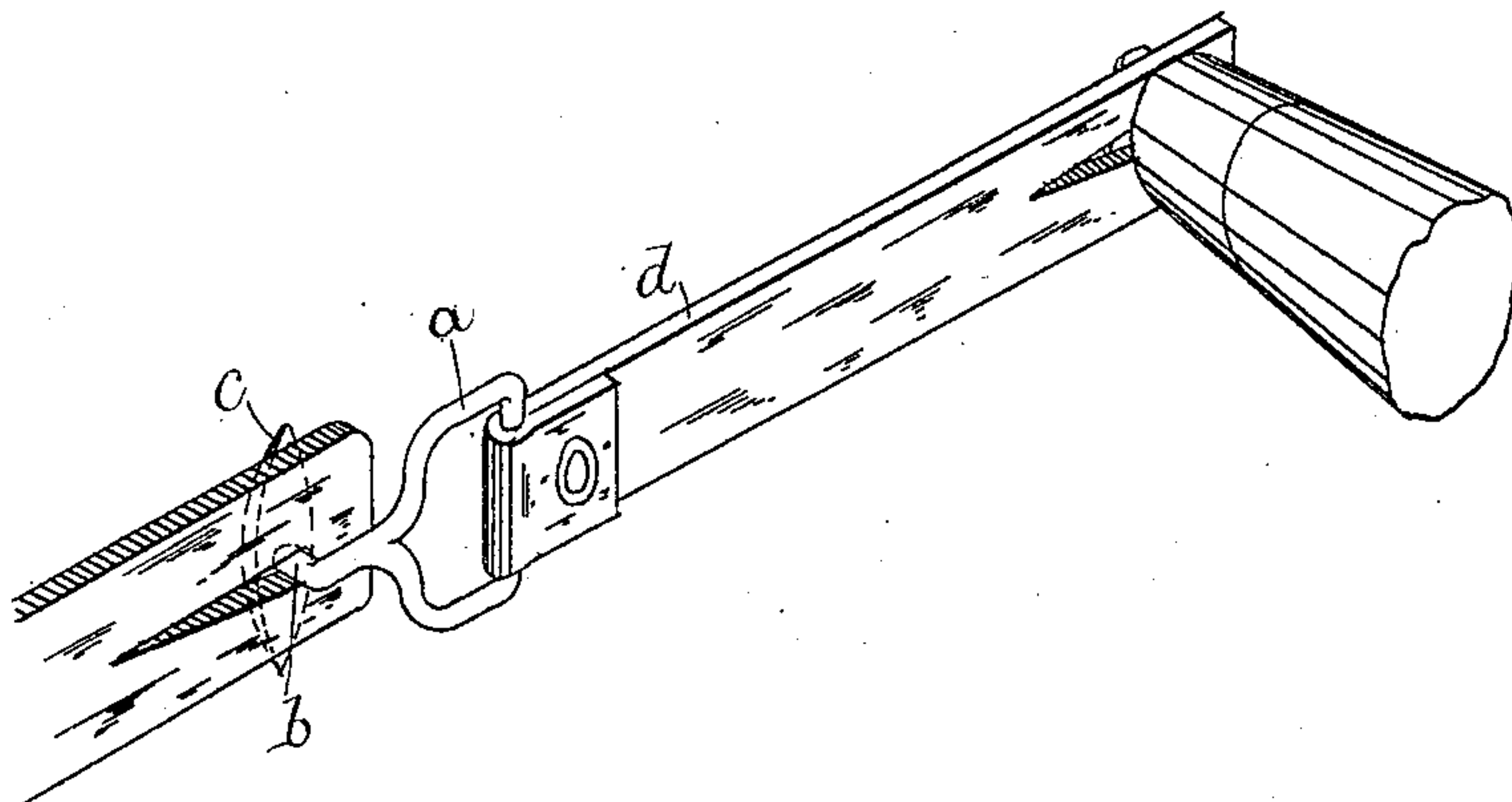
(No Model.)

F. A. ROBBINS.

TUG ATTACHMENT.

No. 397,939.

Patented Feb. 19, 1889.



Witnesses:

*Charles S. Cook*  
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Inventor:

*Frederick A. Robbins*  
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# UNITED STATES PATENT OFFICE.

FRED A. ROBBINS, OF WATERVILLE, MAINE.

## TUG ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 397,939, dated February 19, 1889.

Application filed May 16, 1888. Serial No. 274,095. (No model.)

*To all whom it may concern:*

Be it known that I, FRED A. ROBBINS, a citizen of the United States, residing at Waterville, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Devices for Lengthening Tugs; and I do hereby 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.

My invention relates to means for lengthening the tugs or traces in harnesses; and the particular object of my invention, and that for which it is more especially designed, is to furnish ready means for extending the length of traces without letting them out at the breast-plate when changing from a carriage to a sleigh or from one vehicle to another. Hitherto it has been customary to make harness with means for taking up and letting out the tugs at the breast-plate. The size of the buckle and the stiffness of the leather of the tug made this operation a difficult one, and the construction was clumsy and expensive. It has thus become customary to make harnesses with the tugs secured fast to the breast-plate; and it is to provide ready means of extending the length of the tug, as before stated, that my invention is directed.

My invention consists of a detached strap having a hole adapted to engage the end of the whiffletree, and having at its end a button adapted to enter the hole in the end of the tug.

It further consists of the extension-hook, having a ring, an offset from said ring, and a button on the end of said offset.

I illustrate my invention by means of the accompanying drawing, which shows a perspective view of my device as used.

The hook is preferably made of cast brass or malleable iron, and is formed of a ring, *a*, having a flat or straight portion where the strap is to be attached, an offset, *b*, which extends off at right angles, or nearly so, to the face of the ring *a*, and a button, *c*, on the end of said offset, formed, preferably, with a length greater than its width and a rounded face, which enables it to be readily passed through the eye in the tug. This button *c* is

so situated on the end of the offset *b* that when the hook is in position it will extend across the eye of the tug. The end of the lengthening-strap *d* is put through the ring of the hook and riveted or sewed, and a hole or eye is made at the end, by which it may be hooked to the whiffletree. The narrow button is passed through the eye of the tug and then turned, so that it extends across said eye.

It is designed to put the hook here shown on the market as a new article of manufacture. By its use the construction of a lengthening-strap is reduced to the simple operation of cutting a hole in the strap and fastening one end in my hook by means of a rivet or otherwise. The use of this method of lengthening tugs, which is much preferable to the other method pointed out, is thus rendered practicable, my device furnishing a cheap and simple means of accomplishing it. Several holes may be made in the lengthening-strap to furnish means of varying the length of the tug, or a number of holes may be made in the end of the tug for a like purpose.

The device will work equally well if the ring is secured to the tug and the button hooked into an eye in the strap.

It is obvious that the shape of the ring may be varied in certain particulars without departing from my invention.

My invention may be used to replace the buckle which supports the lug through which the thill passes, or it may be used generally to replace a buckle for connecting two straps.

I claim—

A device for lengthening traces, consisting of a strap provided at or near one end with an eye and at the opposite end with a loop, a shank projecting from said loop and extending at right angles, or nearly so, to its face, and an oblong button at the end of said shank extending transversely to the length of said strap and at right angles to said shank, in combination, substantially as shown.

FRED A. ROBBINS.

Witnesses:

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