

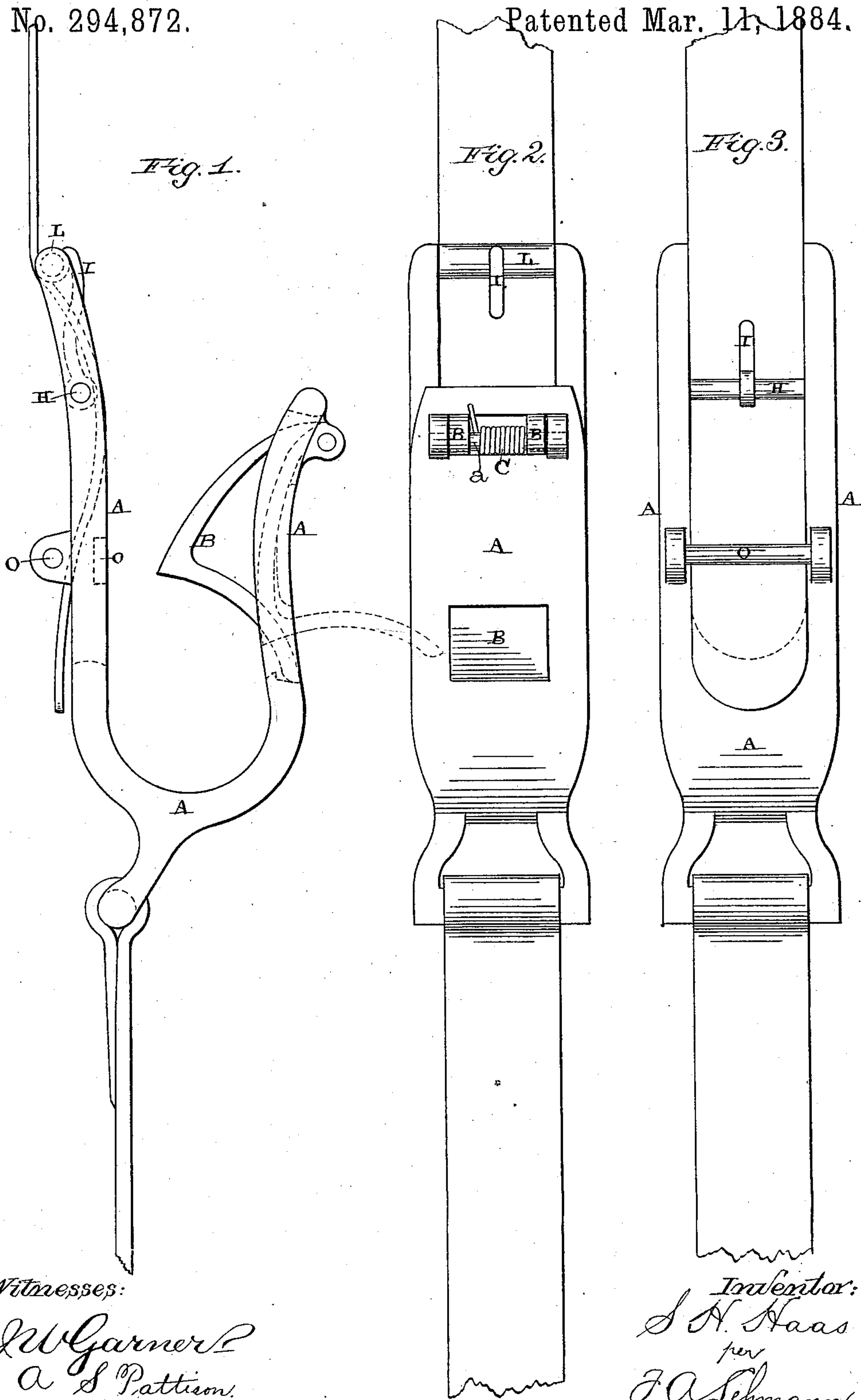
(Model.)

S. H. HAAS.

HARNESS TUG.

No. 294,872.

Patented Mar. 11, 1884.



Witnesses:

J. W. Garner  
A. S. Pattison.

Inventor:  
S. H. Haas  
per  
J. A. Lehmann, atty

# UNITED STATES PATENT OFFICE.

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## HARNESS-TUG.

SPECIFICATION forming part of Letters Patent No. 294,872, dated March 11, 1884.

Application filed August 8, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, SAML. H. HAAS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Harness-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 pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in harness-tugs; and it consists in the combination of a harness-tug which is open at its top and which has a spring snap or catch attached to its outer end, the snap being so arranged that the shaft in sinking into position will force the snap back until the shaft has passed by it, when the snap springs back into place again.

The object of my invention is to provide a harness-tug which is open at its top so the shafts will drop readily into place, and thus enable one side of the horse to be harnessed before going around to the other, and to provide a tug in which there is no friction upon the shafts, and is thus not liable to cause the saddle to rub against the horse's back in such a manner as to make it sore.

Figure 1 is a side elevation of my invention complete. Figs. 2 and 3 are edge views of the same taken from opposite sides.

A represents the tug, which is made U-shaped, one of the prongs being preferably somewhat shorter than the other. This tug differs from those heretofore made in that it is always open at the top, so that the shaft can drop readily into place as soon as it is placed between the two prongs of the tug. Pivoted upon a rod, *a*, which is secured in suitable bearings upon the outer side of the upper end of the shorter prong of the tug, is the spring snap or catch B, which will preferably be made of the shape here shown. Around the rod upon which the snap is pivoted is placed a suitable coil-spring, C, which returns the snap in position as soon as it is free to move. The lower end of the snap passes through an opening made in the prong, to which the snap is secured, so that when the snap is pushed outward this end passes out through the opening, as shown in dotted lines. In order that this

snap may take up no room and thus interfere with the movement of the shaft, there is a recess made in the inner side of the prong, into which the upper portion of the snap sinks when it is forced backward. This snap, after the shaft has dropped into place, catches over its top and prevents the shaft from rising upward. This snap, being made to extend outward over the top of the shaft, and having its lower portion curved, as shown, will catch upon the top of the shaft and prevent any friction upon the tug or shaft which would have a tendency to cause the saddle of the harness to make the back of the horse sore. This tug being open at its top, when the shafts are dropped downward upon opposite sides of the horse, if either one of them catches in the tug they sink into place at once without any adjustment of the horse or vehicle for that purpose. This construction enables the shaft upon one side to be caught in the tug, and then the person can go on and harness up the horse on one side without having to go around on the other side to first adjust the tug on that side upon the shaft.

Most tugs heretofore made have been closed at the top either by means of a spring-snap or because the tug has been made round or oval in shape. This construction only causes extra expense in construction and more trouble in the adjustment and arrangement of parts, and allows so much movement that the working of the saddle will injure the horse's back. These troubles are entirely overcome by the construction here shown. In order to still more cheapen and simplify the tug, I entirely dispense with the usual form of attachment to the tug and form the buckle by means of which the supporting-strap is attached to the tug as a part of the tug itself. For this purpose the rod H will be cast as a part of the tug, and then the tongue I of the buckle will be attached thereto. The upper part of the tug has a friction-roller, L, placed upon it for the strap to bear against. The lower end of the strap passes between the two keepers O O, which are cast as a part of the tug. This construction greatly simplifies and cheapens the tug in every respect, while it increases the strength and durability of the same in every way.

I am aware that harness-tugs have heretofore been made which are provided with springs



or spring-catches at their upper ends, which springs or catches close the tugs at their tops, so that they are always closed, and this I dis-

claim.

5 Having thus described my invention, I claim—

1. A harness-tug consisting, substantially, of a U-shaped body normally open at its top, in combination with the spring-catch, which is

10 pivoted to the outer prong of the tug, said catch normally projecting downward into the tug and adapted to catch over the top of the thill, substantially as set forth.

2. A harness-tug consisting, substantially, of

a U-shaped body normally open at its upper 15 portion, provided with a buckle at its top and a strap-loop at its bottom, in combination with the spring-catch pivoted to the outer prong of the tug, said catch normally projecting downward into the tug and adapted to engage with 20 the top of the thill, substantially as set forth.

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

S. H. HAAS.

Witnesses:

F. A. LEHMANN,

A. S. PATTISON.