

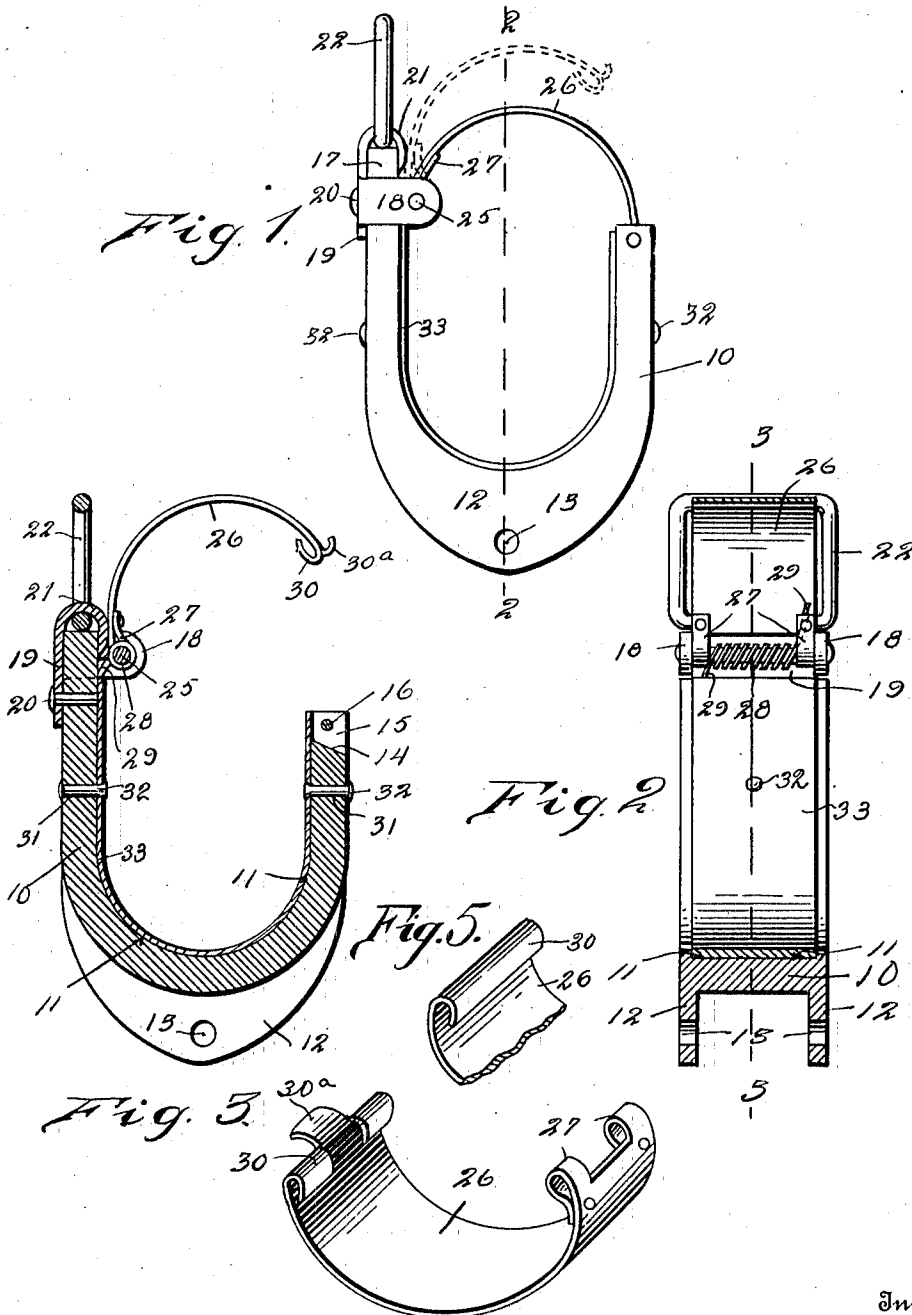
J. H. TROSTEL.

THILL TUG.

APPLICATION FILED APR. 23, 1912.

1,059,410.

Patented Apr. 22, 1913.



Inventor

Fig. 4. John H. Trostel

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UNITED STATES PATENT OFFICE.

JOHN HENRY TROSTEL, OF MARION, INDIANA.

THILL-TUG.

1,059,410.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed April 23, 1912. Serial No. 692,559.

To all whom it may concern:

Be it known that I, JOHN H. TROSTEL, a citizen of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in Thill-Tugs, of which the following is a specification.

This invention relates to harness and has special reference to that part of the harness designed to attach or hold the thills of a vehicle in proper relation to the harness.

The principal object of the invention is to improve the general construction of that part of a harness known as the thill tugs.

A second object of the invention is to provide an improved form of thill tug adapted for rapid engagement with the thill of a vehicle.

A third object of the invention is to provide an improved and simplified form of thill tug which may be rapidly engaged or disengaged from a thill.

With the above and other objects in view, as will be hereinafter apparent, the invention consists in general of certain novel features of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically claimed.

In the accompanying drawings like characters of reference indicate like parts in the several views, and:—Figure 1 is a side view of the improved thill tug, the locking member being shown closed in full lines and open in dotted lines. Fig. 2 is a section on the line 2—2 of Fig. 1 with the locking member open. Fig. 3 is a section of the device on the line 3—3 of Fig. 2, and Fig. 4 is a detail view of the preferred locking member. Fig. 5 is a detail view of a modified locking member.

In the present embodiment of the invention there is provided a U shaped body or inverted arch 10 provided on its inner faces with a recess 11 for a purpose to be hereinafter explained. The body portion is further provided with exterior flanges 12 extending around the bight of the U and deepest at the bottom thereof. These flanges are provided with holes 13 for the reception of a loop (not shown) by means of which the device is secured to the harness. One leg of the U shaped body is shorter than the other, and is provided with a cut out portion 14,

and ears 15 through which a rod or pin 16 is secured.

At the rear, above the flanges the body is reduced as at 17 to receive the ears 18 of an extension member 19 secured behind the rear leg of the body by a rivet 20 or the like. This extension member is rebent at its upper end to form a loop 21 wherein is held a loop 22 by means of which the device is attached to the stops connected with the saddle of a harness.

The ears 18 are connected by a bar 25 and pivotally mounted on this bar is a curved plate 26 provided adjacent its lateral edges with rebent extensions 27 forming eyes surrounding the bar 25 adjacent each ear 18. Around the bar 25, between the extensions 27 is coiled a wire 28 having extended ends 29 one whereof bears against the body 10 and the other against the plate 26 so that the latter is constantly urged to open position, both wire and plate being of spring metal.

The outer or free end of the plate 26 is provided with a rebent extremity 30 arranged to be sprung over and lock on the bar 16 when the device is closed and this end is provided with an outturned lip 30^a to facilitate its disengagement from the bar 16. In the modified form shown in Fig. 4 this lip is omitted.

Each leg of the U shaped body portion is provided near its upper end with a hole 31 through which extends a rivet 32 for securing a leather strip or buffer 33 which rests partly within the recess 11, and extends beyond the inner surface of the body portion 10, as shown.

In the operation of this device the thills are simply dropped into the U-shaped members and the spring plates snapped into place by a downward pressure of the hand. When it is desired to unharness, the reverse movement, aided in the preferred form by pressure against the under side of the tongue 30^a, releases the thills so that they may be readily detached. It will be noted that the strip of leather 33 serves as a buffer and prevents wear on the thills. There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that many minor changes may be made in the form and construction of the device herein described and illustrated. It is not therefore desired to confine

the invention to the exact form herein set forth but it is wished to include all such as come within the scope claimed.

Having thus described the invention, what is claimed as new, is:—

1. In a thill tug, a U shaped body portion, ears formed on one leg of the U, a rod connecting said ears, a resilient plate having one end bent around said rod as a pivot, a spiral spring surrounding said rod and tending to hold said plate in its open position, downwardly and inwardly turned loops upon the free end of said resilient plate, ears formed upon the other leg of said U shaped body portion, and a rod connecting said last named ears adapted to be engaged by said loops on said resilient plate.

2. In a thill tug, a U shaped body portion,

ears formed on one leg of the U, a rod connecting said ears, a resilient plate pivoted on said rod, a spiral spring surrounding said rod and tending to hold said plate in its open position, loops formed on the free end of said plate, a finger piece on the free end of said plate, a cut-out portion at the end of the other leg of the U forming ears, the bottom of said cut-out portion being inclined, a rod connecting said last named ears and adapted to be engaged by the loops on said resilient plate.

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

JOHN HENRY TROSTEL.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."