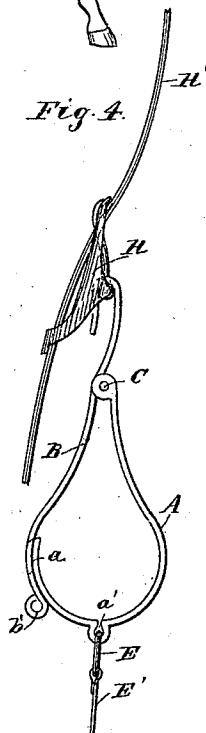
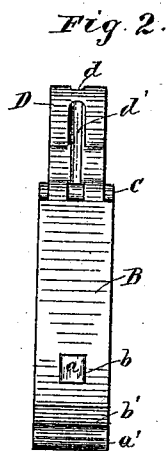
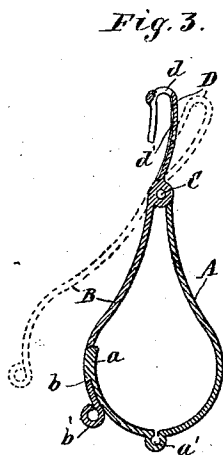
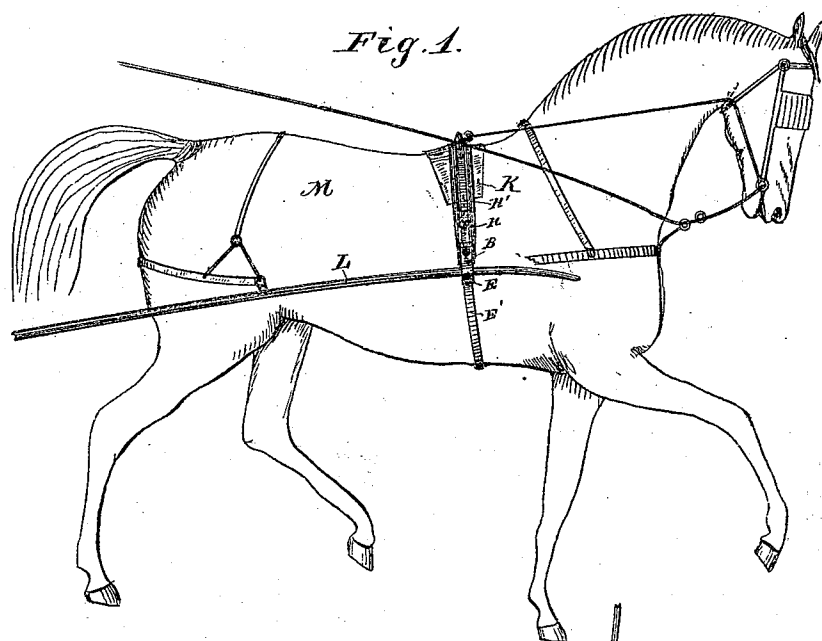


(No Model.)

W. F. NIEDERRITER.
THILL TUG.

No. 501,293.

Patented July 11, 1893.



Witnesses.
a. H. Opsahl.
E. F. Elmore

Inventor
William F. Niederriter
By his Attorney.
Jas. P. Williamson

UNITED STATES PATENT OFFICE.

WILLIAM F. NIEDERRITER, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF
ONE-FOURTH TO ANDREW L. ANDERSON, OF SAME PLACE.

THILL-TUG.

SPECIFICATION forming part of Letters Patent No. 501,293, dated July 11, 1893.

Application filed February 25, 1892. Serial No. 422,738. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. NIEDERRITER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Thill-Carriers; 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 has for its object to provide a simple, neatly appearing and efficient thill carrier. To this end, I construct the carrier of two pivotally connected sections overlapping and interlocking at their free ends and opening outward to admit the thill. The body member of the said two sections is constructed to spring at its free end, so as to permit sufficient endwise movement of the same for the ready locking and unlocking of the overlapping parts. The free end of the other or outer member is provided with an out-turned projection, preferably in the form of a roll or boss adapted to serve as a finger rest in the locking and unlocking action. The body member of the said two sections is also provided with a depressed and yielding seat for a removable billet holder, which is insertible into and removable out of the said seat by springing the free end of the said body section.

The head of the carrier is provided with a back-strap buckle-holder so constructed as to permit the ready application and removal of the buckle.

The invention is illustrated in the accompanying drawings, wherein, like letters referring to like parts throughout, Figure 1 a side elevation illustrating the application of the device. Fig. 2 is a front elevation of one of the carriers detached. Fig. 3 is a sectional elevation of the same, the dotted lines showing the position assumed by the outer member of the pivoted sections when opened to receive the thill. Fig. 4 is a side elevation of one of the carriers, showing the back-strap buckle and billet-holder in position.

A B are the two sections of the carrier pivotally connected by the common pivot rod C, of which A is the body or underlapping member and B the outer or overlapping member.

D is the buckle-holder on the head of the carrier, which as shown, is formed integral, with the outer member B. The outer member B is provided with a latch-seat *b* and the body member A with the latch-head *a*, which engage with each other, under spring tension to lock the overlapping parts together.

b' is the projection or roll forming the finger rest, at the extremity of the free end of the outer or overlapping member.

E is the billet-holder and *a'* is the depressed and yielding seat for the same formed on the lowermost curve of the body member.

E' is the billet.

H is the back-strap buckle and H' the back-strap.

The back-strap buckle holder D is of hook-shape and is provided with a tongue passage *d* at the curve of the hook and with a lengthwise open ended slot *d'* at the tip of the same, for the ready application and removal of the buckle.

The operation and usage of the device are obvious.

The billet holder E is of link or bail-like form, and is removable over the free end of the body section; and may be readily inserted in or taken out of its seat *a'*, by springing the free end of the body member. The back-strap buckle H is insertible into its holder D, by passing the tongue pivot into the opening of the hook and the tongue of the buckle through the passage *d*. The tongue of the buckle when being placed in position enters the opening of the hook through the end slot *d'*. On removing the buckle the reverse action takes place. When the back-strap is then applied in the customary way, the buckle will be securely held on its holder. The form of this buckle-holder D adapts the same for the application of buckles of different sizes and owing to the fact that the slot *d'* is open at the end of the hook the holder may be of relatively small size.

The fact that the two sections of the carrier overlap at their free ends and open outward enables the carrier to be made relatively small and neat in form and yet be able to receive a relatively large thill and is a great convenience and security in the usage of the device. A jar or stroke applied to the out-

side of either member will have no tendency to unlock the same and the downward strain by the thill tends to hold the parts in their locked position. On the other hand, the fact
 5 that the free ends overlap and the sections open outward enables the same to be readily unlocked by a slight endwise movement of the free end of the body member. To effect this endwise movement, the body member may be
 10 constructed of spring material throughout, or the free end of the same may be made to yield with reference to the back of the same with the desired spring tension, by forming a short loop at or near the lowermost part of the curve
 15 as shown at *a'*, which can then also be made to serve as a seat for the billet-holder. I preferably form both sections of the carrier of comparatively rigid spring metal. When in use, the carriers are attached to the har-
 20 ness K and the shaft L, as shown on the horse M, in Fig. 1.

Figs. 2, 3 and 4, of the drawings are drawn to an exact scale one half full size.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A thill carrier having, at its head, the exposed and open buckleholder D, projecting therefrom, which is of hook-like form with an expanded beak, and is provided with the
 30 tongue passage *d*, at the curve of the hook and with the open ended slot *d'* in the beak of the hook for the ready insertion and removal of the back strap buckle, substantially as described.

35 2. A thill carrier constructed in two pivotally connected sections A and B, provided on its upper or head section A, with means for the attachment of a back strap, and provided

on its lower or body section B, with a link or bail-like billet holder E, which is removable
 40 over the free end of said body section, substantially as described.

3. The thill holder consisting of a pair of pivotally connected sections overlapping and interlocking at their free ends, the body or
 45 underlapping member of which is constructed of spring metal and provided with a loop opening into the body of the holder at or near the lowermost curve of the same, to permit the free end of the said body section to have an
 50 endwise movement for locking and unlocking the sections, and for forming a yielding seat for a removable billet holder, substantially as described.

4. The thill carrier consisting of the pair of
 55 pivotally connected sections A B, overlapping and interlocking at their free ends and opening outward, to admit the thill, of which sections the body A is constructed of spring metal and provided with the loop *a'*, for per-
 60 mitting an endwise movement of the free end of the said body section, for locking and unlocking and forming a seat for the removable billet holder E, and the other of which sections, to-wit, the section B is provided with
 65 the out turned roll or boss *b'*, for the purpose stated, and having at its upper end or head the buckle-holder D *d d'*, substantially as and for the purposes set forth.

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

WILLIAM F. NIEDERRITER.

Witnesses:

JAS. F. WILLIAMSON,
 E. F. ELMORE.