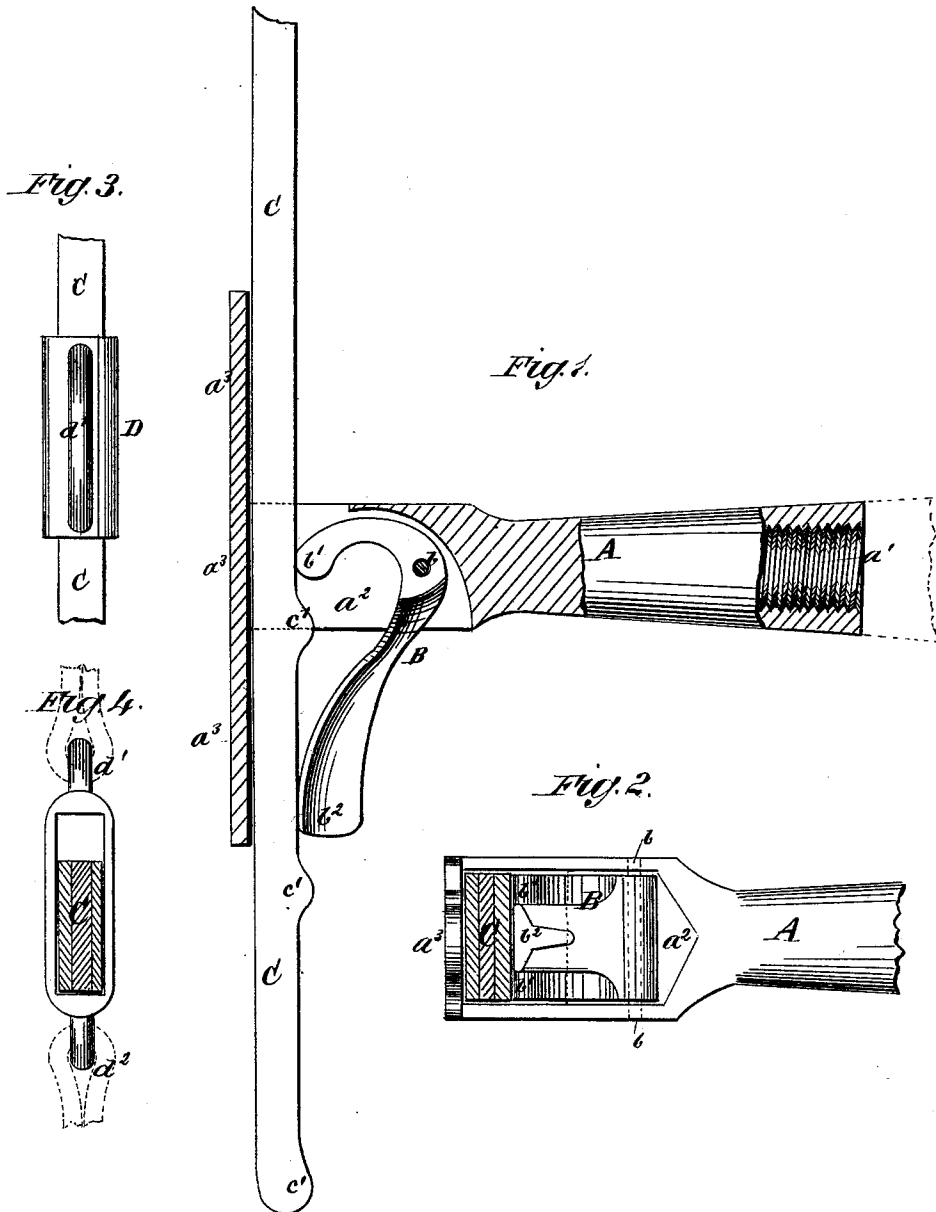


J. B. McNAIR.
Trace-Attachment.

No. 204,677.

Patented June 11, 1878.



WITNESSES:

Charles McArthur,
J. H. Scarborough.

INVENTOR:

J. B. McNaire.
BY *Minuto*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JONAS B. MCNAIR, OF WILLOW HILL, ILLINOIS.

IMPROVEMENT IN TRACE ATTACHMENTS.

Specification forming part of Letters Patent No. **204,677**, dated June 11, 1878; application filed November 16, 1877.

To all whom it may concern:

Be it known that I, JONAS BENJAMIN MCNAIR, of Willow Hill, in the county of Jasper and State of Illinois, have invented a new and Improved Trace Attachment, of which the following is a specification:

The object of my invention is to provide a simple and convenient mode of fastening the tugs or traces of a harness to the single-tree, and which will enable the making of the tug in one continuous piece from the hame to the single-tree, instead of composing it of one long and one short tug, with buckle, loops, &c., for lengthening and shortening it, as heretofore.

The invention consists in the construction and combination of a latch, the metallic end of the single-tree, and the tug of the harness, as will be hereinafter described.

In the accompanying drawing, Figure 1 represents a horizontal section of the end of the single-tree with the tug inserted and clamped by the latch, as when in actual use. Fig. 2 is a rear view of the same. Fig. 3 is a top view, and Fig. 4 an end view, of the tug-loop.

Similar letters of reference indicate corresponding parts.

A is the round detachable end piece of the single-tree, for the reception of which it is provided with a threaded socket, a^1 . The end piece A is cast with a slot, a^2 , through it, and a flange or end plate, a^3 , on it. In the opening a^2 is pivoted the latch B, in a position to clamp the tug, when the latter is inserted through the slot a^2 , against the inside of the flange a^3 .

C is the tug, provided with bumps or raises c' , to insure against any possibility of its slipping out of the hold of the latch B. This latch is constructed to operate similar to a

cam-lever, as shown in Fig. 1, the cam end b^1 , when tightened on the tug, being carried just far enough beyond the position in which the line connecting its point of contact with the tug C and its pivot b is vertical to the tug and the flange a^3 to prevent its slipping back, while it is prevented from slipping forward by the lever end b^2 , which then is in contact with the tug C.

D is the trace-loop. This is cast of metal, with a slot through it for receiving the trace C, and provided with the band-loops d^1 d^2 , for attaching it to the back-band or the saddle and the belly-band of the harness, in order to support and steady the tug when heavy harness is used. For light harness the loop D is not needed.

The size of the end plate or end flange a^3 may, of course, be varied according to requirements for holding the tug in place.

By this construction the length of the tugs between hame and single-tree may be varied without the use of buckles or loops, as heretofore.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The pivoted latch B, constructed as shown and described, in combination with the slotted and flanged end piece A of a single-tree, for securing the tug C to the latter, substantially as specified.

2. The tug C, having projections or raised parts c' , in combination with the slotted end piece A of the whiffletree and the cam-lever B, as and for the purpose set forth.

JONAS BENJAMIN MCNAIR.

Witnesses:

A. C. TERHUNE,
W. H. EIDSON.