J. B. McNAIR.

Trace-Attachment.

No. 204,677. Patented June 11, 1878.

Fig. 3.

Fig. 4.

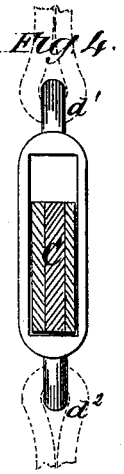

Fig. 1.

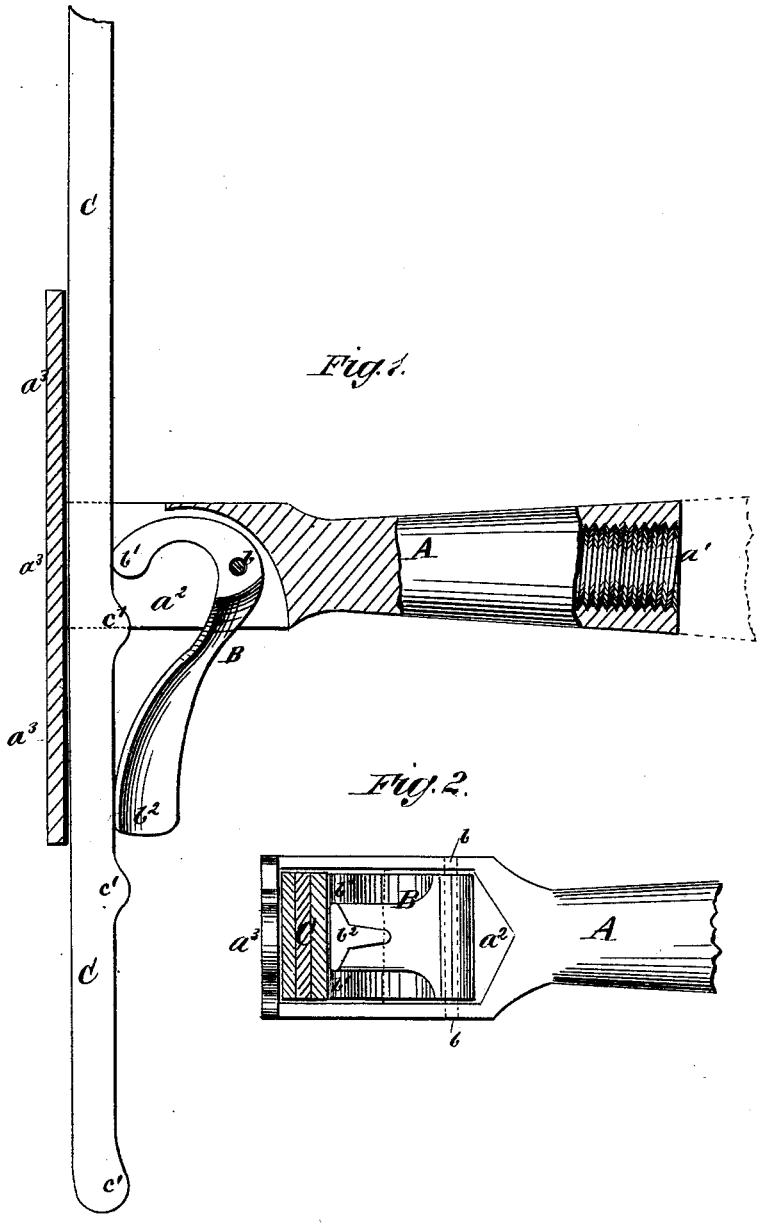

Fig. 2.

WITNESSES:

Francis McArdle.

J. H. Scarborough.

INVENTOR:

J. B. McNair.

BY Munn & Co

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.