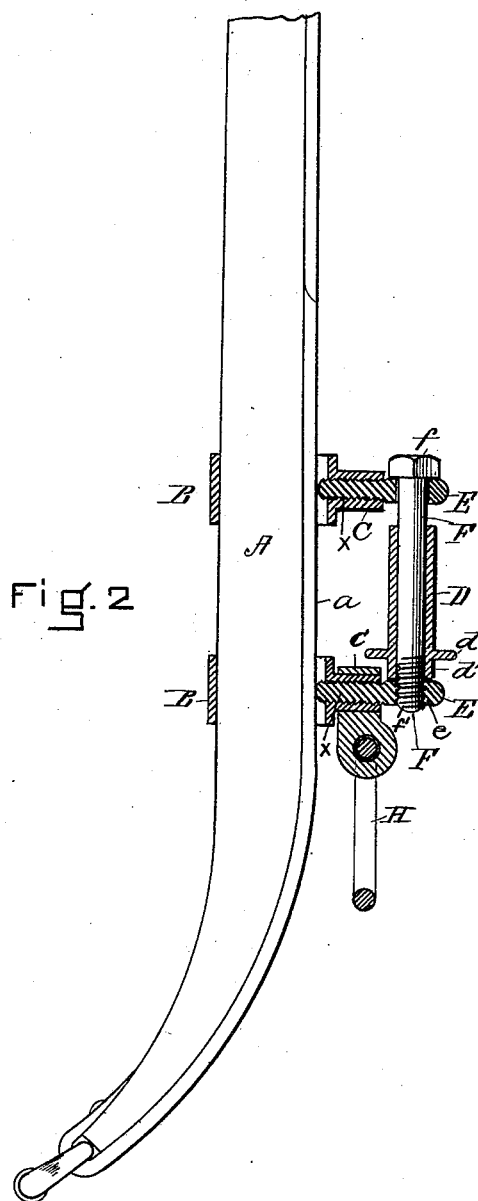
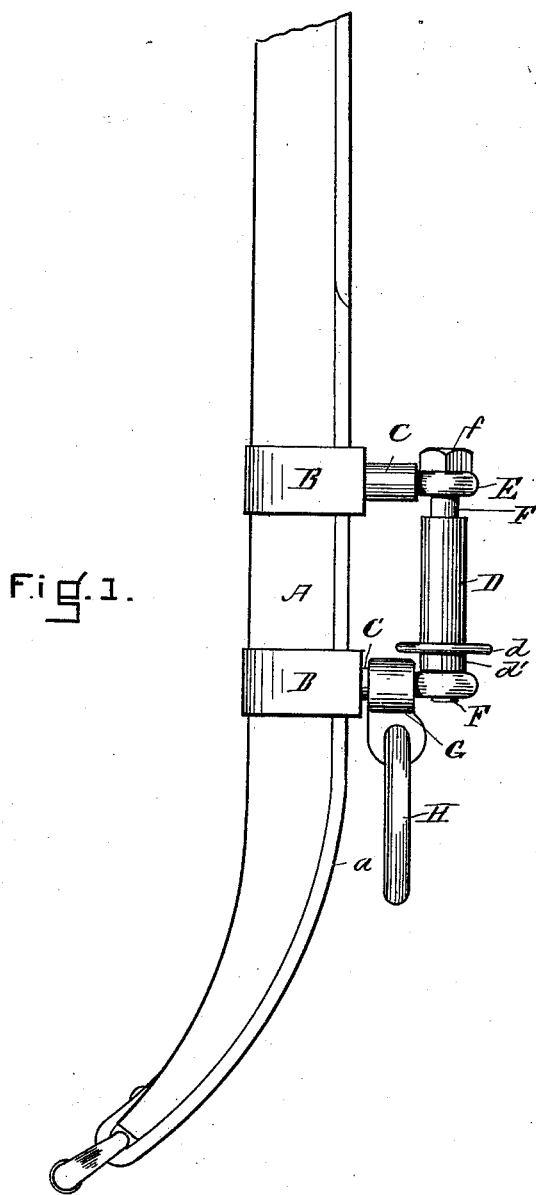


(No Model.)

C. E. CARR.  
TRACE ATTACHMENT FOR HAMES.

No. 422,377.

Patented Mar. 4, 1890.



WITNESSES

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Lewis Perrin.

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# UNITED STATES PATENT OFFICE.

CLARENCE E. CARR, OF ANDOVER, NEW HAMPSHIRE.

## TRACE ATTACHMENT FOR HAMES.

SPECIFICATION forming part of Letters Patent No. 422,377, dated March 4, 1890.

Application filed June 3, 1889. Serial No. 313,007. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE E. CARR, of Andover, in the county of Merrimac and State of New Hampshire, have invented a certain new and useful Improvement in Hame Attachments, of which the following, taken in connection with the accompanying drawings, is a specification.

My present invention relates to hames of harnesses, in which I have made a new and useful improvement.

In the drawings, Figure 1 represents an elevation of my device as applied to a hame. Fig. 2 represents a sectional elevation of the same.

The special part of the hame to which my invention relates is the trace attachment to the same, said attachment being formed adjustable, as hereinafter explained.

In Figs. 1 and 2 like letters of reference indicate corresponding parts.

A represents the body of the hame.

a is the hame-iron commonly found on the back side of the hame. When the body of the hame is made of metal instead of wood, as most commonly used, of course the iron a would not be required. The band B is formed of metal and is made to fit around the hame-body A, its inner and outer shape to conform to the size and style of hame-body. Attached to the band B is the projection C, preferably formed by casting or otherwise of one piece with band B. The inside of projection C is hollow and threaded, the hole extending from its top to its bottom, including the band. In the projection C is placed the screw-threaded bolt or start E, its threaded portion represented by x. On the upper end of start E is formed an eye or loop.

The device usually employs two bands B, two projections C C, and two starts E E. One of the eyes formed in the starts E is preferably threaded, as indicated by e. A bolt F, having a head f at one end and screw-threaded f' at the other end, is passed through the eyes of the two bolts or starts E E, the threaded end f' engaging the thread e, formed in the eye. The form of bolt F is immaterial, and it may be held in place in any convenient manner; but I prefer the form and manner of securing it in the eyes substantially as represented in the drawings.

The loose sleeve or thimble D, with the projection or guard d, is preferably placed on the bolt F, as shown, to which thimble the trace is attached. I do not confine myself to the form of thimble shown, as other kinds and styles can be used equally well. An extension G may be formed as a part of projection C; but I prefer to make it a swivel or loose sleeve to be slipped over the projection C. When so made, it can readily be detached, if broken, and a new swivel slipped on at small expense.

The object of the swivel or sleeve G, with ring H, is to furnish suitable means for fastening the holdback or pole straps. With my device any of the common forms of holdback attachments can be conveniently used.

The bands B B are formed loosely upon the body of the hame A to permit of adjustment up or down upon the body. The said bands are held in place at any desired point by the impinging of the lower end of the bolts or starts E E upon the body of the hame or upon the plate a, when a plate is used.

In operation the bands B B are adjusted at the desired height, the holdback device or swivel G is slipped over the projection C of lower band B, and a similar holdback-strap device or a ring, if one is required, is slipped over the projection C of the upper band. The starts E E are inserted and screwed down, the bottoms pressing upon the hame-body or hame-plate, (if used,) thus rigidly securing the bands B B to the hame, and also securing the swivels in proper position. The bolt F, with the sleeve or thimble D, is then inserted in the eyes, and the device is in position ready for the attachment of the trace in the usual manner.

Trace attachments are usually immovably riveted or otherwise directly attached to the hame. Although I am aware that some forms of adjustable attachments have been used, none (of which I am informed) are similar to my present invention, as the bands are held to the hame-body by a key or some form of independent fastening, which in use is objectionable.

Among the benefits to be found in my device are simplicity, cheapness of construction, durability, ease of adjustment, strength of parts, and ready removal of parts broken

or worn out and the substitution of new parts. My device can also be used with many kinds and styles of holdback attachments.

Having now fully described my invention, 5 what I claim, and desire to secure by Letters Patent of the United States, is—

10 In a hame attachment, the combination, with the body A, of the bands B B, each formed with the projection C, interior threaded, the starts E E, each threaded at its lower end and arranged to engage the interior threaded projections C and press against the face of the body A, adjustably securing the bands B

to the body A, and the bolt F, adapted to be secured to the outer ends of said starts, all 15 substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 27th day of May, 20 A. D. 1889.

CLARENCE E. CARR.

Witnesses:

D. EUGENE CARR,  
WALTER C. MOREY.