

George J. Letchworth.

Hames.

116725

PATENTED JUL 4 1871

Fig. 1.

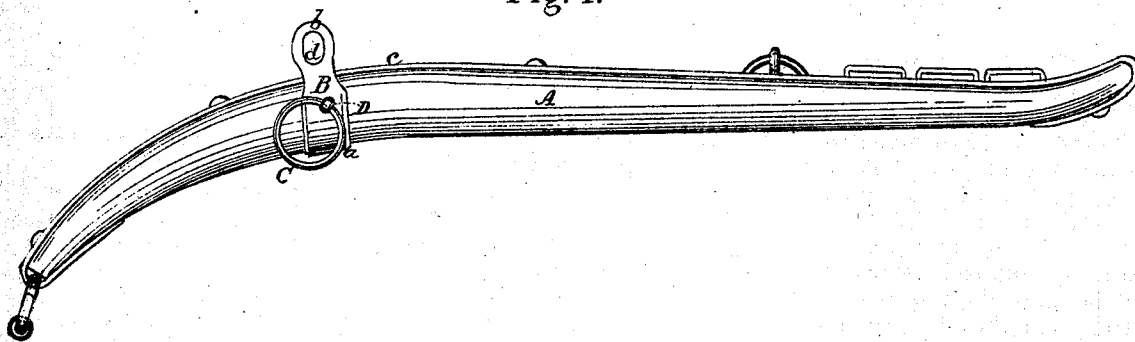


Fig. 2.

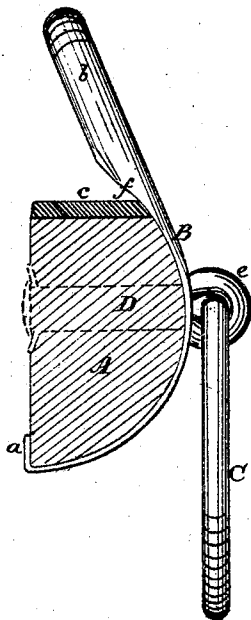
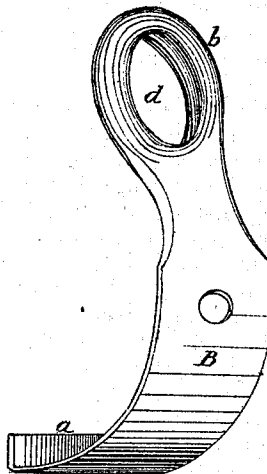


Fig. 3.



Witnesses:

E. C. Adams

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UNITED STATES PATENT OFFICE.

GEORGE J. LETCHWORTH, OF AUBURN, NEW YORK.

IMPROVEMENT IN HAMES.

Specification forming part of Letters Patent No. 116,725, dated July 4, 1871.

To all whom it may concern:

Be it known that I, GEORGE J. LETCHWORTH, of Auburn, in the county of Cayuga and State of New York, have invented a new and useful improved draft and holdback attachment for hames for harness, of which the following is a specification:

The object of my improvement is to obtain a draft and holdback attachment for hames which will be more durable and answer the purpose better than the old two-pronged staple or the circular clip. In the common hames the two-pronged staple makes two holes through both the wood and iron strap, so as to cut off nearly, or quite, one-third of the latter, thus weakening the part requiring the most strength. Moreover, the holdback attachment has no support on the outside of the hame except the wood, and, having severe strain upon it, is very liable to get started by the wood giving away, and to come out entirely.

Many devices have been contrived to obviate this difficulty, among which may be mentioned bands to embrace the hame, and to which the draft and holdback-rings have been riveted; but this is expensive and difficult to fit upon the hames. Another device, known as the circular-clip hames, has been devised, in which a hook-band is used to support the circular clip, so that the draft or resistance would be applied to the front of the hame, and which constantly tends to to twist and to rub and wear away the collar. Moreover, in this circular clip there is no holdback attachment, and, consequently, the combination of the two devices in one is not obtained.

My improvement is to take the place of the common mode of attaching this clip and the old staple and holdback; and it consists in fitting the draft attachment quite around the front or outside of the wood, so that its thick arm will incline over and form a clamping-shoulder to the band, and its thin end hook on the inner side, so as to bend and support the wood and strap, and combining therewith the holdback attachment in such manner as to secure both attachments by its single bolt, thereby avoiding the cutting of the hames and its band at the point requiring the greatest strength, but holding both firmly by riveting the single bolt of the breast-ring or holdback through the curved band and the wood, so that the eye of the bolt will clamp the plate.

In the accompanying drawing, Figure 1 represents an elevation of one of a pair of hames em-

bracing my improvement. Fig. 2 represents a cross-section of the same, showing the draft attachment as being secured by the bolt of the holdback, full size; and Fig. 3 represents a view, in perspective, of the draft attachment.

The hames A are made and banded in the usual manner. The draft attachment consists of a plate, B, curved so as to fit the outer or front side of the hame, having a hook, *a*, which fits upon and against the back side of the hame, and an eye-arm, *b*, extending up in an inclined position, so as to be directly over the iron hame-strap *c*, so that the trace which is attached to it will draw in a direct line like the old-style double-pronged staple; thus, while obtaining the advantages of a direct draft by a side attachment, obviating the cutting of the hame through its strengthening-band. The plate B is made thin where it hugs the hame, but thick to form the draft-arm *b* and eye *d*, and the inclined position of this arm allows it to lie close to and brace the wood. The breast-ring or holdback C is secured to the draft-plate B by a single eyebolt, D, passing through the front side of the curved plate B and the wood, and riveted to the back thereof, as shown in Fig. 2 of the drawing. The curved plate B and the wood are therefore pierced by a single hole, and the eye *e* of the bolt D is clamped directly against the curved plate, which is thus bound to the front side of the hame by the ring-bolt and locked to the back side by the hook *a*, so that one fastening firmly secures the two, the draft-plate being sufficiently broad to obtain a solid face-bearing, while the eye *e* of the bolt draws and holds it firmly to the side and against the edge of the hame-band. The junction of the arm *b* of the draft attachment with the hame-band *c* also forms a shoulder, *f*, which overlies the band *c*, and thus gives additional strength to the hame and its band at the point of greatest strain, so that the draft-plate B has three points, *a e f*, of bracing support upon the hame, which renders the two attachments firm and strong, with no possible chance for either to work loose and pull out the wood.

Having described my invention, I claim—

The combination of the draft-eye *b*, holdback-ring C, bolt D, and the lip *a*, constructed and arranged as described.

GEORGE J. LETCHWORTH.

Witnesses:

A. E. H. JOHNSON,
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