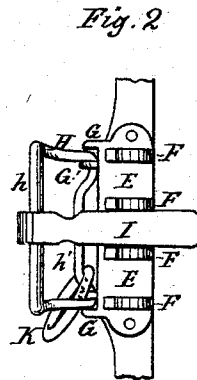
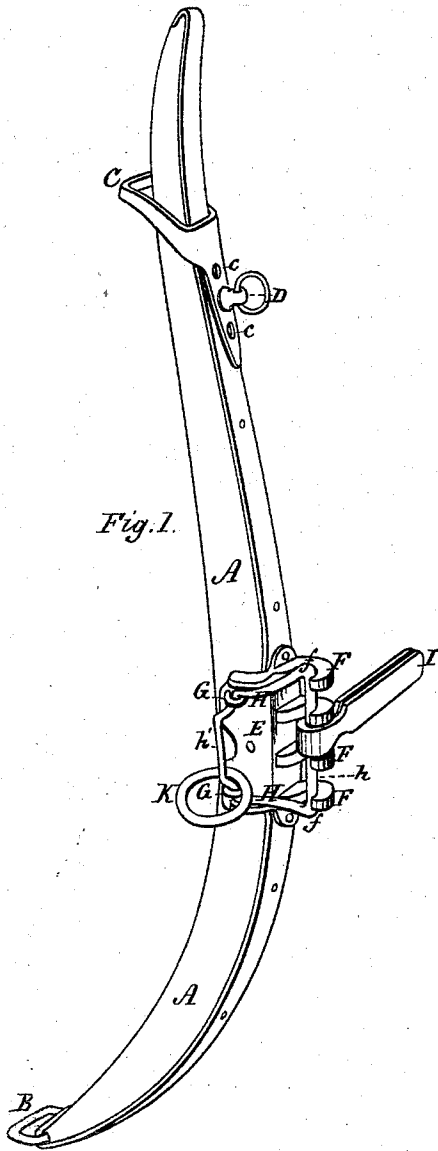


C. ROBINSON.

Hames for Harness.

No. 137,241.

Patented March 25, 1873.



Witnesses

Edmund Masson

John R. Young

Inventor.

Clark Robinson, by
Prindle and Co., his Attys.

UNITED STATES PATENT OFFICE.

CLARK ROBINSON, OF EAU CLAIRE, WISCONSIN.

IMPROVEMENT IN HAMES FOR HARNESS.

Specification forming part of Letters Patent No. 137,241, dated March 25, 1873.

To all whom it may concern:

Be it known that I, CLARK ROBINSON, of Eau Claire, in the county of Eau Claire and in the State of Wisconsin, have invented certain new and useful Improvements in Harness; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of a hame having attached thereto my improvements, and Fig. 2 is a side elevation of the attachments for the tugs and breast-straps.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to render the attachments of hames adjustable, in such a manner as to enable the latter to be fitted to any size of necks or to any requirements of draft; and, to this end, the said invention consists, principally, in the construction of the tug-clip attachment, substantially as and for the purpose hereinafter specified. It consists further in the construction of the attachment of the breast-strap, substantially as and for the purpose hereinafter shown.

In the annexed drawing, A represents a hame, provided at its lower end with a strap-link, B, all of usual construction. Encircling the upper portion of the hame is a metal strap, C, which, upon its outer side, is extended downward along the corresponding face of said hame, as shown, and within such extension is provided with two or more holes, *c*, for the passage of the terret-bolt D, said bolt being provided with the usual threaded end, which fits into a corresponding opening in said hame, and enables said strap to be confined closely against the latter. By removing the terret-bolt and raising or lowering the strap C until the former can be passed through another of the openings *c* into the hame, the distance between the upper and lower hame-straps can be varied so as to enable the size of the hame to be made to correspond to the neck of the horse upon which the same is used. The hame-strap is passed through the inward-projecting end of the strap C, while a terret-ring, *d*, fastened loosely within the end of the terret-bolt D, furnishes a guide for the reins. Secured to or upon the outer and forward

sides of the hame, at the usual point of attachment for the tug, is a metal plate, E, which conforms to the shape of said sides, and at or upon its outer face is provided with a number of lugs, F, that extend horizontally and laterally outward from equidistant points between the upper and lower ends of said plate. From the rear side the ends of the lugs F curve outward and forward, while upon or within the front sides of each is provided a semicircular recess or notch, *f*, the object of which will be hereinafter explained. Upon the front side of the plate E, near its upper and lower ends, are provided two perforated lugs or ears, G, within which is journaled one side of a link, H, that has a general rectangular form in front elevation, and is so shaped as to enable it, when turned rearward, to conform to the general shape of said plate E, so as to cause the bar forming its outer vertical side to fit into the semicircular notches *f*. The tug-clip I, having the usual form, is hinged or pivoted upon the outer bar *h* of the link H, and, when the latter is in engagement with the lugs F, fits into one of the spaces between the same.

By throwing forward the outer side of the link the tug-clip can be raised or lowered so as to cause it to coincide with and fit into either of the spaces between the notched or recessed lugs, and the line of draft correspondingly changed.

In order that the accidental disengagement of the tug-clip may be prevented, the upper end of the bar *h'*, forming the inner side of the link H, is extended outward at an angle, and thence inclines downward and inward, as seen, so that at or immediately above the lower lug G the distance between said bar and the plate E is just equal to the diameter of the metal of which the breast-strap ring K is formed. From a point upon a line with the upper edge of said lug G said bar *h'* extends horizontally inward so as to form of the latter a crank-lever.

As thus constructed, the ring, when in position at the lower end of the space between the inner link-bar, perforated lugs, and plate, closely fills said space, and, operating as a lock, prevents said bar from turning rearward, so as to permit the outer side of said link to be moved outward.

When it is desired to change the position of the hame-clip the breast-strap ring is raised until the link is released, when the desired adjustment may be readily effected.

By this construction and combination of parts a perfect adjustment of the size of the hames or of the line of draft may be effected, while the device forms a part of a harness, and is in use, while, as ordinarily constructed, the hames would require to be removed from the collar before any change could be made. Another advantage arises from the attachment of the upper hame-straps, as by the same said straps are caused to lie flat upon the collar instead, as is commonly the case, of being placed edgewise, so as to require twisting in order to enable them to conform to the position occupied.

Having thus fully set forth the nature and

merits of my invention, what I claim as new is—

1. The plate E, provided with the recessed lugs F and perforated lugs or ears G, in combination with the link H and tug-clip I, substantially as and for the purpose specified.

2. In combination with the plate E, provided with the lugs F and perforated ears G, and with the link H, constructed as shown, and hinged within said ears, the breast-strap ring K encircling the inner bar *h'* of said link, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of December, 1872.

CLARK ROBINSON.

Witnesses:

J. F. ELLIS,

M. P. GOODWIN.