

(No Model.)

E. H. McBRIDE.
HORSE DETACHER.

No. 475,140.

Patented May 17, 1892.

Fig 1.

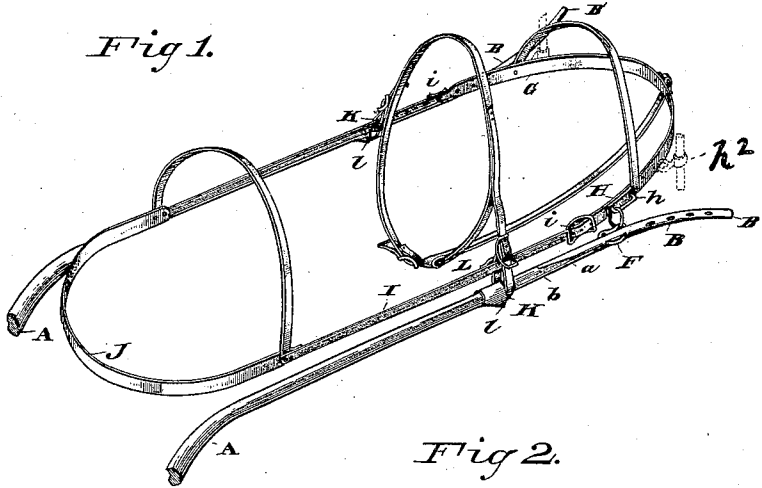


Fig 2.

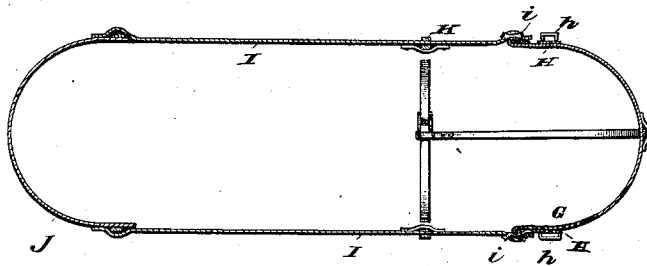


Fig 3.

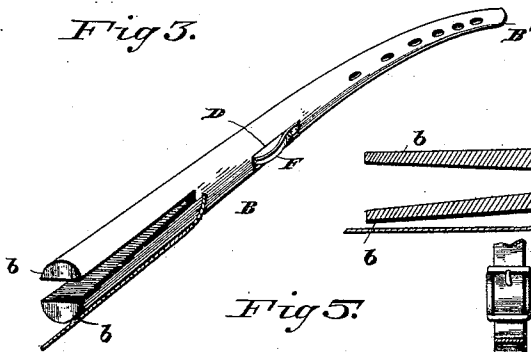


Fig 4.

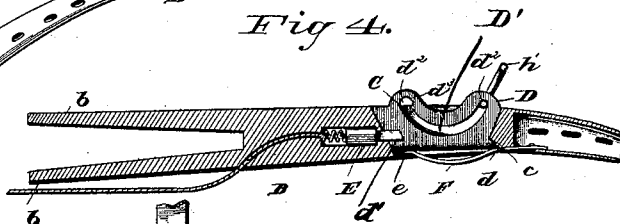
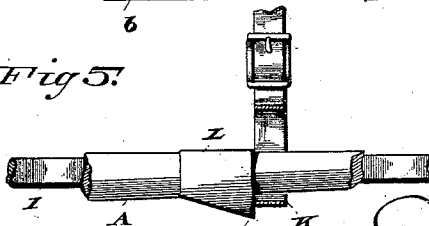


Fig 5.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD HENRY McBRIDE, OF SPRINGFIELD, MISSOURI.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 475,140, dated May 17, 1892.

Application filed October 20, 1891. Serial No. 409,269. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HENRY McBRIDE, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Horse-Detachers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to draft appliances for vehicles; and it consists in the combination, with the thills provided with detaching means, of a simple and improved construction of harness adapted to be connected with the latter.

The object of the invention is to provide a simple and efficient construction and arrangement of parts whereby the invention is equally as well adapted for harness employing either a collar or breast-strap.

A further object of the invention is to provide, in connection with the thills having detaching devices, harness embodying holdback means, whereby the power is applied at the breeching when the horse is backing, in lieu of upon the neck or back.

With these and other objects in view the invention further consists, substantially, in the construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is perspective view of vehicle-thills and harness in connection therewith and embodying my invention. The harness shown is of the breast-strap pattern, the collar-and-hame pattern being illustrated in dotted lines. Fig. 2 is a longitudinal sectional view taken through the breast-strap and holdback attachment. Fig. 3 is a detail perspective view of one of the metallic thimbles which are applied to the thills. Fig. 4 is a horizontal sectional view thereof. Fig. 5 is a detail vertical sectional view taken through one of the thill-tugs and the adjacent parts of the thill.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A A designate the vehicle-thills, which may be in the main

of any suitable construction. The thills are contracted at their forward ends, and each of said ends beveled at its side edges to form a wedge-shaped member *a*.

B B designate two metallic extensions or thimbles for the thills, conforming in contour thereto and provided at their rear ends with vertically and longitudinally arranged flaring sockets *b b*, corresponding to and receiving the members *a*, to which they are firmly screwed or otherwise secured. The metallic thimbles B are each provided in advance of the socket *b* with an inwardly-flaring, horizontally, and longitudinally arranged slot C, said slots having at their forward outer edges an offset *c*. Within the slot C are disposed detachable draft-plates D D, the latter having their ends outwardly beveled to correspond with the flaring ends of the sockets. A forwardly-projecting lug *d* is provided at the outer edge of the forward end of each plate D, said lugs engaging the offsets *c*. At the rear ends of the plates are provided centrally-arranged recesses *d'*, which are normally engaged by the beveled end *e* of a spring-held snap-catch E, and to said catches are connected suitable means, under the control of the driver, for operating the same.

Within the body of the plates D are provided approximately segmentally-curved slots D', the plates being so arranged relative to the thills that the ends of the slots project beyond the inner edge thereof and form eyes *d''* through one of which draft connection is made. To effect proper connection with the rear eyes *d''*, the latter are provided at their forward sides with offsets *d'''*. In practice draft is applied through either the forward or rear eyes, as desired. The ends of the projecting portions of the plates are rounded, as shown, the object of which being to prevent injury to the horse, such as would be liable to occur were such projections left sharp and angular. To this end the metallic thimbles B are provided at their forward ends with outwardly-curved integral elongations B', terminating in advance of the shoulders of the horse, thus preventing injury to the latter by contact with the thill ends. The elongations B' are cast or otherwise formed hollow and also fenestrated with a view to lightness.

To insure immediate detachment of the

plates D when the catches are withdrawn from engagement therewith, a flat spring F may be employed, which is secured to the outer side of each thill in advance of the plates, said
 5 springs projecting rearwardly and having their free ends bearing upon the rear portion of the adjacent edge of the blocks. Thus when the catches are withdrawn should the draft not serve to instantly detach the plates
 10 the springs act to force the plates from the retaining-slots and effect the desired end.

G G designate the draft-tugs, which in the breast-strap pattern of harness form practically a continuation of the breast-strap. Near
 15 the rear ends of the draft-tugs are secured plates H H, provided with elongated loops h h , which are connected, respectively, with one of the eyes in each of the plates D by a ring or link h' h' . In the collar-and-hame pattern
 20 of harness the front ends of the draft-tugs are preferably provided with metallic loops h^2 h^2 , which are connected with the hames in the usual manner, as shown in dotted lines, Fig.

1. At the rear ends of the draft-tugs G are
 25 secured buckles i i , to which are attached the forward ends of holdback-straps I I, the rear ends of the latter being secured to a breeching J. Thill-tugs K K are provided for the thills, said thill-tugs being constructed of
 30 leather and connected with the harness-saddle. The holdback-straps pass through the thill-tugs and are rigidly secured thereto, the purpose of which will now appear. Upon the
 35 under side of each of the thills, in rear of the thill-tug embracing the same, is secured a metallic plate L, forming a shoulder or stop
 40 at its forward end, designed to limit the rearward movement of the thill-tug upon the thill. Thus in backing the holdback-straps, in addition to effecting a backward draft upon the
 45 plates D, also draw upon the thill-tugs, which, being limited in their rearward play upon the thills, serve to assist in this operation.

The remaining parts of the harness may be
 45 of any suitable or preferred construction, a description of which being unnecessary.

The operation and advantages of my invention will be readily understood by those skilled
 50 in the art to which it appertains.

From the foregoing construction and ar-

5 rangement it will be obvious that my invention is thoroughly practical whether a breast-strap or a collar and hames be used, and that by the employment of the construction for
 55 backing all strain and injury to the neck and back of the horse is entirely overcome.

I claim as my invention—

1. The combination, with thills provided with plates secured thereto and forming shoulders or stops at their front ends and with detachable draft devices located in advance of
 60 said plates, of harness comprising draft-tugs adapted to be connected to said devices, straps formed at their lower ends, with thill-tugs embracing and supporting the thills and adapted
 65 to engage the shouldered plates, breeching, and holdback-straps connecting the same with the draft-tugs, said holdback-straps being permanently connected with the thill-tugs,
 70 substantially as and for the purpose set forth.

2. The combination, with the thills provided with detachable draft devices located near their forward ends and with plates secured to the thills in rear of said devices and
 75 forming shoulders or stops at their front ends, of harness comprising draft-tugs connected with the draft devices, thill-tugs embracing and supporting the thills and adapted to engage the shouldered plates, breeching, and
 80 holdback-straps secured to the latter and to the thill-tugs and connected with the draft-tugs, substantially as and for the purpose set forth.

3. The herein-described harness, comprising draft-tugs adapted to be connected with draft
 85 devices carried at the forward ends of the thills, straps formed at their lower ends with thill-tugs for the purpose described, breeching, holdback-straps connecting the same with the draft-tugs and passing through the thill-
 90 tugs, and straps disposed outside the latter and secured to the holdback-straps at each side of said thill-tugs, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in
 95 presence of two witnesses.

EDWARD HENRY MCBRIDE.

Witnesses:

JNO. C. DAY,

T. J. DELANEY.