

(No Model.)

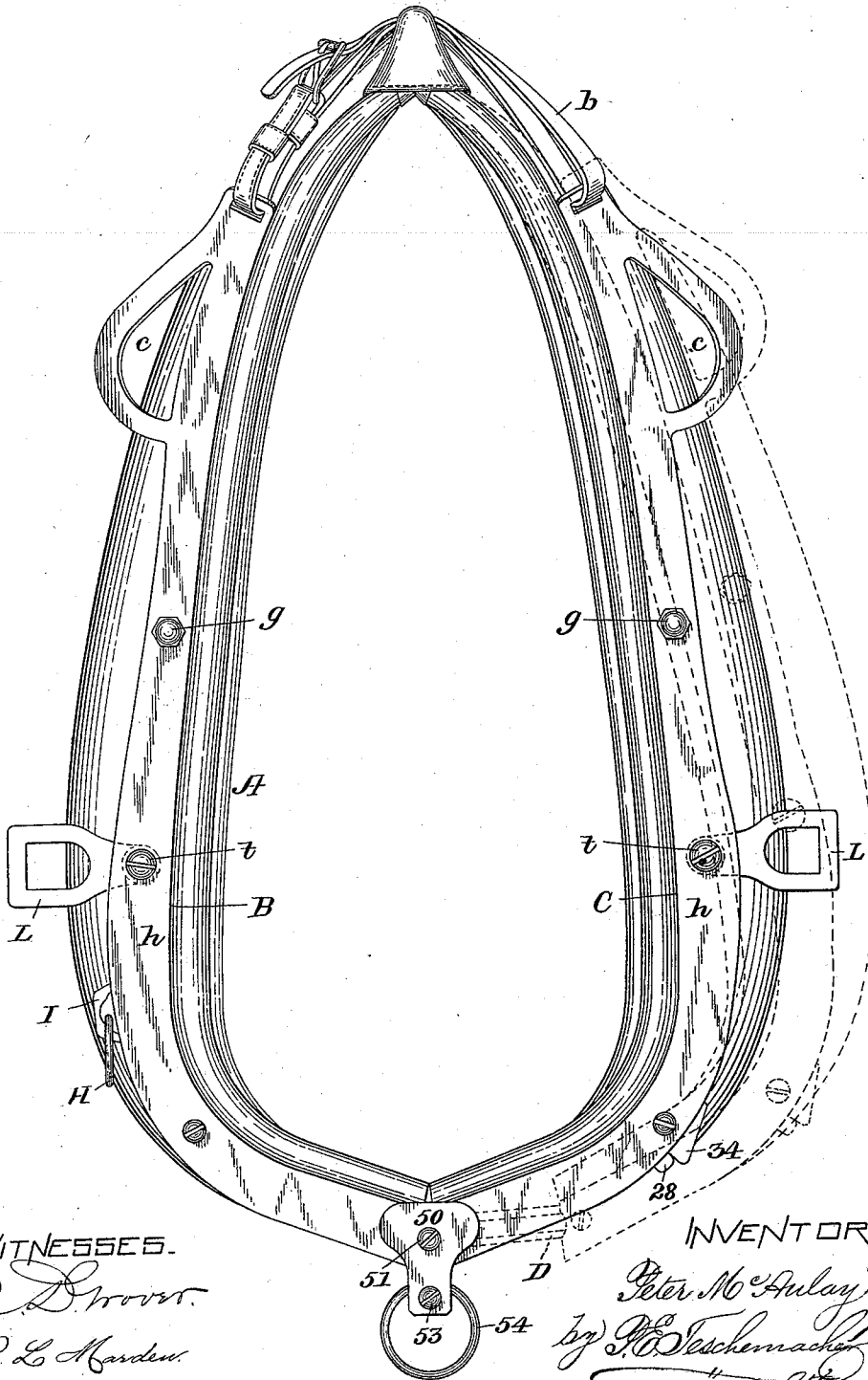
2 Sheets—Sheet 1.

P. McAULAY.
HAME.

No. 578,653.

Patented Mar. 9, 1897.

Fig 1.



WITNESSES.
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UNITED STATES PATENT OFFICE.

PETER MCAULAY, OF BOSTON, MASSACHUSETTS.

HAMES.

SPECIFICATION forming part of Letters Patent No. 578,653, dated March 9, 1897.

Application filed December 30, 1896. Serial No. 617,500. (No model.)

To all whom it may concern:

Be it known that I, PETER MCAULAY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Hames, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front elevation of a divided horse-collar having my improved hames applied thereto, the collar and hames being shown closed up. Fig. 2 is an elevation of the lower portion of the same, the covering-plates of the hollow portion of the hames being broken away to show the interior construction. Fig. 3 is an elevation similar to Fig. 2, showing the collar and hames open at the bottom to enable the collar to be easily slipped over the horse's head. Fig. 4 is an elevation of the inner sides of the lower portions of the hames, showing the buttonhole-slots for receiving the fastening-studs on the collar by which the hames are secured thereto at those points. Fig. 5 is an enlarged perspective view of the detachable pole-strap ring-holder. Fig. 6 is an enlarged sectional detail on line 6 6 of Fig. 3.

My invention relates to that description of hames which are intended for use in connection with a collar divided at the bottom and adapted to be opened on a hinge or pivot at the top to enable it to be easily placed over a horse's head, such collars and hames being well adapted for hack and express harnesses and also those used for fire apparatus; and my invention consists in a pair of hames adapted to be fastened to the collar and having their lower ends connected by a link or bar pivoted at one end to the bottom of one of the hames and sliding within the opposite portion of the other hame, combined with a locking device of peculiar construction for holding and locking the hames and collar when closed up, said locking device being simple, easily operated, and free from liability to get out of order or become accidentally unfastened; and my invention furthermore consists in a novel connecting device for fastening the hames to the collar in such manner as to permit the hames to be easily re-

moved for repairs or other purpose without injuring or tearing the collar to which they are attached.

In the said drawings, A represents a divided horse-collar, the two sides or portions of which are hinged together at the top to permit them to be separated at the bottom, as shown dotted in Fig. 1, to facilitate the operation of placing the collar over the head of a horse.

B C represent the two hames, which are composed of brass or other suitable metal and properly fitted to the roll of the collar, which is shaped to receive them. The upper ends of the hames are provided, as usual, with eyes for the reception of the leather strap *b*, by which the hames are held securely together at the top of the collar. Each of the hames is secured to the collar by means of a headed stud *d*, Figs. 2 and 3, which is permanently secured to the bottom of the inner side of the collar and projects therefrom into a position to engage a buttonhole-slot *f* in the adjacent side of the hame near the bottom thereof, as shown in Figs. 2 and 4, the hame after being engaged by the stud *d* and slid into place being still further secured to the collar by a screw-bolt *g*, preferably placed near the middle of its length, this method of fastening enabling the hames to be readily removed for repairs or other purpose without injury to the collar.

c c are ordinary rein-eyes, which are formed integral with the hames, as shown in Fig. 1.

The lower portion of each of the hames is made hollow, forming a box or casing which is provided with a removable cover or plate *h*, secured in place by means of suitable screws.

The two hames B C are connected together at the bottom by a link or bar D, which is pivoted at one end to the hame B by means of a screw *k*, the said link being provided at the pivotal point with a circular boss *m*, Fig. 6, fitting within a correspondingly-shaped cavity *n* in the bottom of the hame B, thereby forming a stronger pivotal bearing than if the screw *k* only was relied upon to hold the link in place. The link D is provided with a longitudinal slot 25 and is fitted to slide within the opposite hollow portion of the hame C, a stop-pin 26, passing through the slot 25, serv-

ing to limit the outward movement of the two hames from each other, and consequently the distance which the collar can be opened to enable it to be slipped over the head of the horse. To the end of the link D, which slides within the hame C, is pivoted a dog 28, the hook-shaped outer end of which, when the collar and hames are closed together, enters an aperture 29 in the side or outer wall of the hame, in which position it is locked, so that it can escape, by means of a sliding catch-bolt G, the stem 30 of which passes through a partition 31, extending across the interior of the casing and is encircled by a spiral spring 32, by which the bolt is pressed down to cause its tongue 33 to pass in behind the dog 28, as shown in Fig. 2, thereby acting as a wedge to hold the hook-shaped end of the dog in place within the aperture 29, so that it cannot be withdrawn to permit of the opening of the collar until the bolt G is pressed back against the resistance of the spring 32 by placing the thumb or finger against a thumb-piece 34 on said catch-bolt, which passes through a slot 35 in the side of the casing and is properly shaped to slide upon the outside of the casing, as shown in Figs. 2 and 3.

s is a pin which fits between the tongue 33 and the opposite portion of the bolt G and serves to prevent the displacement of the bolt, and also limits its movement in the direction in which it is pressed by the spring 32.

The link D is of suitable length to permit the hames and collar to be opened or spread apart at the bottom sufficiently to permit the collar to pass freely over the head of the horse, and when the collar is closed up the locking device will automatically catch the link D and hold it so that it will be impossible for it to become unfastened by any movements of the horse, thus rendering it absolutely safe and reliable under all conditions to which it may be subjected.

His a ring for the pole-strap where a "double hitch" is used, this ring being secured to the hame by a D-shaped ring-holder I, having a central opening 40, Figs. 2 and 5, on its inner straight side for the entrance of the ring H when the holder is removed from the hame. The outer wall of the hame at this point is provided with two straight notches or openings 41 42, into which the ring-holder is fitted after the covering-plate *h* has been removed, as shown in Fig. 2, the portion 43 of the wall between the notches being embraced by the holder I, the inclined ends of which take a

wedging bearing against the adjacent sides of the notches, which thus receive the strain instead of the central portion 43 embraced by the holder. By this construction when the ring H is not required for use it is merely necessary to take off the covering-plate *h*, when the holder with its ring can be readily removed and the plate *h* again secured in place by its screws, or the ring may be replaced by a snap-hook, if desired, and the holder again returned to its place.

L L are the tug-clips, which are pivoted to the hames at *t t*, said clips being provided, as usual, with means for securing the traces thereto.

When the hames B C are brought together, the joint between them is covered by a plate 50, secured to the hame B by a screw 51, and through this plate 50 and a lug 52 beneath the same passes a screw 53 for holding between said plate and lug a ring 54 for the martingale or pole-strap.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a hame-coupling, the combination with the hames, of the longitudinally-slotted connecting-link pivoted at one end to one of the hames and sliding within the hollow portion of the opposite hame, a stop-pin passing through the slot in the link for limiting the outward movement of the ends of the hames from each other, a dog pivoted to the free end of the connecting-link and having a hook or projection at its outer end adapted to engage an aperture in the wall of the casing in which the connecting-link slides, and a spring-actuated sliding catch-bolt provided with a thumb-piece, and having a tongue or projection adapted, when the hames are brought together, to pass behind the dog and lock the same within the aperture in the casing, all constructed to operate substantially as described.

2. The combination with a divided horse-collar having headed studs projecting from the inner sides of its lower ends, of the hames provided with buttonhole-slots engaging said studs, and the fastening-bolts *g, g*, for securing the upper portions of the hames to the collar, substantially as described.

Witness my hand this 28th day of December, A. D. 1896.

PETER MCAULAY.

In presence of—

P. E. TESCHEMACHER,
LOUIS PFINGST.