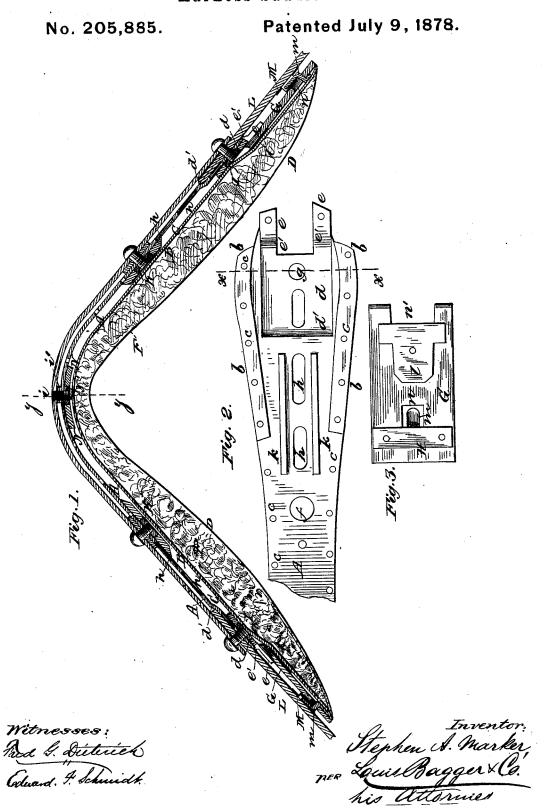
S. A. MARKER. Harness-Saddle.



## S. A. MARKER. Harness-Saddle.

No. 205,885.

Patented July 9, 1878.

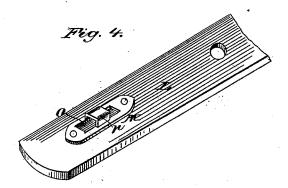


Fig. 5.

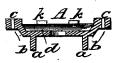
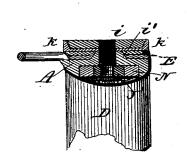
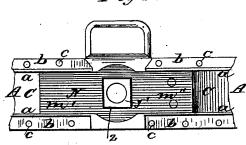


Fig. 6



Frg. 7.



Witnesses: Bed I Deterich Edward F. Schmidt Stephen A. Marker by Laws Bagger Co. his attornes.

## TED STATES PATENT OFFICE.

STEPHEN A. MARKER, OF HARTFORD, CONNECTICUT.

## IMPROVEMENT IN HARNESS-SADDLES.

Specification forming part of Letters Patent No. 205,885, dated July 9, 1878; application filed May 20, 1878.

To all whom it may concern:

Be it known that I, STEPHEN A. MARKER, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Harness-Pads; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which-

Figure 1 is a longitudinal section. Fig. 2 is a plan view of one end of the tree or pad-plate, both ends being alike. Fig. 3 is a view of the under side of the flexible foundation-piece. Fig. 4 is a perspective view of the under side of the skirt, showing fastening-catch. Fig. 5 is a cross-section on the line x x, Fig. 2. Fig. 6 is a similar section on line y y, Fig. 1; and Fig. 7 is a plan view of the under side of the ridge or middle part of the pad-plate.

Similar letters of reference indicate corre-

sponding parts in all the figures.

This invention relates to certain improvements in harness or coach pads; and it consists in the combination and arrangement of the parts, substantially as hereinafter more

fully set forth.

In the two sheets of drawings hereto annexed, A is the tree or pad-plate, which is made of metal, and provided with two flanges, a a, on the under side, set back a short distance from the edges, so as to form a horizontally-projecting rim, b b, having a series of perforations, c, on each side.

The ends of pad-plate A are sunk or depressed, as shown at d, and terminate at each end in two projecting prongs or fingers, e e, sunk or depressed below the depressed part d of the plate, so that two steps or shoulders, denoted by d'e', are formed at each end.

Pad-plate A is provided on each side with two circular holes or perforations, fg, for the shanks of the terret-hook and pad-screw respectively to pass through, and between these perforations is a series of oblong slots, h h h. Upon the middle or top part of the tree is a square perforation, i, for the square shank of surrounded by a flange, i. On the under side of the middle part of the pad-plate, Fig. 7, is a circular recess, to receive the flexible nutfastening N, which consists of a piece of leather, rubber, or other flexible material, cut to fit the circular recess on the under side of the plate, and provided with two wings or flaps, m' m", which fit into the channel C formed between the flanges a a on each side of the tree. One of these flaps, m'', is riveted down upon the pad-plate, while the other, m', is loose, enabling the flexible piece N to be lifted partially out of the recess in which it rests.

The nut y' for the shank of the check-rein hook is screwed up in the usual manner, after which the flexible fastening N, which has a square opening, z, in the center to fit the nut y', is turned down over and around the nut, thus preventing this from turning and working loose. To remove the nut, the fastening N is lifted up by its loose flap m', when the nut may be readily detached. The flexible fastening N, being secured at one end to the pad-plate, cannot possibly become detached and get lost.

If desired, the tree may be made with one or more ribs or flanges, k, on its upper side or face, to support the housing and prevent it

B is the back-band, which is stretched over the flanges a a, and secured, by riveting or stitching, in the perforations c of the side rims b b. In this manner it will be observed that a covered channel, C, is formed, reaching from each end clear up to the top of the pad.

The bottom or cushion piece D is passed up around the edges of piece B, and stitched by a single seam on each side to the welt E, the inner flange of which is tacked down upon the upper face of the pad-plate A by means of the

perforations c.

The space between the back-band B and cushion-piece D is filled with hair or other

suitable stuffing, F, as shown.

The foundation-piece, to which the skirt is secured, consists of a piece of leather, G, having secured upon its under side (see Fig. 3) a T-shaped plate, l, made in one or more pieces, the check-rein hook to pass through, which is I and also a catch-plate and lug, H m. The latter is composed of a piece having a raised projecting lug or tongue, m, which projects up through a square hole, n, cut in the foundationpiece G, to which plate H is secured by rivets. The upper end of piece G is cut out, and the short part between the two wings formed by the cut is skived and depressed, so as to form a slope or incline. This foundation-piece is inserted between the back-band B, which projects a short distance out over the end of the pad-plate, and the fingers or prongs e e of plate A, the central depressed or inclined part reaching up between these prongs, to the under side of which the top or cross arm of plate l is riveted. Piece G is united to the projecting end of the back-band B along the sides and end by riveting, stitching, or in any other suitable manner, the two pieces B and G together forming a flexible end piece or basepiece for the cushion D F and welt E.

By this construction and combination of the flanged and slotted pad-plate A, back-band B, and foundation piece G, the nuts (denoted by I and K, respectively) for securing the padscrew and terret-screw upon the plate may be inserted at the end of this, without removing or disturbing the housing, by sliding them down through the incline formed in the top of the foundation-piece G between the prongs e e, into the channel C formed between the backband B, side flanges a a, and pad-plate A. By the use of a piece of wire the nuts may be pushed up to their proper places, facing the perforations f and g, respectively; or, if preferred, the housing may be lifted and the nuts brought into proper position by the use of an awl or other pointed instrument inserted through the slots h h h successively so as to catch the nuts and push them up into their position.

The skirt L has riveted to its under side the oblong catch-plate M, the slot o, of which is spanned by the bridge-piece p, that engages with the catch-lug or hook m of plate H. The square opening n in the foundation-piece G admits of the easy hooking or unhooking of the skirt, so that this may be attached to or detached from the pad in a moment of time, and with little trouble. It is obvious, however, that my improved tree and pad may be

used with any other suitable kind of skirtfastening, and that the form of lug and catchplate herein shown may be modified in shape without departing from the spirit of my invention.

Having thus described my improvement, I claim and desire to secure by Letters Patent

of the United States-

1. The tree or pad-plate A, having the flanges a a on its under side, perforated wings or side flanges b b, prongs e e, perforations fg i, and slots h h, substantially as and for the purpose herein shown and described.

2. As an improvement in harness and coach pads, the combination of the flanged and slotted pad plate A, constructed as described, with the back-band B and foundation-piece G, whereby a channel, C, is formed for the ready insertion, adjustment, and removal of the pad and terret nuts, substantially as and for the purpose herein shown and described.

3. The flexible foundation-piece G, cut out at n' n, and having the fastening-plate l and catch-plate and lug H m, substantially as and for the purpose herein shown and described.

4. The combination of the flexible foundation-piece G, having plates l H m, and cut out at n' n, with the skirt L, having slotted catch-plate M, engaging, by its bridge p, with tongue m of plate H, substantially as and for the purpose herein shown and described.

5. As an improvement in harness and coach pads, the combination of the flanged and slotted pad-plate A, back-band B, foundationpiece G, cushion-piece D, and welt E, substantially as and for the purpose herein shown

and described.

6. As an improvement in harness and coach pads, the combination of the flanged pad-plate A, having circular recess z on its under side, with the flexible nut-fastening N and nut y', substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

STEPHEN A. MARKER.

Witnesses:

M. D. EDGERTON, P. H. DALY.