(No Model.)

J. L. RICHARDS.

HARNESS SADDLE.

No. 410,253. Patented Sept. 3, 1889.

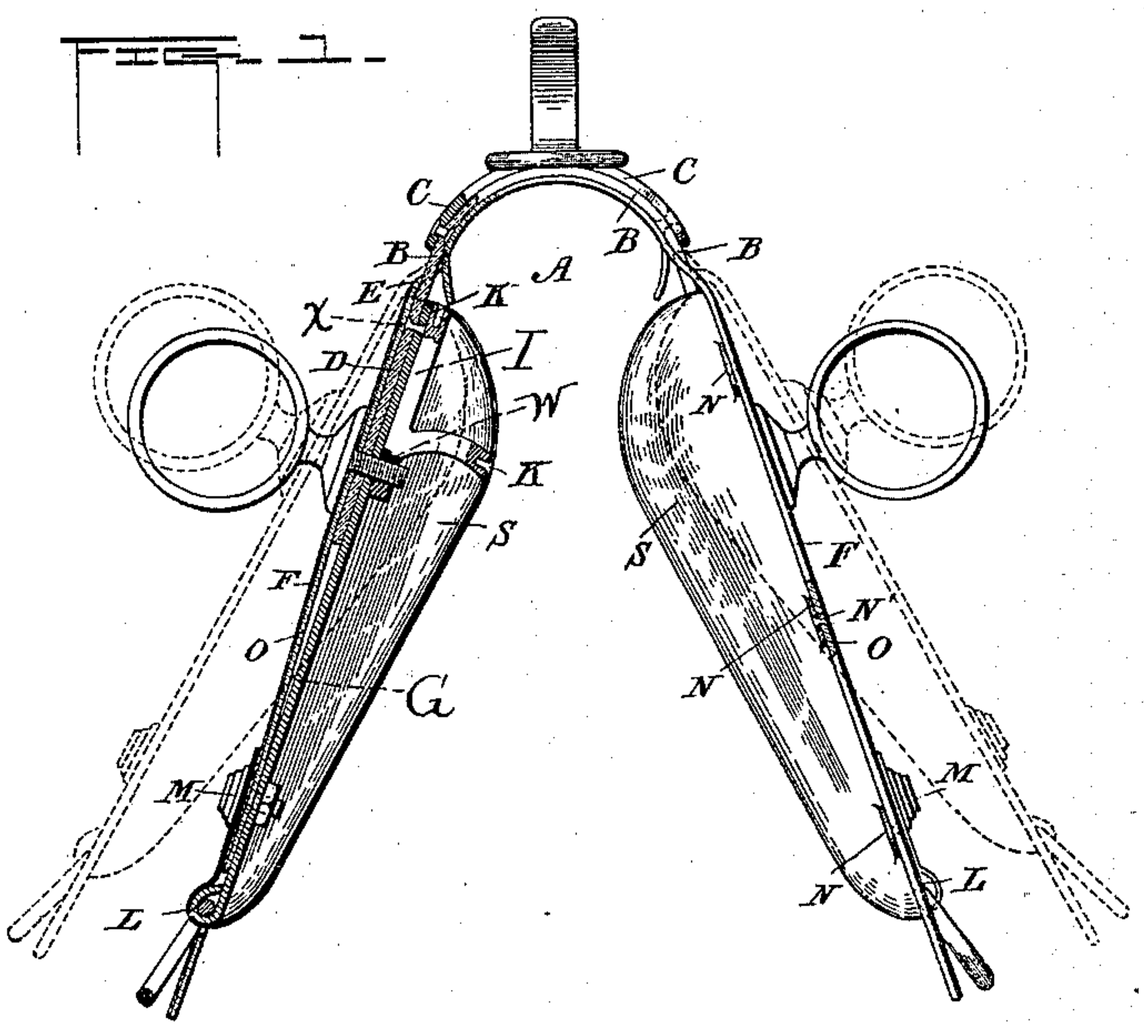
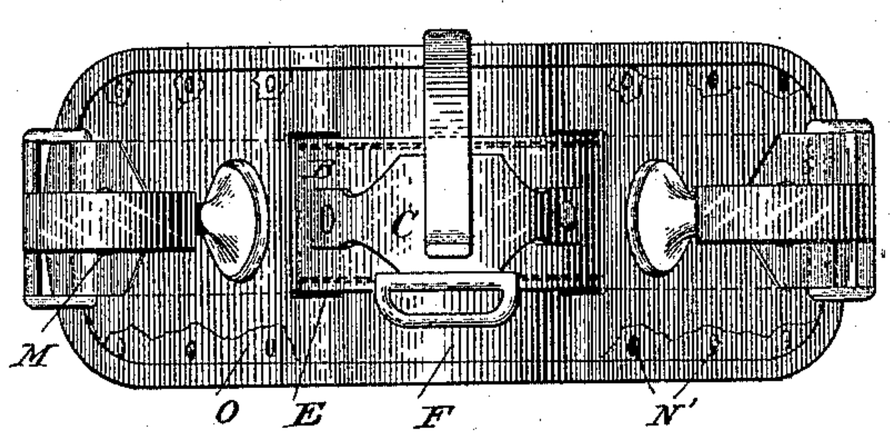


FIG. 2.



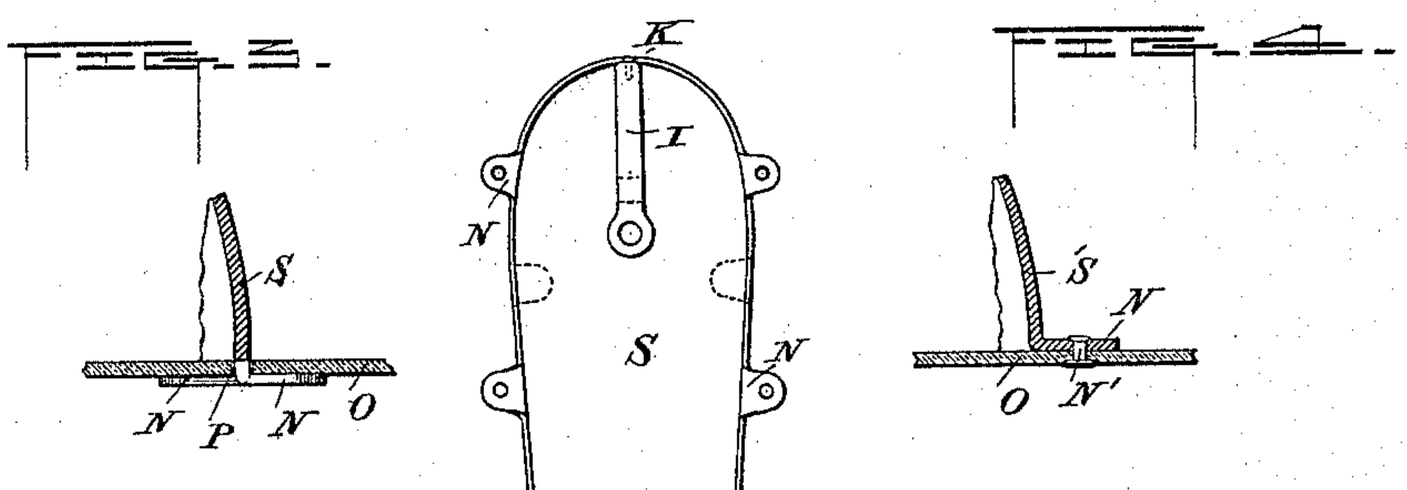


FIG. 5.

Witnesses
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per R. P. Wm Davis
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UNITED STATES PATENT OFFICE.

JOSEPH L. RICHARDS, OF BUCHANAN, MICHIGAN.

HARNESS-SADDLE.

SPECIFICATION forming part of Letters Patent No. 410,253, dated September 3, 1889.

Application filed March 18, 1889. Serial No. 303,734. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. RICHARDS, a citizen of the United States, residing at Buchanan, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Harness-Saddles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of harness-saddles in which zinc pads are employed, and has special reference to those saddles used upon work-horses.

The object of my device is to overcome the objectionable features of the hinged tree, in which the center drops down upon the backbone of the animal and creates a sore.

A further object of my invention is to construct the saddle so that it will have a large range of flexibility, in order to adapt itself to the back of different sizes of horses.

A still further object of my invention is to construct the saddle in such a manner as to dispense with a large amount of stitching, whereby a great saving in labor and expense is effected.

With these ends in view my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my complete invention, the left side of the saddle being shown in cross-section to illustrate more clearly the mode of attaching the tree and pads; Fig. 2, a top view; Fig. 3, a detail view of a section of the pad, illustrating a modification of the mode of attachment; and Figs. 4 and 5, additional detail views of the pad.

The saddle-tree A consists of a metallic curved arch C, mounted upon and riveted to the leather foundation B. The stiffness of the arch prevents the tree from dropping down upon the animal's back. The arch-plate C is provided with a check-hook and back-strap loop, both of which are cast integral with the plate. The skirts D of the tree pass through an opening E in the outer cover F and are clamped between the under plate G and the terret-collar H, as will be clearly seen in sectional view of the left wing of the saddle. The plate G, pad-bracket I, cover F, and skirt D are all securely clamped together by means of the threaded terret-shank, which passes through these parts and engages the threaded aperture W. The upper ends of the zinc pads S S are secured to the outer arms of the bracket I by means of rivets K, while the lower end is bent around the eye L of the plate G and folded down upon the outside of the cover, where it is fastened by the bolt M. The plate G consists simply of a single piece of flat malleable metal extending the length of the pad, and having its lower extremity bent around to form an eye, in which the skirt-buckle is inserted, and its upper end secured to the skirt by the rivets X and terret-shank. The sides of the pad are provided with fins N, which are riveted to the saddle-lining O by the rivets N'. The rivets might be dispensed with by cutting slits P in the lining and then bending the fins over at right angles to the pad and passing them edgewise through the slits and alternately bending them back down over the opposite surfaces of the lining, as shown in the modification in Fig. 3. Either mode will suffice to form a secure fastening for the pad to its cover. Thus it will be seen that much of the perishable stitching heretofore employed is dispensed with, and by means of the construction just described various parts of the saddle may be taken apart from time to time for repairs with the greatest facility. As the leather skirts D, which connect the tree with the pad portion of the saddle, are flexible, they form a hinge-joint and allow the saddle to readily adapt itself to the back of animals of various sizes. Dotted lines in Fig. 1 show the saddle spread to fit a heavy-set horse, while full lines represent the position of the saddle when the sides are drawn nearer together when used upon a smaller and thinner animal. The tree A is at all times held stiff by means of the metal stiffener or plate C, which, by means of its curved form, will always keep the under side of the tree clear of the animal's back, and hence prevent rubbing and irritating, thereby affording comfort and ease.

In putting the saddle together the leather strap which forms the foundation B of the arched stiffener-plate C is placed astride the central part of the cover F, and the tree-skirts

D are passed down through apertures E and under the cover F, and by this arrangement all stitching is obviated.

It is evident that many slight changes in the construction and arrangement of my invention, which might suggest themselves to a skilled mechanic, could be resorted to without departing from the spirit and scope of my invention; hence I do not limit myself to the exact construction herein shown.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a harness-saddle, of an arched plate mounted upon a foundation of leather having its opposite ends extended downward, a metallic pad provided with a bracket upon its inner side and having a threaded aperture, a perforated metallic plate, an outer covering over the plate and downwardly-extending ends of the leather foundation, and a terret having a threaded shank arranged to pass through said cover, plate, and end and to screw into the threaded aperture in the bracket, whereby these parts are clamped together, in the manner and for the purpose described.

2. In a harness-saddle, the combination of a metal pad, a bracket located upon the inner side of the pad, a perforated metallic plate forming a seat for the pad, a saddle provided with downwardly-extending ends overlapping said plate, and a terret provided with a threaded shank passing through said ends and plate and screwing into a threaded aperture in the bracket, all arranged and adapted to operate substantially as described.

3. In combination with a saddle-tree mounted upon a leather foundation having downwardly-extending ends, a terret provided with a threaded shank, a metallic pad having a threaded bracket upon its inner side, a perforated metallic plate forming a seat for the pad, said plate being provided with an eye upon its lower end to receive a buckle, and an extension upon the lower end of the pad, which extension is arranged to be fastened down upon the outside of the saddle, in the manner and for the purpose described.

4. In a harness-saddle, a metallic pad provided with a threaded bracket upon its inner side, a perforated metallic plate forming a seat for the bracket, and integral fins arranged along the edges of the pad, whereby it is riveted to the saddle, in combination with a terret having a threaded shank arranged to pass through the perforation in said plate and to engage the threaded aperture in the pad-bracket, in the manner and for the purpose set forth.

5. In a harness-saddle, a metal pad provided with devices for securing it to the under side of the saddle, and having its lower end bent over and fastened down upon the outside of the saddle, in the manner and for the purpose described.

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

JOSEPH L. RICHARDS.

Witnesses:
CHARLES D. NILES,
ALISON C. ROE.