

E. R. CAHOONE.
HARNESS-SADDLE.

No. 185,388.

Patented Dec. 19, 1876.

Fig. 1.

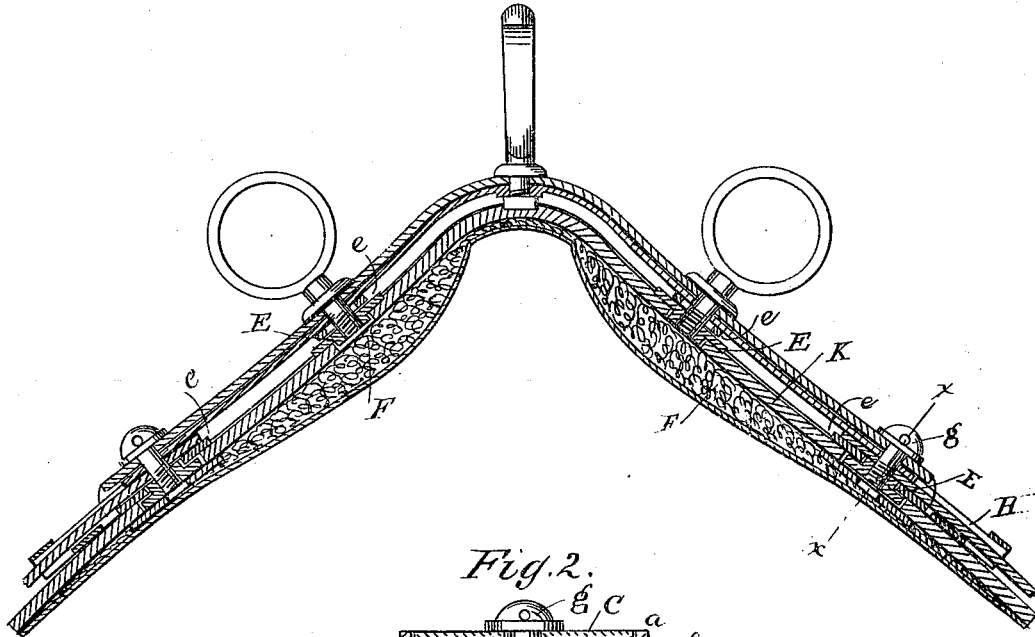


Fig. 2.

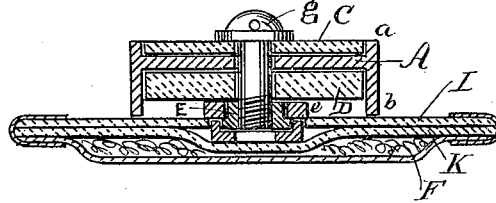


Fig. 3.

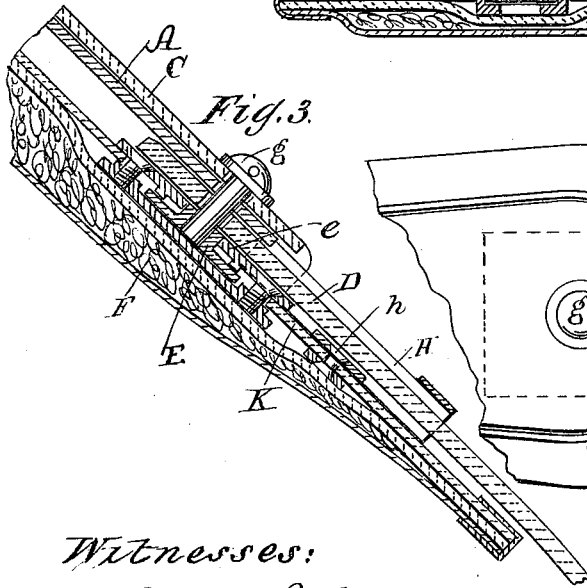
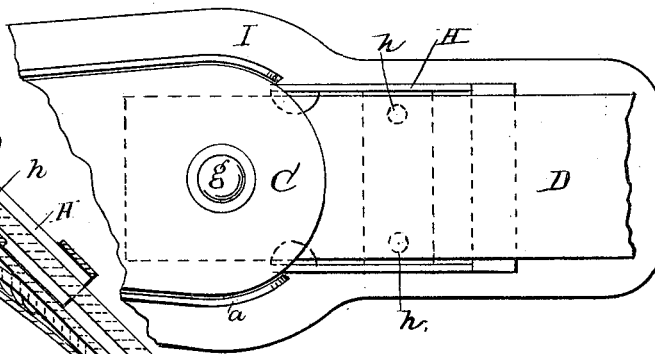


Fig. 4.



Witnesses:

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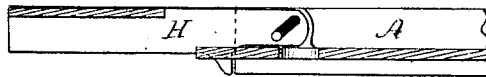
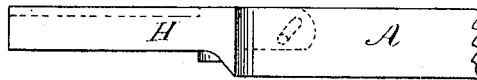
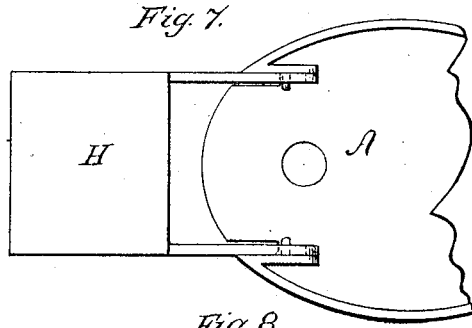
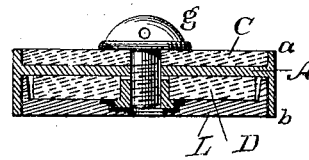
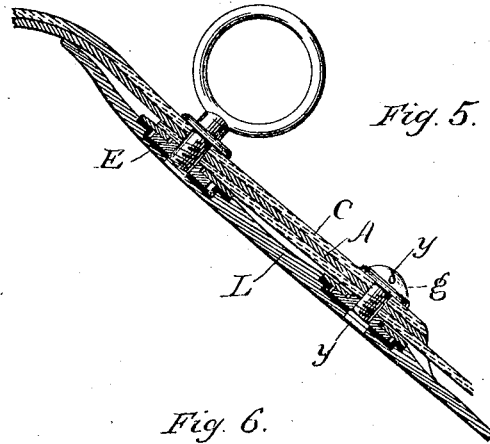
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UNITED STATES PATENT OFFICE.

EDWIN R. CAHOONE, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN HARNESS-SADDLES.

Specification forming part of Letters Patent No. 185,388, dated December 19, 1876; application filed October 11, 1876.

To all whom it may concern:

Be it known that I, EDWIN R. CAHOONE, of Newark, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Harness-Saddles, of which the following is a full and clear description, reference being had to the accompanying drawings, wherein—

Figure 1 is a central longitudinal section. Fig. 2 is a transverse section on line *x x*. Fig. 3 is an enlarged longitudinal section of the lower end of the saddle, showing a modified method of attaching pad screw-nuts. Fig. 4 is a plan of the portion shown in Fig. 3. Fig. 5 is a longitudinal section, showing a modified structure, to wit, a pad without a housing. Fig. 6 is a transverse section on line *y y*. Figs. 7, 8, 9 exhibit methods of attaching the flexible tip to the tree.

This invention consists, first, in a non-elastic flexible metallic tip, which may be hinged to the end of the tree or secured to the pad or housing only, to prolong said flange plate or tree on the pad or housing; second, a pad and housing made together as a single structure and provided with holders for the terret and pad screw-nuts, whereby there is a saving in stock in the manufacture, and the making of said pads may be conducted separately and without reference to the tree, and the terret and pad screw-nuts may be inserted or changed at pleasure.

That others may fully understand my invention, I will particularly describe it.

A is my tree-plate, constructed with the flanges *a b* along its edges, to impart strength and stiffness, and also to receive and cover the edges of the leather top C above said tree, and the pad F below the same. The back-strap D also enters between the flanges *b*, below the tree, and is secured by the terret and pad screw-nuts. By this structure the exposed edge of the saddle is entirely that of the tree, which may be finished by japanning or otherwise. The top leather C may be dispensed with, and the upper surface of the tree finished by japanning or otherwise, as desired. The terret and pad screw-nuts E are sunk into the pads and confined by plates or holders *e*, which are fastened to the pad bottom K. The pad may therefore be made en-

tirely separate and distinct from the tree, and be united thereto by the terret-screws and pad-screws *g*, as shown. The terret and pad screw-nuts, being exposed upon the surface of the pad F, may be easily removed and changed, if desired. The holder-plates *e* being secured to the pad or housing leather, which forms its foundation, the said pad is thereby stiffened and drawn firmly up against the tree by the terret and pad screws, so that it cannot sag in use.

It is desirable that the tree-plate shall extend over the horse's side farther than it is possible to extend a rigid plate, because beyond a certain distance from the horse's spine the variations of form will be such that no arbitrary shape of tree will fit different horses with reasonable exactness. If the horse is fat, the ends of the tree hurt him; and if he is lean, the ends of the tree will be subject to strain and will be broken. Therefore the saddle-trees have heretofore been made shorter than was desirable, and I have remedied this defect by placing at the end of the tree-plate A a movable metallic tip or extension-piece, H, which may be jointed or hinged to the plate A directly, as shown in Figs. 7, 8, 9, or it may be secured to the pad or housing immediately at the end of said plate. In either case it will effect the purpose of an extension of the tree.

The tip H may be cast with or without a loop across its lower end, to confine the strap D, as desired. It may be secured to the pad by nails or screws; but I prefer to nail to the under side of the pad bottom K, and in definite positions, two nuts for the reception of the screws *h*, which confine the tip H, and it is then easy to attach or detach said tip at any time. This is a great convenience, because the parts of the saddle need not be assembled except as ordered, and then the style of trimmings desired may be put up at once. When the saddle is designed for hard usage, and extra strength is required, it will be advantageous to hinge said tips directly to the ends of the tree-plate A, and such hinging may be effected in a great variety of ways. The ends of the side flanges of the tip should always extend up past the ends of the flanges *b* either inside or outside of the same, so as

to present the appearance of a continuous plate.

I am aware that elastic extension or stiffening pieces of steel, &c., have been riveted to the ends of the trees, to project down into the pads; but such pieces differ from my invention in these particulars: First, they are not sufficiently flexible; second, they are elastic; third, they are necessarily placed inside the pad, whereas mine is necessarily outside the same.

The pad F may be formed in the usual manner of felt or hair, and fitted within the flanges *b b*, whereby its edges are covered and protected by said flanges *b b*. But I prefer to employ a filling of *papier-mache*, or other similar material, which may be pressed in dies to give it the proper form, with suitable indentations for the terret and pad screw-nuts. This filling is represented at L, Figs. 5 and 6. It is covered with the usual pad leather and bottom, and fibrous or hair stuffing may be used with it, if desired.

When a more ornamental finish is required a housing, I, is employed. Heretofore the pad F and housing I have been made as separate

structures; but I make the pad and housing together, the housing-lining and pad-leather being one and the same. Thereby there is material saving in stock and labor.

Having described my invention, what I claim as new is—

1. A metallic saddle-tree, A, combined with a pad or housing provided with a metallic tip attached thereto, substantially as and for the purpose set forth.

2. A saddle-tree, A, combined with a metallic tip hinged thereto, substantially as shown and described.

3. A pad, F, and housing I, constructed together and united by the same stitches to constitute a single structure, as set forth, combined with holders secured to its surface, to receive and confine removable terret and pad screw-nuts, whereby said pad and housing may be securely attached to or removed from the tree, and said nuts changed at pleasure.

EDWIN R. CAHOONE.

Witnesses:

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