2 Sheets—Sheet 1.

E. R. CAHOONE.
Harness-Saddle.

No. 220,273. **Patented Oct. 7, 1879.**

Fig. 1.

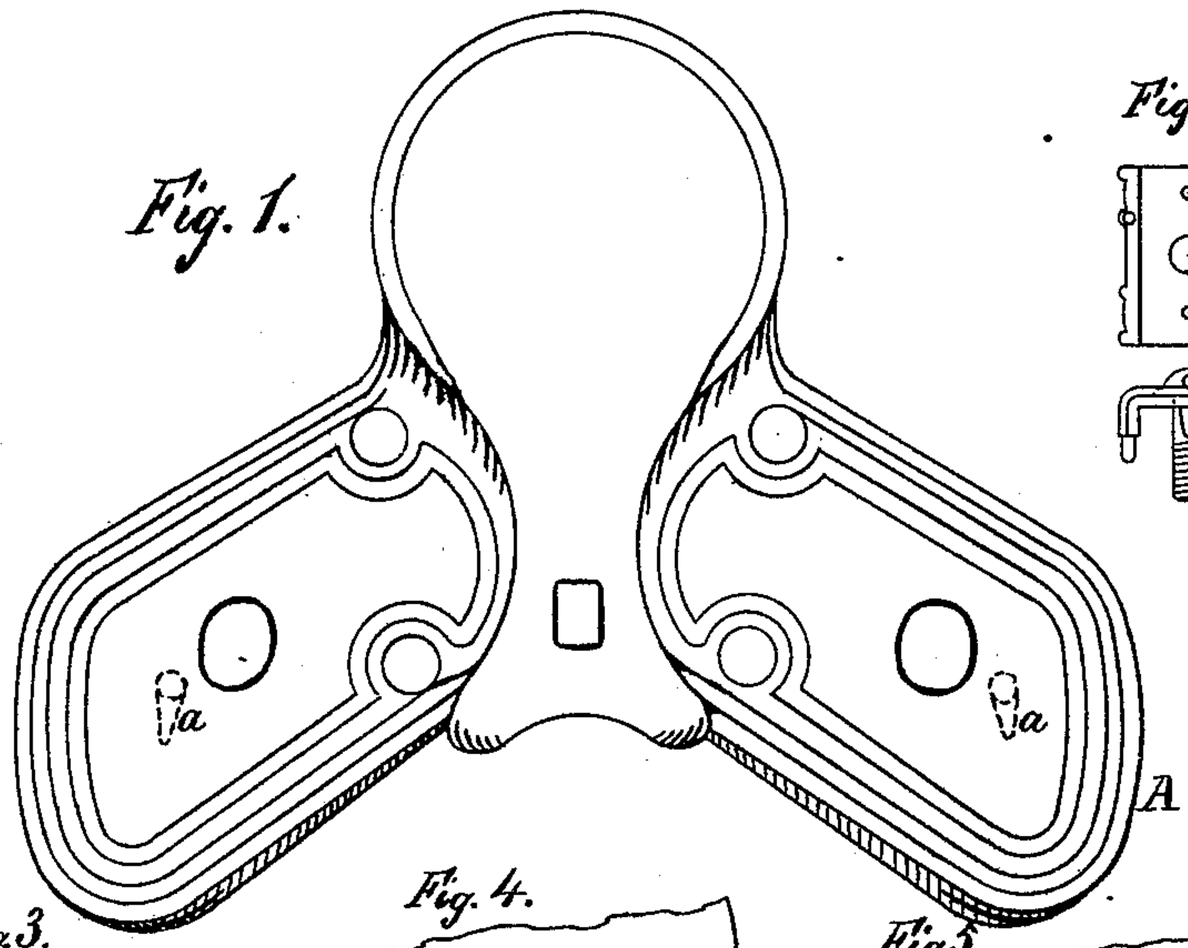


Fig. 2.

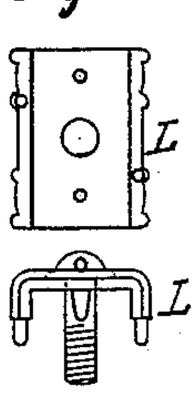


Fig. 6

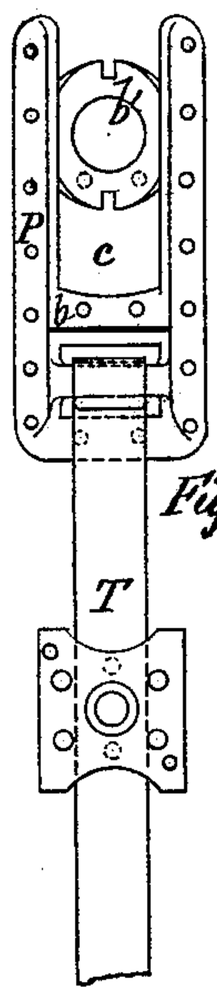


Fig. 3.

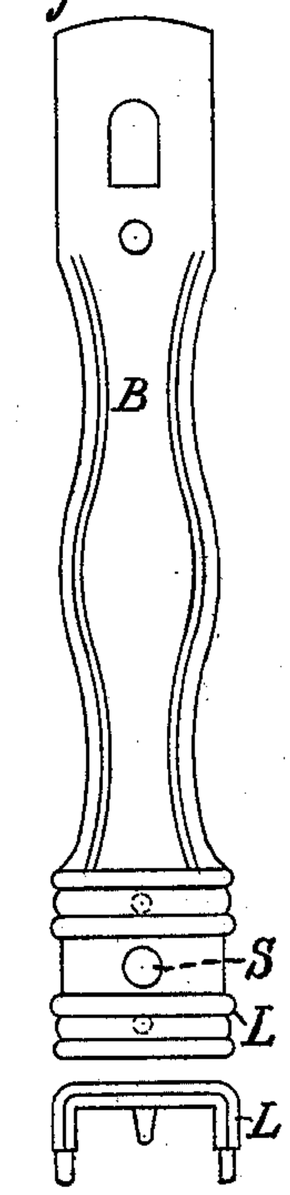


Fig. 4.

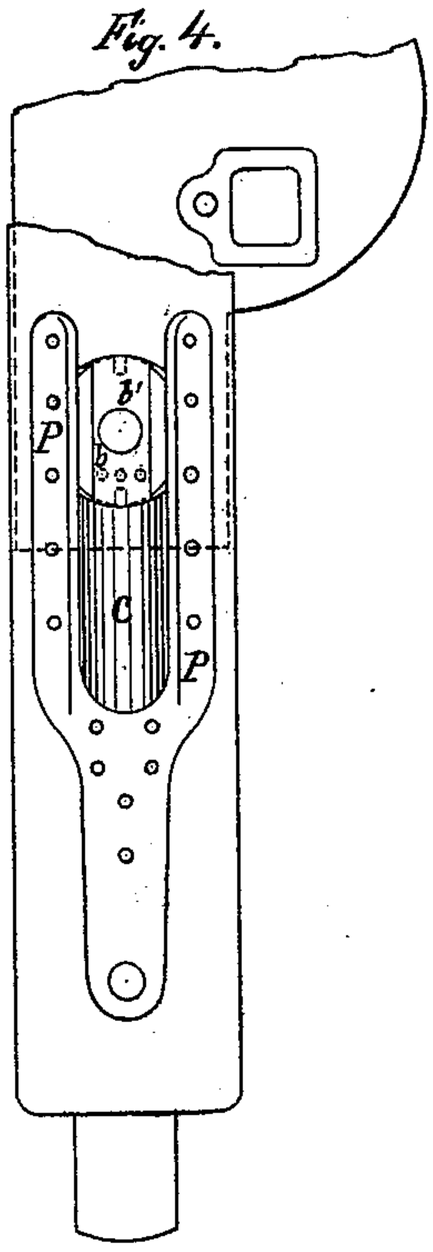


Fig. 5.

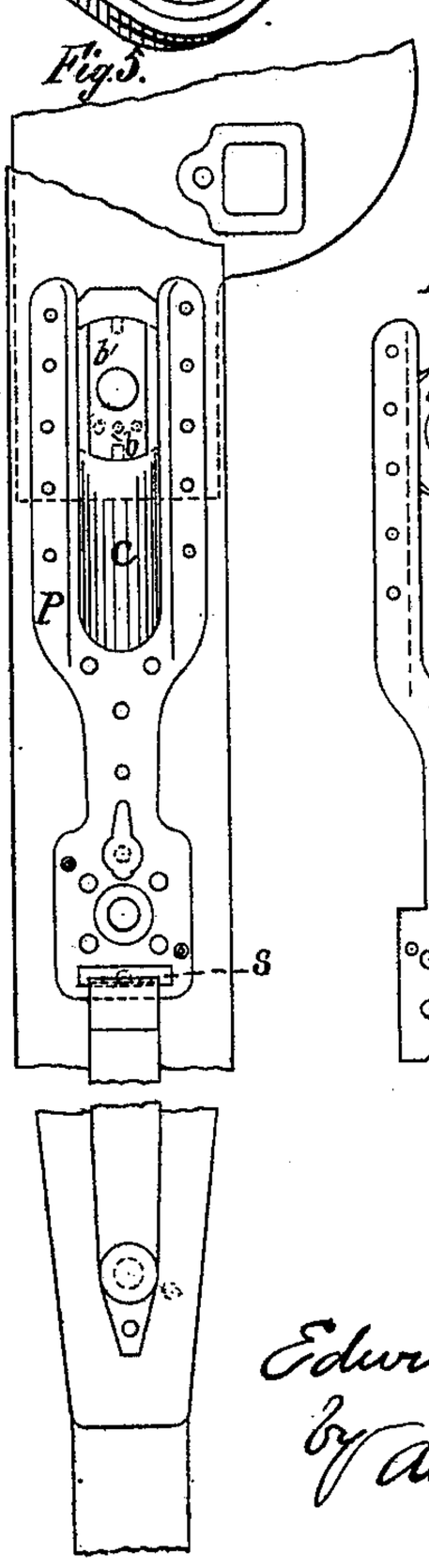


Fig. 7.

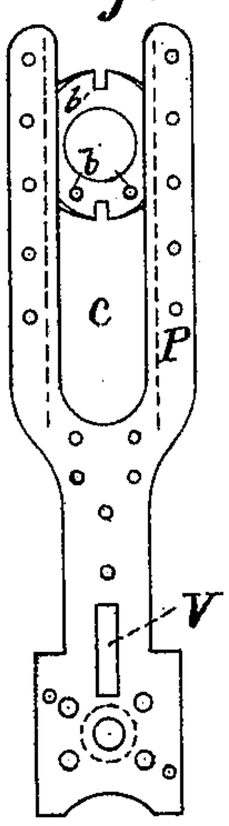
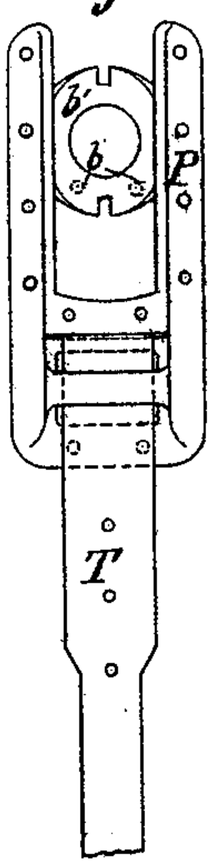


Fig. 8.



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2 Sheets—Sheet 2.

E. R. CAHOONE.

Harness-Saddle.

No. 220,273. Patented Oct. 7, 1879.

Fig. 9.

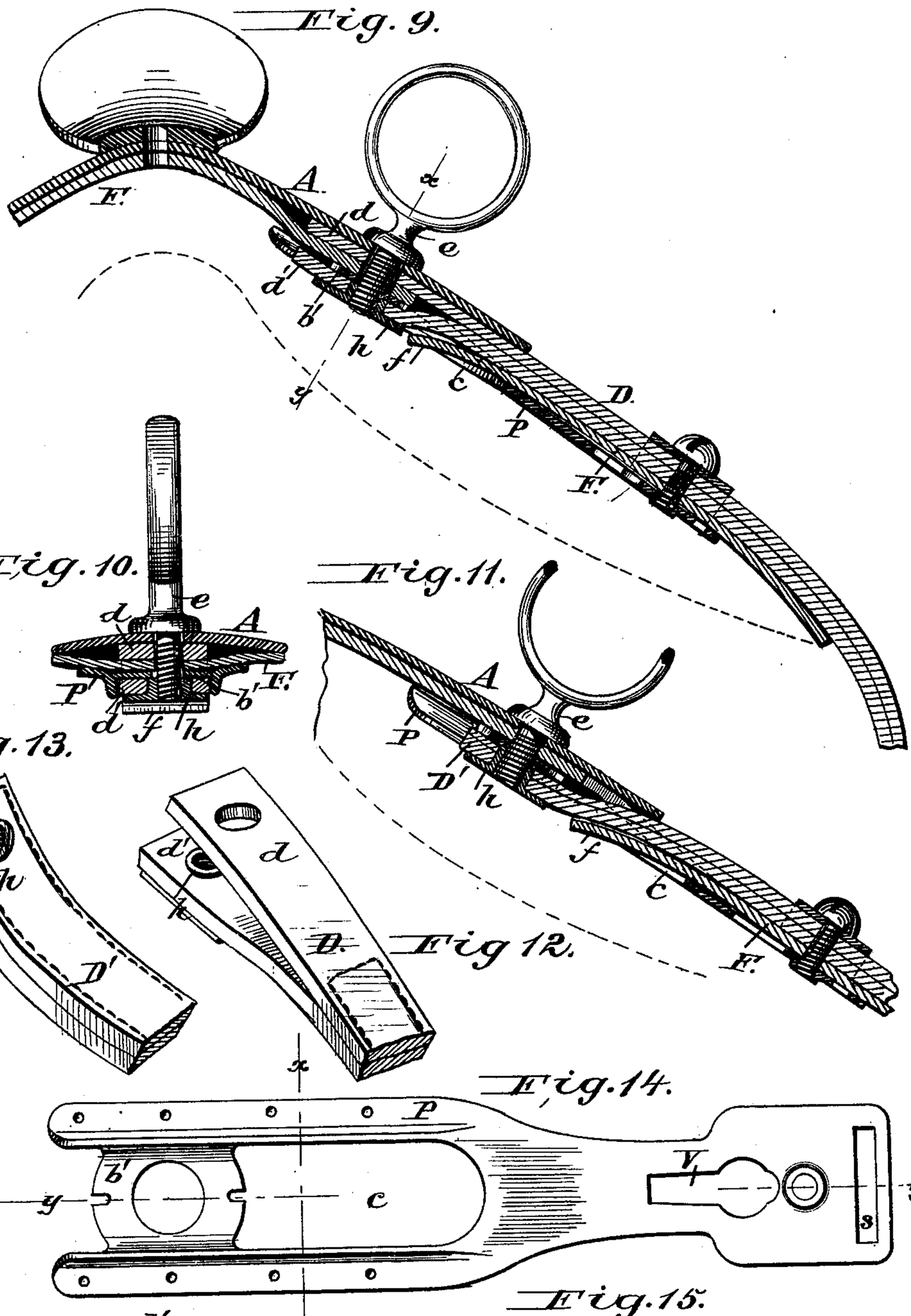

Fig. 10.

Fig. 11.

Fig. 13.

Fig. 12.

Fig. 14.

Fig. 15.

Fig. 16.

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Inventor:
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by associate attorney,
Wm. N. Finckel

UNITED STATES PATENT OFFICE.

EDWIN R. CAHOONE, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN HARNESS-SADDLES.

Specification forming part of Letters Patent No. **220,273**, dated October 7, 1879; application filed December 9, 1878.

To all whom it may concern:

Be it known that I, EDWIN R. CAHOONE, of Newark, in Essex county, State of New Jersey, have invented an Improved Harness-Saddle, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part hereof, in which drawings—

Figure 1 is a view of a saddle-tree, showing the seat and jockeys, having imitation saddle-nails cast on the jockeys. Fig. 2 shows the metal loop and screw-bolt. Fig. 3 shows the metal part of back-band and loop cast in one piece. Figs. 4 and 5 are views of the under side of the tree, showing the under pieces and manner of sewing them. Fig. 6 is a view of the short under piece with long steel stiffener. Fig. 7 is a view of the under piece with long stiffener with square end, having holes to receive pins on metal loop and bosses for the thread of bolt or pad-screw. Fig. 8 is a view of the short under piece to be used with short steel stiffeners. Fig. 9 is a longitudinal section of a portion of a saddle embodying my invention, the back-band being split and passed one part over and the other under the bridge of the under piece. Fig. 10 is a cross-section on line *x y* of Fig. 9. Fig. 11 is a longitudinal section similar to Fig. 9, but with the back-band entire and under the bridge. Fig. 12 is a perspective view of the split end, and Fig. 13 a similar view of the entire end, of the back-band. Fig. 14 is a bottom-plan view, Fig. 15 a longitudinal section on line *y y* of Fig. 14, and Fig. 16 a cross-section on line *x x* of Figs. 14 and 15, of the under piece.

My invention consists in the construction and arrangement of the metal under pieces which are combined with the tree, substantially as hereinafter described, and pointed out in the claims.

The under surface of the frame A is provided with pins *a*, cast on the under side, to enter into the leather flap or back-band, thus preventing a side motion, which is a trouble with frames having a seat and frame cast together. These pins work in connection with other pins, *b*, provided on the under pieces, P, which are cast so that when the terrets are screwed into their places the parts are held firmly together, entirely preventing a side motion from drawing the flaps out of place when not used.

This saddle tree or frame is susceptible of being used with an under piece or flange containing a stiffener cast with it, to work in connection with an iron back-band top. A back-band adapted to this purpose is shown in Fig. 3. This metal back-band B is finished with an imitation-leather loop, of iron, and a bolt or pad-screw, S, passing down through the leather portion of the back-band, which is inserted under the loop L, through the flaps and into the stiffener, thus making a very substantial device.

When the short flanges, such as are shown in Figs. 6 and 8, are used, a long steel stiffener, T, is secured to the flange in such a manner as to allow sufficient motion to take away unnatural stiffness, while it performs the function for which it is used, (steel stiffeners being preferable to iron.) They extend the whole length of the flaps, and are secured at the loops by having the screw-bolts which hold the back-bands pass through them and fastened with a rivet at the lower end.

The under pieces or flanges, P, are made with an aperture, *c*, large enough to receive the back-band either under the bridge, on top of the bridge, or divided so that one layer of the leather passes above the bridge and the other below the bridge, to which the burr should be fastened. This will be more readily understood by reference to Figs. 9 to 16 of the drawings.

In Fig. 9 the back-band D is of such thickness that it would be necessary to skive it down, and thereby weaken it, in order to make it fit under the jockey, with an under piece such as heretofore used. Now, to save the labor and waste of skiving, and to preserve the strength of the back-band, I divide the end of such back-band and pass one portion, *d*, over the bridge *b'* of the under piece, and the other portion, *d'*, through the aperture *c* of the under piece, and under the bridge, the jockey, flap F, back-band, and under piece being held together by the terret *e*, the screw of which is received into the burr *h* on the under side. A portion, *f*, of the flap is cut

away and allowed to project through the aperture *c* in the under piece.

In Fig. 11 the back-band D′ is passed entire through the aperture *c* and below the bridge. In both cases the back-band sinks within the aperture in the under piece, and the jockey can thereby be fitted snugly and closely to the flap and over the back-band.

The pointed pins on the flanges pass into the back-band, and take the strain in a great measure off the terrets. The long flanges, which have the stiffeners cast to them, have a thickened portion or boss to receive a good thread; also a square portion at the loop end, to work in connection with the back-band loops, said loops having pins on them made separate from the upper portion; also a slot, B, so that when they are required to be used with leather loops and a leather back-band they can be nailed in, as in other saddles; also the slot *s* at the extreme end of the under piece running crosswise to receive the end of the long steel stiffener.

One feature of this back-band with metal loop is, that it has screws or bolts which can be taken off and put together after the saddle is made; hence, if the back-bands wear out, new ones can be inserted without ripping the saddles or taking them to pieces.

Flanges have been made apparently similar in construction, but none known to me have answered the purpose but these. Other flanges or under pieces have been made with bridges elevated to receive the back-bands. They have been made with openings to receive the nuts or burrs; but in these cases the burrs have to be put in underneath and the back-bands on top, thus answering but one purpose. They have also been made with a stud to work through a hole in a metal back-band. In this case, however, pins are pointed to press into the leather back-band, and the whole is secured together.

Flanges have been made with stiffeners cast to them; but my flanges have on them a boss to receive the bolts or screws and square ends to receive the pins from metal loops, also transverse slots to receive the spring-stiffeners.

Steel stiffeners have been fastened to the flanges before; but in this case the steel stiffeners are fastened in a different way, and extend the whole length of the flaps, so as to give strength and firmness in cheap saddles.

My invention must not be confounded with saddles which have a metal clip fixed on top for a swinging back-band. Saddles of that kind have a hole to receive a bolt or screw, which passes down through the back-band and flaps into a nut, which is fastened to the flap on the under side, and are so made for the purpose of obtaining a swinging back-band. In mine, however, said back-band, the top of which is of metal, with a loop in imitation of leather cast to it, is used in combination with under pieces or flanges which have stiffeners attached to them, containing a bolt with holes to receive pins or loops, and thickened portions or bosses to receive the pad-screws, so as to bring all together, clamping firmly the back-bands in place with side motion.

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

1. A back-band loop of metal, having pins or projections on the edges that meet the flaps, in combination with under pieces or flanges which have a square portion at their extremities, forming a part of said loop, substantially as and for the purpose specified.

2. The concave under pieces with a bridge, constructed as described, to receive the back-bands, such under pieces having pointed pins cast on them, for the purpose specified.

3. The concave under pieces, P, having apertures *c*, and extended longitudinally to act as stiffeners, and provided with a pad-screw boss, a square flat perforated portion surrounding the boss, and a slot, *s*, in combination with steel stiffeners T, pad-screws, and loops L, substantially as described.

4. The seat, convex jockeys, and pointed pins *a*, all cast in one piece, in combination with concave under pieces, provided with bridges thereon, metal loops L, and metal stiffening back-bands, all constructed and arranged substantially as described.

EDWIN R. CAHOONE.

Witnesses:
ABRAHAM MANNERS,
NOBLE TEAS.