

No. 617,876.

Patented Jan. 17, 1899.

C. J. COOPER.  
HARNESS SADDLETREE.

(Application filed Sept. 14, 1898.)

(No Model.)

Fig. 1.

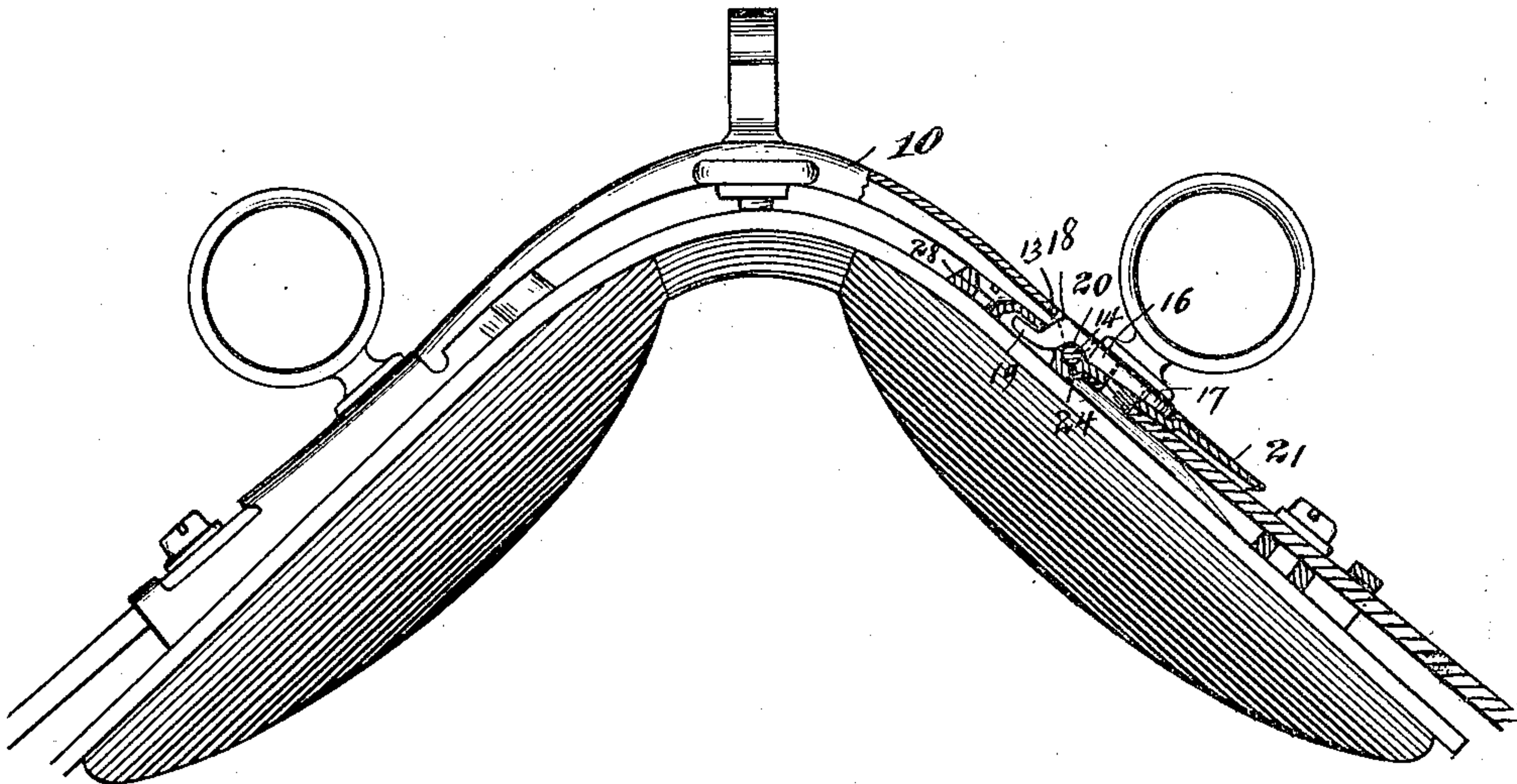


Fig. 2.

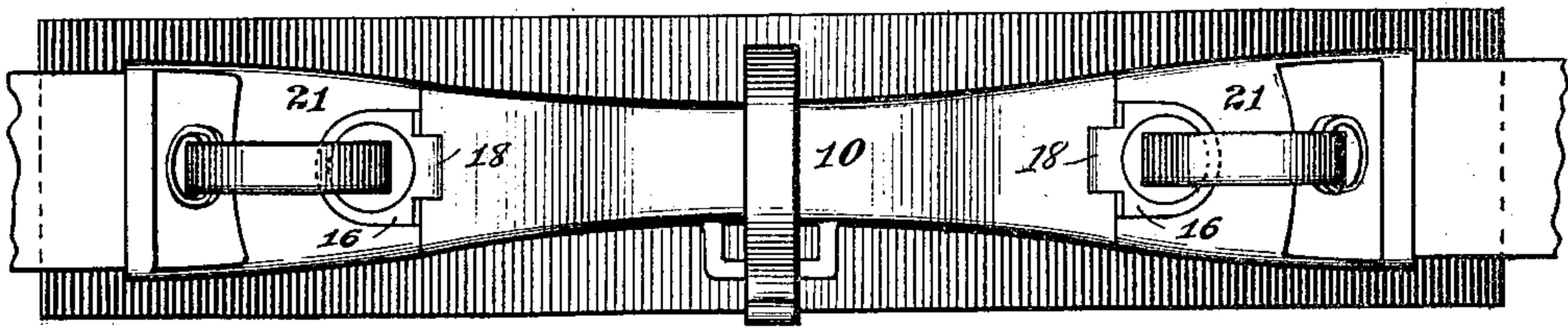


Fig. 3.

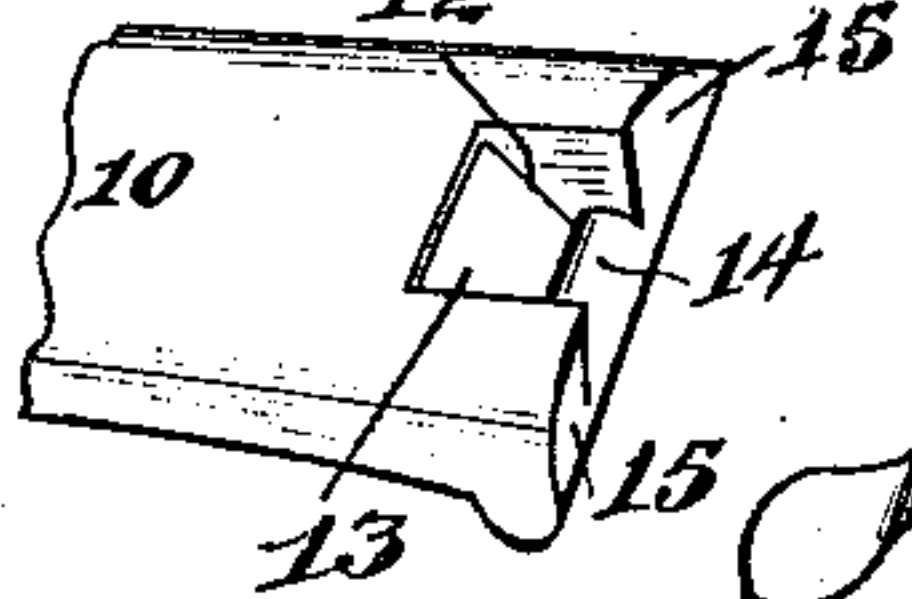


Fig. 4.

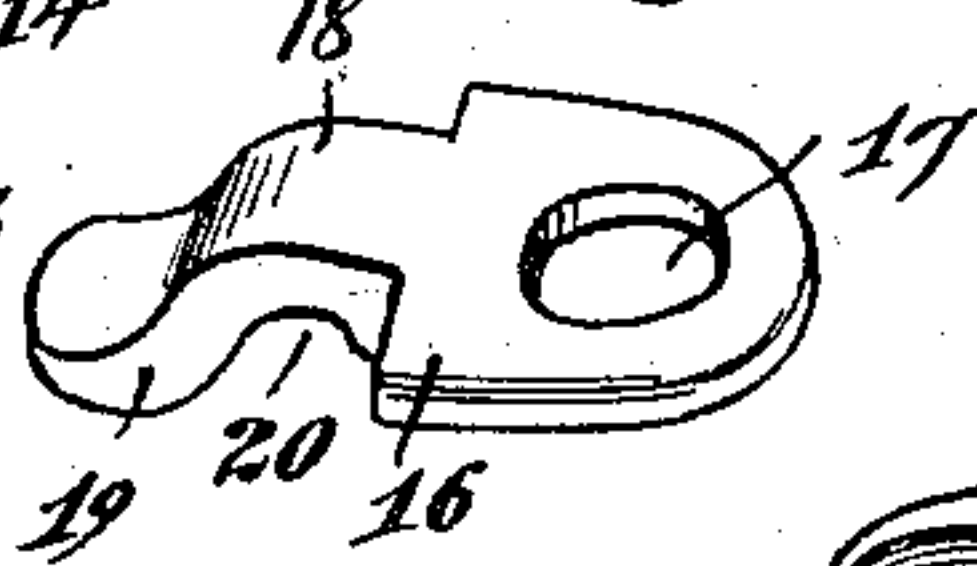
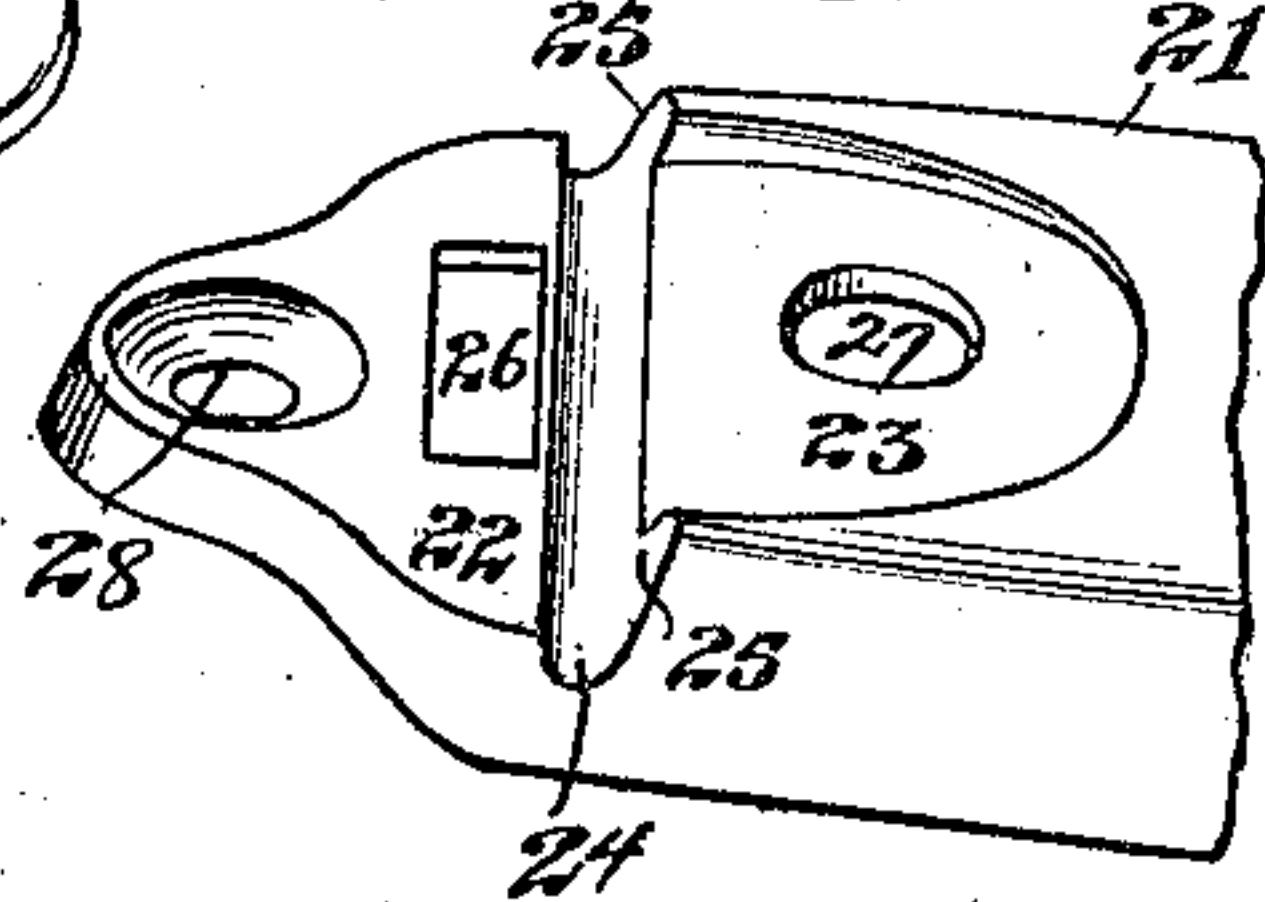


Fig. 5.



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# UNITED STATES PATENT OFFICE.

CHARLES J. COOPER, OF MOLINE, ILLINOIS, ASSIGNOR TO EVELYN T. COOPER, OF SAME PLACE.

## HARNESS-SADDLE TREE.

SPECIFICATION forming part of Letters Patent No. 617,876, dated January 17, 1899.

Application filed September 14, 1898. Serial No. 690,939. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES J. COOPER, of Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Harness-Saddle-trees, of which the following is a specification.

This invention relates to harness-saddle-trees and is in the nature of an improvement upon the construction set forth in Letters Patent No. 408,827, granted to me August 13, 1889.

My present invention has for its object to provide an improved construction of the pivotal connection between the yoke and the jockey-plates, whereby a more efficient limitation of the flexion at the pivotal connection between these parts may be obtained, while at the same time the tree will present a flush and smooth upper surface free from projections and of greater strength.

To these ends my invention consists in certain novel features which I will now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a harness-saddle embodying my invention, one side of the tree being shown in section. Fig. 2 is a plan view of the same; and Figs. 3, 4, and 5 are perspective views of the adjacent ends of the yoke and jockey-plate and of the intermediate connecting-plate, the parts being somewhat separated to better illustrate the construction.

In the said drawings, 10 represents the yoke of the tree, which is of any approved construction. This yoke terminates at its ends in a plane surface at right angles to the body of the yoke, it being centrally rabbeted or cut away to form a recess 12, extending inward from the terminal surface and downward through the body of the yoke, thereby forming an aperture 13 at the bottom of the recess 12, which aperture is closed or defined at its front by the cross-bar 14, which serves as a pintle for the hinge connection, while the terminal surfaces at each side of the recess 12 form shoulders 15, as clearly shown in Fig. 3.

16 indicates the connecting-plate, which is provided with a flat body portion having an aperture 17 for the passage of the turret-shank and a projecting tongue 18, which ex-

tends in the plane of the body of the plate for some distance and then downward and away from the said body portion, forming a hooked end 19. On its under side the tongue 18 is provided with a groove or recess 20, which fits over the cross-bar 14, while the hooked end 19 is adapted to extend through the aperture 13, and the body portion is adapted to fit the recess 12, lying therein flush with the upper or outer surface of the yoke. It will be understood, of course, that two of these connecting-plates are employed, one at each end of the yoke.

The jockey-plates are indicated at 21, each plate being rabbeted at its upper end, as indicated at 22, to receive the lower end of the yoke, which fits thereon and lies in said rabbet with its upper surface flush with the upper surface of the jockey-plate. The body of each plate is recessed, as shown at 23, back of or below the rabbet 22, said recess being adapted to receive the body portion of the connecting-plate 16, which fits therein and lies flush with the surfaces of the yoke and of the jockey-plate, so that the top of the tree is a smooth uninterrupted surface without projections of any kind. Between the rabbet 22 and recess 23 is formed a groove 24 to receive the cross-bar 14 of the yoke, and the ends of the body portion of the jockey-plate extending above said groove and lying on each side of the recess 23 form shoulders 25, having plane surfaces at right angles to the body of the plate and parallel with and adapted to abut squarely against the similar faces of the shoulders 15. Each jockey-plate is provided with an aperture 26 to receive the hooked end 19 of the tongue 18 and with an aperture 27 in the recess 23 for the passage of the shank of the turret.

28 indicates an aperture for the passage of a screw, which serves to aid in securing the jockey-plate to the saddle.

The parts are assembled in the manner shown in Fig. 1 of the drawings, the hooked end 19 of the plate 18 of the connecting-plate passing through the apertures 12 and 26 and the cross-bar 14 being held in the grooves 20 and 24 between the connecting-plate and jockey-plate. The several parts are secured in this position by means of the turret, which passes downward through the apertures 17



and 27 and clamps the connecting-plate and jockey-plate firmly to the saddle. When the parts are thus assembled, it will be seen that a limited amount of flexion is permitted by the movement of the connecting and jockey plates around the cross-bar 14 as a pivot, but that this movement is limited by the meeting of the abutting shoulders 15 and 25 on the yoke and jockey-plates, respectively. These shoulders are formed upon the larger and stronger members of the tree instead of upon the connecting-plate, as in my prior patent, hereinbefore referred to, and the structure is thus made stronger and better adapted to resist wear. It will also be obvious that the smooth upper surface of the entire tree at the point where the connections between the yoke and jockey-plates are made is advantageous in that it presents no projections which are liable to be entangled or broken and gives the tree a better finish.

I claim—

1. In a harness-saddletree, the combination, with a yoke having at its end an aperture and cross-bar and stop-shoulders located on each side of said aperture, of a jockey-plate rabbeted to receive the end of the yoke and having stop-shoulders to abut against

those of the yoke and an aperture, and a connecting-plate having a body portion adapted to be secured to the jockey-plate and a hooked end passing over the cross-bar and through the apertures in the yoke and jockey-plate, substantially as described. 30

2. In a harness-saddletree, the combination, with a yoke having at its end a recess provided with an aperture and cross-bar, with stop-shoulders located on each side of said aperture, of a jockey-plate rabbeted to receive the end of the yoke, provided with an aperture and having a recess for the connecting-plate and stop-shoulders to abut against those of yoke, and a connecting-plate having a body portion adapted to fit within the recess in the jockey-plate and be secured therein and having a tongue adapted to fit within the recess of the yoke and provided with a hooked end to pass over the cross-bar and through the apertures in the yoke and jockey-plate, said yoke and plates having a flush or continuous upper surface, substantially as described. 40 45 50

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