

V. Borst,
Harness Saddle.

No. 103132.

Patented May 17. 1870.

Fig: 1.

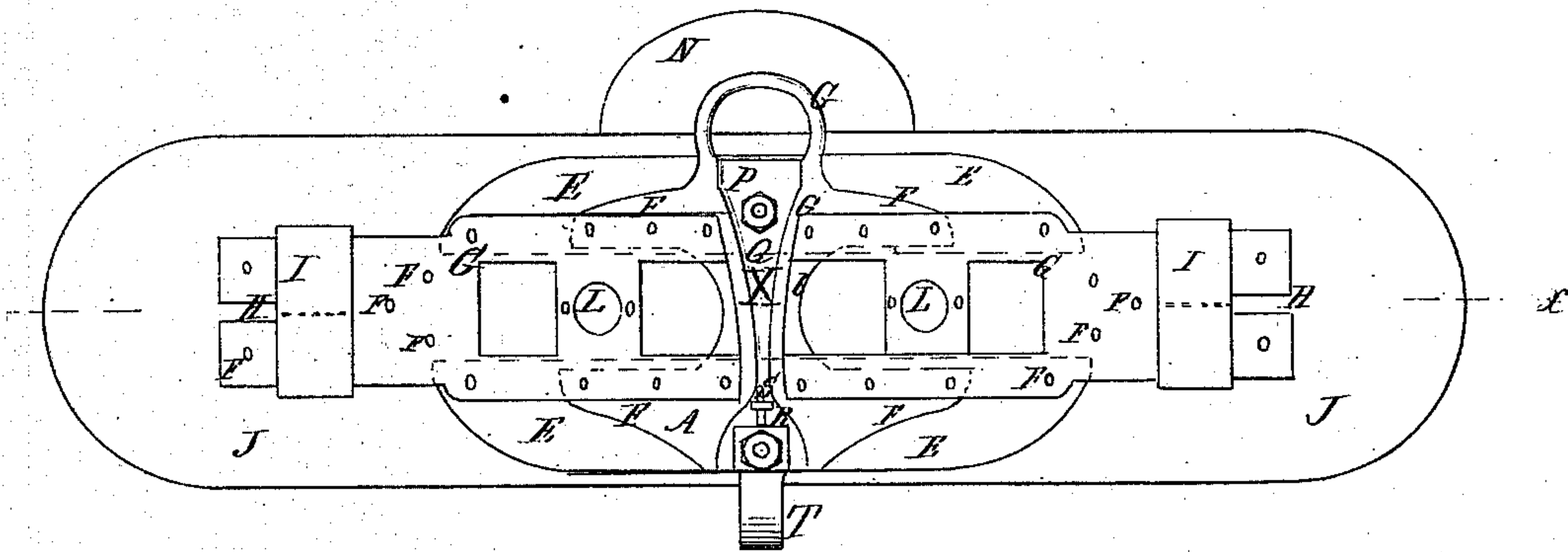


Fig: 2.

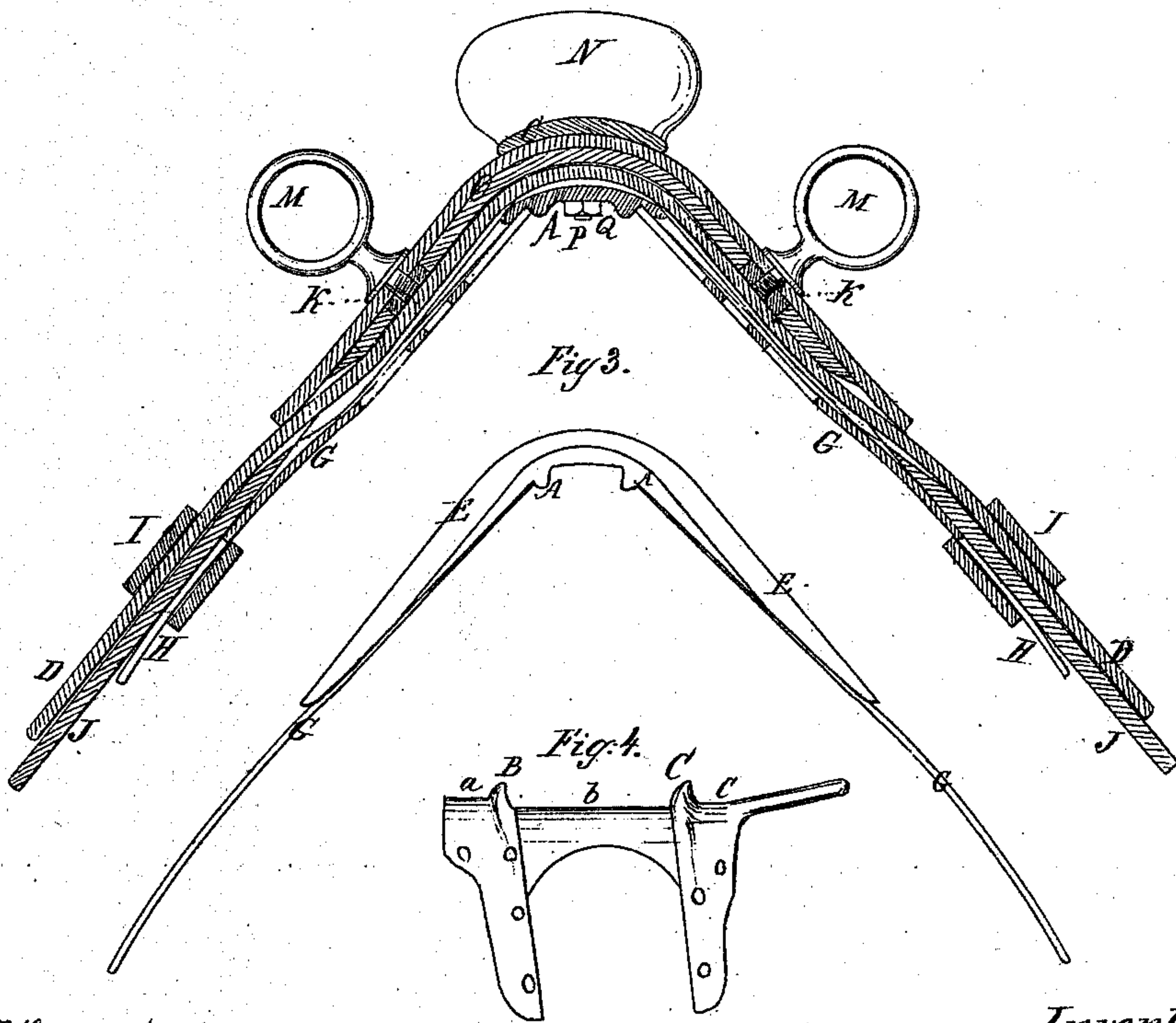


Fig: 3.

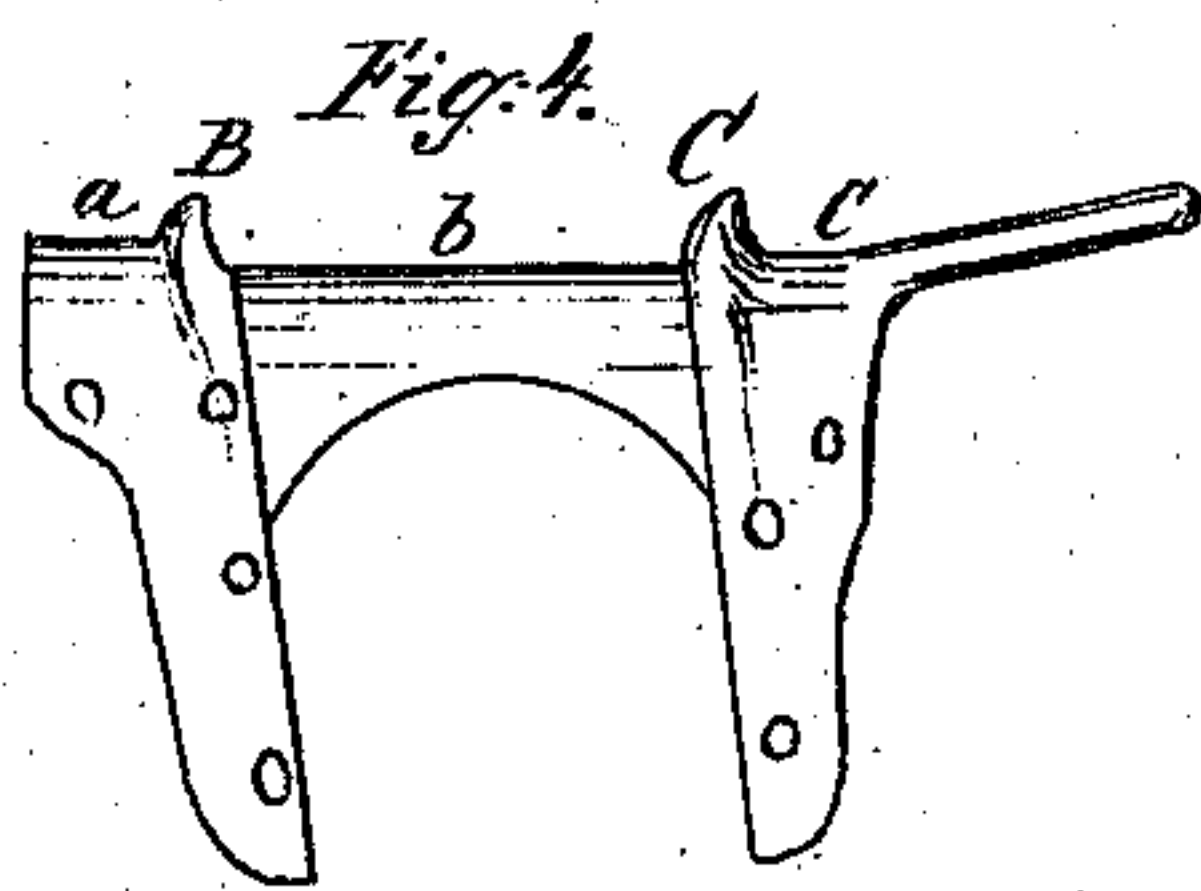


Fig: 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

VALENTIN BORST, OF NEW YORK, N. Y.

IMPROVEMENT IN HARNESS-SADDLES.

Specification forming part of Letters Patent No. 103,132, dated May 17, 1870.

To all whom it may concern:

Be it known that I, VALENTIN BORST, of the city, county, and State of New York, have invented a new and useful Improvement in Harness-Saddles; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which drawings—

Figure 1 is an inside view of my improvement. Fig. 2 is a vertical section in the line *x x* of Fig. 1. Fig. 3 is an edge view of the saddle-tree without the leather covering. Fig. 4 is a side elevation of my skeleton saddle-frame detached.

Similar letters indicate corresponding parts.

This invention relates to harness-saddles; and it consists in an improved method of constructing the saddle-tree, which I construct with a skeleton metallic frame, which constitutes the back or highest part of the tree, and upon which the tree is built up, and which has arms—two or more on a side—that incline downward at a proper angle to receive the sides of the saddle-tree. The skeleton is made in one piece by casting, and contains the crupper, and is provided with suitable openings, holes, and slots to receive the fastenings which secure the other parts of the saddle to it. The skeleton is surmounted by wooden mountings bent to the proper shape and arranged over the anterior and posterior parts of the skeleton frame, to which it is fastened securely. To the arms of the skeleton frame, and also to the wooden mountings, are fastened by rivets or other means elastic metallic plates, which form the sides of the tree, and which serve to secure the loops for the back-band. The back-band goes over the middle of the skeleton and is received between flanges, which help to guide and retain the wooden mountings in place.

The letter A designates my skeleton saddle-frame, consisting of a solid back divided by vertical flanges B C into an interior part, *a*, a central part, *b*, and a posterior part, *c*. The back-band D crosses the central part, *b*, of the saddle, where it is confined by the vertical flanges B C, and the angular or bent wooden mountings E E are laid over the anterior and posterior parts *a c*, respectively, behind and

before the said flanges, which serve to keep said mountings in place. The wooden mountings and the skeleton frame are fastened together by screws or rivets, which are inserted through holes F in the skeleton frame. The crupper-ring G is made in one piece with the skeleton frame. The anterior and posterior parts *a c* of the skeleton frame are extended downward on each side at a suitable inclination or angle, so as to form arms F F—two on each side in this example—to which are secured the wooden mountings E E and the elastic side plates, G G, the former being outside the arms F and the latter inside or beneath them. The plates G G have portions cut away to secure as much lightness as is practicable for the degree of strength required, and at their lower ends they have elongated slots H H to enable me to secure the back-band loops I I to the leather flaps J J by sewing the ends of the loops to the flaps J J through the slots from the under side. The saddle-tree is strengthened, and the wooden mountings E and side plates, G, more securely united to each other by transverse metallic braces K K, extending across the mountings, which braces are firmly riveted to the mountings and the side plates. The braces K are provided with screw-sockets L to secure the turrets M, which are screwed down into the braces. The back-band passes up outside of the side plates, G G, under the braces K, and over the central part, *b*, of the skeleton frame, as is shown in the drawings. The cantel N is fastened to the skeleton and to the wooden mountings, (the usual leather cover, O, intervening between them and the cantel,) by means of screw-bolts P, which pass down through perforations made for them in the skeleton frame, and are secured beneath the latter by nuts Q. In addition to the bolts, I use, if necessary, a perforated lip, like that shown at R, extending from the cantel through the wooden mountings and skeleton frame, on the under side of which it is fastened by a key, S. By this construction and arrangement I secure the several parts together in a simple and efficient manner, and obtain a strong base in the skeleton frame for the union of the different portions and for uniting the cantel to the saddle-tree. The bridle or check hook T is also secured to the skeleton frame by means of a bolt and nut, a

perforation being made through the front part of the frame for that purpose.

Another novel feature of my saddle consists in forming a longitudinal central groove, X, on the under side of the skeleton frame extending throughout, from front to rear, in such a manner as to form a recess for containing the ends of the bolts and lips above mentioned and the nuts and key Q S, by which they are locked on the under side of said frame. This groove or recess forms a receptacle for said fastening, so that when the saddle is applied to use it does not come in contact with the back of the animal nor interfere with the padding.

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

1. The skeleton frame A, consisting of the parts *a b* B C cast together in one piece, substantially as and for the purpose described.

2. The combination of the frame A, the wooden mountings E E, and the side plates, F F, substantially as described.

3. The elongated slots H in the side plates, F, for securing the ends of the back-band loops by sewing, substantially as described.

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Witnesses:

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