V. Borst,

Harness Saddle.

No. 113,136. Patented Mar. 28, 1871.

Fig 1

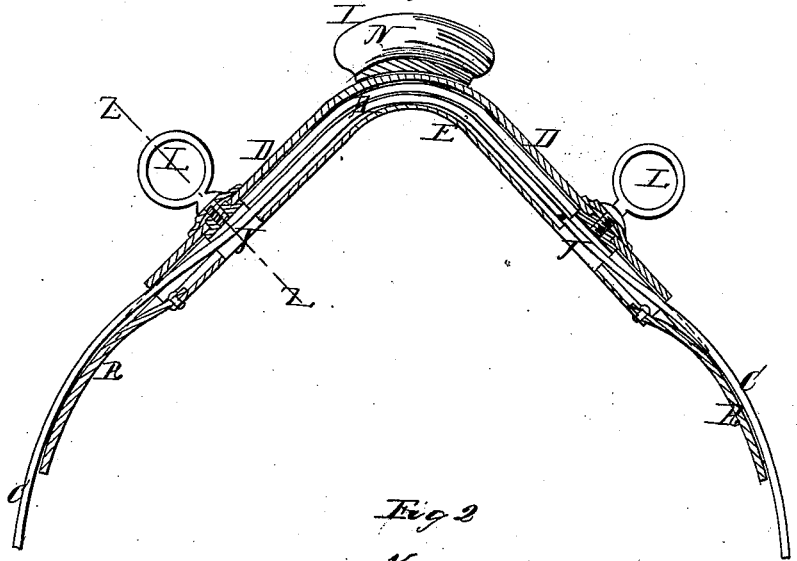


Fig 2

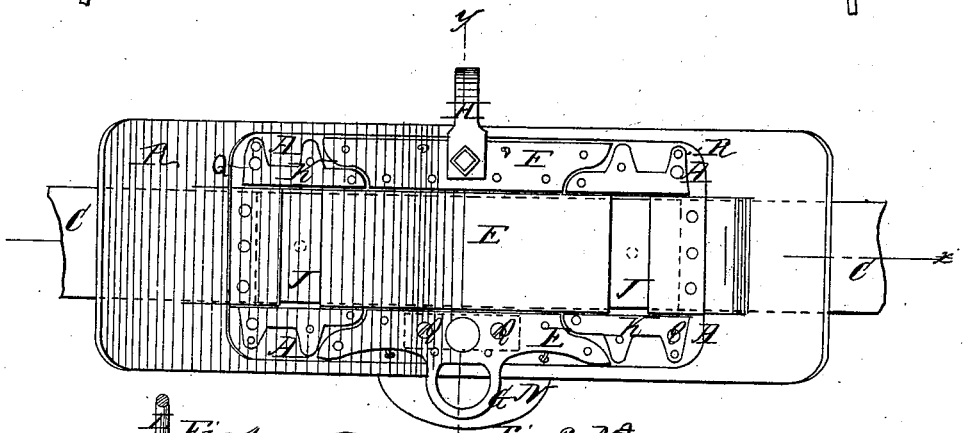


Fig 4

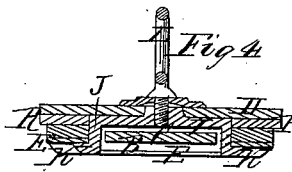
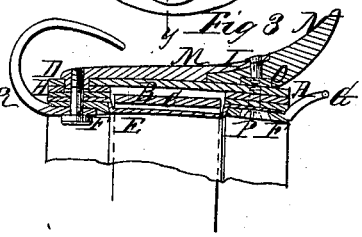


Fig 3



Witnesses.
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United States Patent Office.

VALENTIN BORST, OF NEW YORK, N. Y.

Letters Patent No. 113.136, dated March 28. 1871

IMPROVEMENT IN HARNESS-SADDLES.

The Schedule referred to in these Letters Patent and making part of the same.

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-Saddle; 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 drawing forming part of this specification, in which drawing—

Figure 1 is a central section in the line *x–x* of fig. 2.

Figure 2 is an inverted plan view of my improved saddle.

Figure 3 is a cross-section in the line *y–y* of fig. 2.

Figure 4 is a cross-section in the line *z–z* of fig. 1.

Similar letters indicate corresponding parts.

This invention relates to saddles for harness, and consists in several novel features of improvement, as hereinafter explained.

The letters A A designate the usual wooden mountings of the saddle-tree, which extend from one side to the other of the frame, and are separated by a space wide enough to form the usual channel B for the back-band C.

The upper surfaces of the wooden mountings A are covered by the "jockey"-leather D, while to their under surfaces are fastened the metal frame E, which forms the foundation or base to which the wooden mountings above mentioned, and also the cast-metal braces, hereinafter mentioned, are attached.

The metal frame extends throughout the whole extent of the saddle-tree, and the same may be of cast or sheet metal, and if made of sheet metal it is swaged or bent longitudinally to conform to the curved shape required for the saddle, and transversely it is bent, as is shown most clearly in fig. 3, so that its central part throughout its length is depressed to form the bottom of the back-band channel B, whereof the leather covering D forms the top, the sides of the channel being formed by the bends in the said metal frame, together with the inner edges of the wooden mountings.

The edges of the metal frame E overlap upon and are fastened to the under surfaces of the wooden mountings, and, in order to obtain the necessary strength and stiffness and to keep the saddle-tree in its proper shape, I place independent metallic braces, F F, under the metal frame along the parts which are fastened to the wooden mountings, as is most clearly shown in fig. 2. The thickness of the metallic braces is such that they will be flush with the bank-band channel, as is seen in fig. 3.

The rear brace F is formed with the usual loop, G, for the back-strap of the harness, and the front brace F is made with a depression to receive the shank of the check-hook H, which is fastened to it by a screw-bolt, which goes through it and the wooden mountings and the cantel I.

The braces F F are cast or made of any suitable material that possesses the required strength and stiffness, and I make them corrugated on one or both surfaces, so as to secure lightness and strength. Their ends extend down in each direction toward the ends of the saddle-tree about as far as the places of the terret-hooks, at which points the channel part of the metal frame E is cut away to receive the transverse terret-hook braces J J, which consist of cast-metal U-shaped pieces, whose ends or edges K K are fastened upon the wooden mountings A A either below the edges of the metal frame, or, as in this instance, above the edges of the frame, the whole being firmly secured, as is the case with the other braces F, by screws or rivets.

The backs of the transverse braces J J extend over the back-band channel and hold up the leather covering D, and form supports for the terret-hooks L L, whose shanks screw into them.

The transverse braces J J are made with their edges elongated, more or less, so as to extend toward the ends of the wooden mountings, to give to them and to the coterminous metal frame the requisite strength at the ends of the saddle-tree.

The ends of said transverse braces J also form solid bearings for the screws Q Q, which go through the jockey D, and fasten it, the flap R, the wooden mountings, the said braces, and the frame E to each other.

By constructing the parts in the manner herein described I am able to place the terrets over the center of the back-band channel and yet leave the said channel open and unobstructed, so that the back-band can be moved freely through it at all times, adapting itself to the movements of the horse.

The cantel is of wood, N, and of metal, M, combined, and as the rear portion N, which is made of wood to decrease the weight of that portion, must receive the screws or fastening devices which secure that part of the saddle-tree, it is found in practice that wood does not possess sufficient strength and firmness to form a suitable bed for the fastenings. In order to remedy this defect, I set into the bottom of the wooden part of the cantel a metallic bed-plate, O, which is tapped to receive the screw-bolts P, which secure the rear of the cantel to the saddle-tree, thereby giving the fastenings a firm bearing in the cantel without weakening the wood, and without liability of becoming loose by wear.

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

1. The combination of the sheet-metal frame E, constructed as described, so as to form the founda-

tion of a saddle-tree and a channel-way for the back-band, with the wooden mountings A A and the front and rear metallic braces F F, substantially as set forth.

2. The transverse terret-hook braces J, in combination with the sheet-metal frame E and wooden mountings A, substantially as described.

3. The combination of the cantel I of a metallic bed-plate, O, arranged upon the wooden portion of the cantel, substantially as and for the purpose described.

This specification signed by me this 21st day of January, 1871.

VALENTIN BORST.

Witnesses:
E. F. KASTENHUBER,
J. VAN SANTVOORD.