H. W. DOWNING.

RIDING SADDLE.

APPLICATION FILED OCT. 20, 1911.

1,154,003. Patented Sept. 21, 1915.

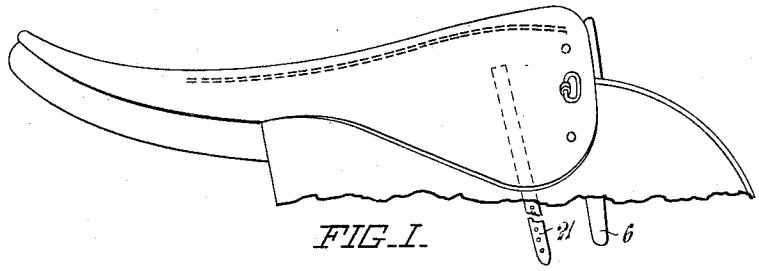

FIG. 1.

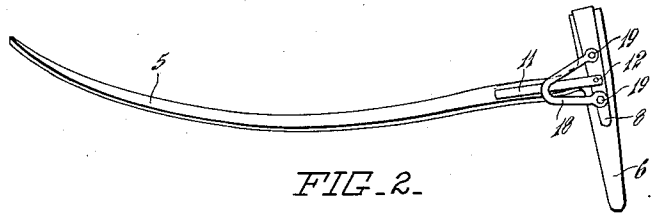

FIG. 2.

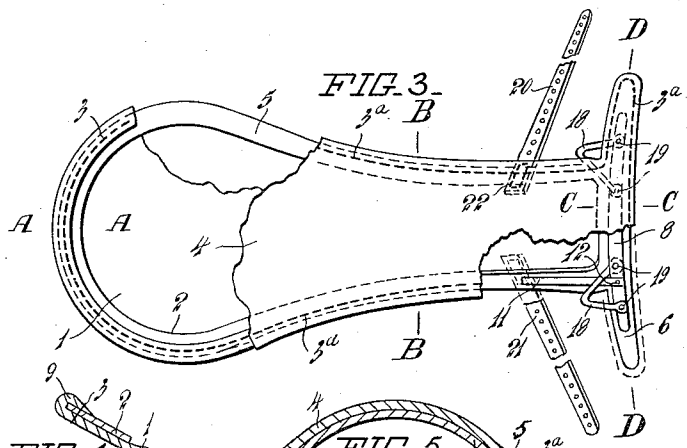

FIG. 3.

FIG. 4.

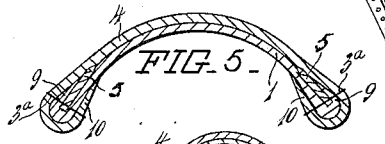

FIG. 5.

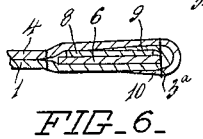

FIG. 6.

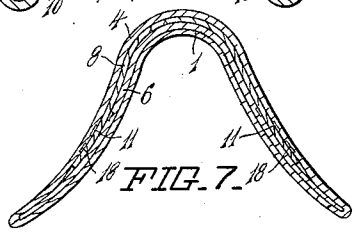

FIG. 7.

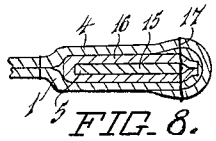

FIG. 8.

Witnesses:-
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UNITED STATES PATENT OFFICE.

HARRY WOOD DOWNING, OF CHRISTCHURCH, NEW ZEALAND.

RIDING-SADDLE.

1,154,003. Specification of Letters Patent. Patented Sept. 21, 1915.

Application filed October 20, 1911. Serial No. 655,690.

To all whom it may concern:

Be it known that I, HARRY WOOD DOWNING, a citizen of the Dominion of New Zealand, and resident of Gloucester street, Christchurch, in the Provincial District of Canterbury, in the Dominion of New Zealand, have invented certain new and useful Improvements in Riding-Saddles, of which the following is a specification.

This invention relates to saddles used upon horses' backs, and the object of the invention is to provide a saddle, which is very much lighter than saddles as usually constructed, and at the same time of sufficient strength to withstand ordinary wear and tear.

My invention is particularly valuable in the case of saddles for racehorses, where lightness is a consideration of the highest importance. According hereto, a saddle is made of green-hide molded to shape upon a block, and stretched in superposed thicknesses over a tree made of compressed fiber, leather or thin wood. The head of the tree, made of a thin steel plate, or thin wood or compressed fiber stiffened with a metal plate, is connected to the tree by the greenhide, and in the case of heavier saddles, by plates extending along the sides of the tree. D or other fastenings for the girth are dispensed with, the girth straps being merely stitched to the greenhide and the leather or compressed fiber tree.

The drawing herewith illustrates the invention.

Figure 1, is a side elevation of a saddle with part of the flaps removed. Fig. 2, a side elevation of a saddle tree, Fig. 3, a plan of a saddle with part of the greenhide removed, Fig. 4, a section on a larger scale on line A—A, Fig. 3, where an upper layer of greenhide is removed. Fig. 5, a section on a larger scale on line B—B, Fig. 3. Fig. 6, a section on a larger scale on line C—C, Fig. 3. Fig. 7, a cross section on line D—D, Fig. 3. Fig. 8, a cross section of a modified construction of tree.

In carrying out my invention I employ a block or mold, arched at the front and curved upwardly at the back and otherwise shaped to correspond to the interior or underside of a saddle. The size of the block is such that the edges of the tree overhang. Green-hide 1 after being soaked in water is stretched over the block or mold and the tree placed thereon. The edge of this lower layer of green-hide 1 is turned up and around the edge of the tree to which it is attached by tacking or rough sewing 3. An upper layer of soaked green-hide 4 is then stretched over the tree 2 and the lower layer of green-hide and its edges turned around the edge of the tree. The edges of both layers of green-hide are secured by sewing 3^a which passes through the body 5 of the tree and around the head 6, see more particularly Fig. 5.

The construction of the head 6 is shown in Fig. 6, a plate 8 of steel or the like being used to strengthen the compressed fiber or leather head 6 and the edges 9 and 10 of the green-hide 1 and 4 being turned up and down respectively around the edge of the fiber or leather 6, and secured thereto by stitching 3^a. In heavy saddles, the plate 8 is secured to the tree by plates 11, which extend along the side as shown more particularly in Fig. 2, and are fixed to the said plate 8 by rivets 12 and by brazing.

In Fig. 8, a construction is shown when thin wood 15 is employed in the manufacture of the tree. Green-hide 16 is then stretched around the body 5 and the head 6 and secured by stitching 17, thereby forming a strong casing, which prevents the wood from splitting when the tree is bent or twisted in use.

The D's 18 for attaching the stirrup straps are secured to the plate 8 by rivets 19 and by brazing. The girth straps 20 and 21 are attached to the tree and green-hide layers by stitching 22.

When the saddle is required for a rider who wishes to ride in a forward position, the head 6 is reversed so that the D 18 projects forwardly and thus allows the stirrups to be used in a more forward position.

What I do claim and desire to secure by Letters Patent of the United States is:—

1. A saddle consisting of a lower layer of green-hide, formed to the desired shape by stretching while wet over a suitably shaped block, a saddle tree superimposed upon said layer, and an upper layer of green-hide superimposed on said saddle tree and lower layer, and formed to the shape thereof by stretching while wet thereover, the edges of said layers of green-hide being secured together.

2. A saddle consisting of a lower layer of

green-hide of the desired form, a saddle tree superimposed thereon and an upper layer of green-hide superimposed on said saddle tree and lower layer, the edge of one layer being turned around the edge of the saddle tree, the edge of the other layer being turned around the turned-over edge of the first layer, and the edges of the layers being secured together.

3. In a saddle of the kind described, a saddle tree, and superposed layers of green-hide stretched upon said tree, the edges of the lower layer being turned around the edge of the tree, and the edge of the upper layer being turned around the edge of the lower layer, the said edges being then secured to the tree by stitching, as set forth.

4. A saddle consisting of a lower layer of green-hide of the desired form, a saddle tree superimposed thereon, an upper layer of green-hide superimposed on said saddle tree and lower layer, and a metallic reinforcing plate for a portion of said saddle tree, held in position thereon entirely by one of the green-hide layers, the edge of one layer being turned around the edge of the saddle tree, the edge of the other layer being turned around the turned-over edge of the first layer, and the edges of the layers being secured together.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

HARRY WOOD DOWNING.

Witnesses:
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