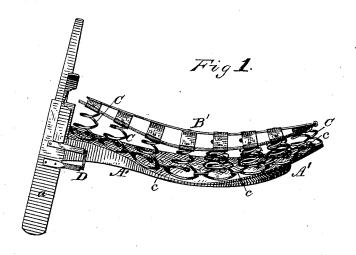
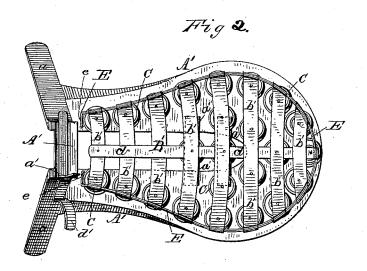
(No Model.)

## DE WITT HEERMANCE. RIDING SADDLE.

No. 454,211.

Patented June 16, 1891.





WITNESSES:

O.a. Lee.

INVENTOR.
Dilbrit offisomance
By Tring Uting
Attorney

## UNITED STATES PATENT OFFICE.

DE WITT HEERMANCE, OF RHINEBECK, NEW YORK.

## RIDING-SADDLE.

SPECIFICATION forming part of Letters Patent No. 454,211, dated June 16, 1891.

Application filed February 14, 1891. Serial No. 381,414. (No model.)

To all whom it may concern:

Be it known that I, DE WITT HEERMANCE, a citizen of the United States, residing at Rhinebeck, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Sæddles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to saddles in which springs are used to lessen the jolt and increase the ease and comfort of the rider's seat.

Figure 1 is a side elevation of my improved saddle, and Fig. 2 is a top plan view of the same.

Similar letters refer to similar parts throughout the views.

The drawings show the ordinary wooden frame or tree A' of a saddle, which, in this instance, is shown as a side-saddle, and is therefore provided with leg-horns and stirrup attachment D. The open part of the lower tree is crossed in two or three places by metal slats a', which make a foundation for some of the springs which are desirable in a side-saddle, and also serve to brace the tree at those points. The saddle is to be padded and cushioned in the usual way to fit the back of the horse.

The upper tree or seat B' of the saddle is constructed as follows: A steel-spring wire rod E is shaped to correspond with the back and sides of the lower wooden tree A', is about 35 two inches above it, and runs up on either side to the pommel of the lower tree A'. This wire is held in shape by brass cross-bands b', which clasp the rod E on either side, and these bands are crossed at right angles by a similar band, preferably of brass, running the length of the seat and in the center of it. Between the seat so formed and the saddle-tree A' are cone-shaped springs C, two inches high. These springs are secured by metal staples c and 45 rivets c' to the tree A', and by c' to the bands b', which, together with the rod E, form the seat of the saddle. This seat is free to move

upon the springs wherever the weight of the rider brings the pressure.

Stirrups may be fastened to the lower tree 50 by loop D in the customary manner, for it is necessary that they should be firm and unyielding under the pressure of the foot, thus preventing the rider after he rises in the stirrups from meeting the rebound of the springs 55 as he regains his seat.

I am aware that coil or spiral springs have heretofore been used in saddles, but wherever they have heretofore been inserted they have been used as a cushion attachment, or 60 if with an upper tree the springs work upon or in connection with pins or studs, or else the seatis fastened to the pommel of the tree, as shown in the saddle of Tolbert, patented August 14, 1883, No. 283,043; in that of Quin- 65 tero, patented March 8, 1887, No. 359,176, and that of Bennett, patented December 28, 1886, No. 355,123. In a man's saddle, especially, the weight of the rider is constantly being thrown against the pommel, and it is evident 70 that any fastening of the seat to the lower tree at the pommel must prevent the easy and proper working of the saddle.

My saddle is both simple in its construction and very durable, the upper tree or seat being firmly fastened to the lower tree simply by the springs, which readily yield wherever the pressure comes upon the seat.

Having thus fully described my invention, what I claim as new, and desire to secure by 80 Letters Patent, is—

The lower saddle-tree A', provided with cross-bands a', in combination with coiled springs C, fastened to A', and with an upper tree or seat B', attached to the upper ends of the springs. C and consisting of the rod E and the cross-bands b' d, all as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

DE WITT HEERMANCE.

Witnesses:

P. A. LEE, IRVING ULTING.