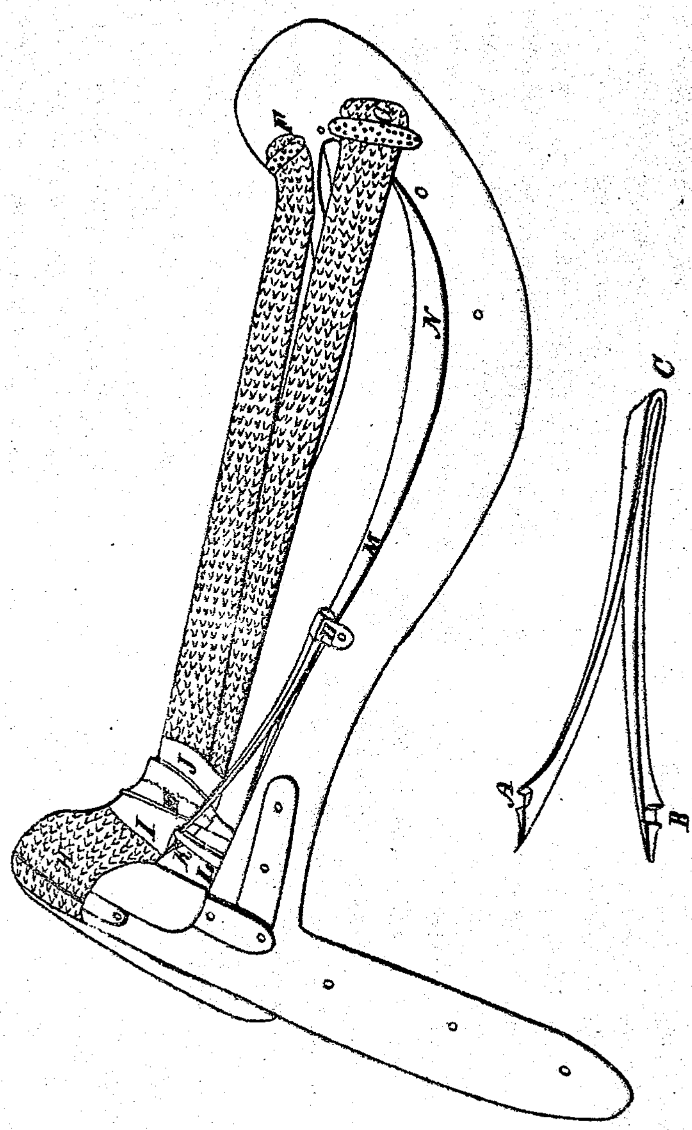
R. Wilson,

Riding Saddle,

No. 139, Patented Mar. 11, 1837.



Witnesses.

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Inventor:

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UNITED STATES PATENT OFFICE.

ROBERT WILSON, OF MILTON, PENNSYLVANIA.

SPRING-SEAT RIDING-SADDLE.

Specification of Letters Patent No. 139, dated March 11, 1837.

To all whom it may concern:

Be it known that I, ROBERT WILSON, of Milton, in the county of Northumberland and State of Pennsylvania, have invented a new and Improved Mode of Making a Spring-Seat to the Common Riding-Saddle; and I do hereby declare that the following is a full and exact description.

The nature of my invention or improvement consists in the application of springs to a cross-straining and applying them to the common riding saddle so as to produce the spring required in the seat.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my saddle tree on any of the common forms or fashions, and apply thereto the webbing and other appendages of such saddles; but in order to obviate the hardness and density peculiar to the seats of the common riding saddles, I make use of two springs, made of steel, and similar to those used for the common fix-traps, as represented at A, B, C. Each spring is about four inches long and is open about one and an half inch at the points, and of a weight proportionate to the size of the saddle. They are each about half an inch in width at the heel, and about one eighth of an inch at the points, about one eighth of an inch thick at the heel, and taper to such a thickness at the points as will make a good spring. The points of each spring are made flat, for about three quarters of an inch, at a right angle with the other flat part of the spring, for the purpose of receiving a notch about a quarter of an inch long, and about an eighth of an inch deep, one at the end of the upper arm, as at A, for a metallic hook or loop to catch in to hold the spring to the tree; and the other, of the same description, at the lower arm of the spring, just the width of the notch further from the end, as at B, for the cross-straining to hook into. The heel of each spring is held to its place by means of a metallic socket as at D, fastened to the tree. and is about half an inch deep, and formed in such a manner as to allow the springs to be taken out and returned as may be required.

The cross-straining E is made of hoop or forged iron, is about an eighth of an inch thick and about three quarters of an inch in width at the middle, and just at each end about a quarter of an inch, coming to its full width at about one and a quarter inch from the ends, each end is also turned up in the form of a hook. The cross-straining is about five and an half inches long from hook to hook or of a proper length to fit the tree. The edges are turned up in order to fit the webbing and make the lower side rounding. It is bent in a circular form so as to fit the tree; and covered with a middling thick piece of leather as far as it rests on the webbing. The webbing is put on behind at F and G, in the common way, but a little higher on the cantle; and on the head H in the common way also, unless the head be very low, in which case it is brought to a proper height by tacking on a piece or two of thick leather. The higher the head and cantle, or the higher the head is, and the hgher the webbing is nailed on the cantle, the more spring can be had in the webbing. The webbing is put on more loosely than for a common saddle, as the springs afterward applied bring it up tight; the proper slackness is easily ascertained by trying one or two pair of springs. The cross-straining is placed across the webbing as near to the head of the tree as the webbing, coming between it and the head of the tree, will permit. It is necessary that there be a piece of thick leather sewed on the webbing as at I, J, for the cross-straining to rest on. The springs are placed one on the top of the inside edge of each bar of the tree, in a perpendicular position and just opposite to each other, with the points at such a distance from the head of the tree as will allow the cross-straining to hook into the notch, in the lower arm of each spring. The heel of the spring being secured to the tree, as before described, with a piece of thin sheet-brass D, turned over it in such a way as to form a socket, which is riveted or screwed to the tree in a durable manner. The upper arm of each spring is held down by a piece of hoop or forged iron K, L, about one eighth of an inch thick, and about three inches long, about half an inch wide at the lower end, and tapering to about a quarter of an inch at the upper end, on which a short hook is turned. K, which catches in the notch on the upper arm of the spring. This piece is bent in a form to fit the tree, and also to clear the lower arm of the spring as it is drawn up by the cross-straining. It is placed on the inside of the bar and on the outside of the spring, and screwed to the tree with two or

three screws. The cross-straining hooks on to the springs from the inside of the latter. To prepare the tree for this improvement, I pare off the inside edge of the bars, in order to give more space between them; I then shave off the top of the same to a thin edge, as represented at M, N. By means of this I get more room for the webbing to spring up and down without striking the tree. The cross-straining raises the webbing in the seat from one to one and an half inches from the tree. I also cut away the wood to the plates on the inside edges of the head of the tree, in order to give more room for the cross-straining; as the closer the cross-straining is to the head, the better the springs work. After these springs are correctly applied, the lower arms rise about five-eighths of an inch at the points by pressing down the webbing to its greatest distance. As the webbing is pressed down, the lower arms of the springs approach the upper arms; or, as the cross-straining is drawn down by the springs, the webbing rises in the seat.

The advantages this improvement has over any other spring saddles I know to be in use, are, first, that in case the springs should accidentally break from a flaw, too high a temper, rust occasioned by the dampness rising from the horse, or owing to low temper, they should sink or cease to act, they can be easily replaced by taking out the padding next to the horse's back, and taking a spring of the same number, tieing it together and putting it to its place with the fingers; after which by cutting the thread it will spring to its place; not even a screw nor rivet has to be drawn to replace them, as they can be sprung out and in, by pressing them together. Second, the springs cannot be broken by any weight which may be placed on the seat, owing to their being tempered at such a distance apart at their points as to admit of their coming together without cracking. Third, that this principle gives as much spring to the seat as any other known to be in use, and in some instances more. Fourth, that this improvement can be applied to trees of any of the common forms or fashions, and at a very trifling expense in comparison with that necessary to make some spring-saddles.

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

The application to a cross-straining, applied to the common riding saddle, springs which will give the cross-straining the desired motion, and allow the webbing which passes under it, to rise and fall in such a manner as is required to make a pleasant seat to ride upon, as herein described; using for that purpose any kind of materials which will produce the intended effect.

ROBERT WILSON.

Witnesses:
Jos. Round,
B. M. Miller.