

(No Model.)

H. A. OWEN.
TOP ROLL SADDLE FOR SPINNING MACHINES.

No. 570,765.

Patented Nov. 3, 1896.

Fig. 1.

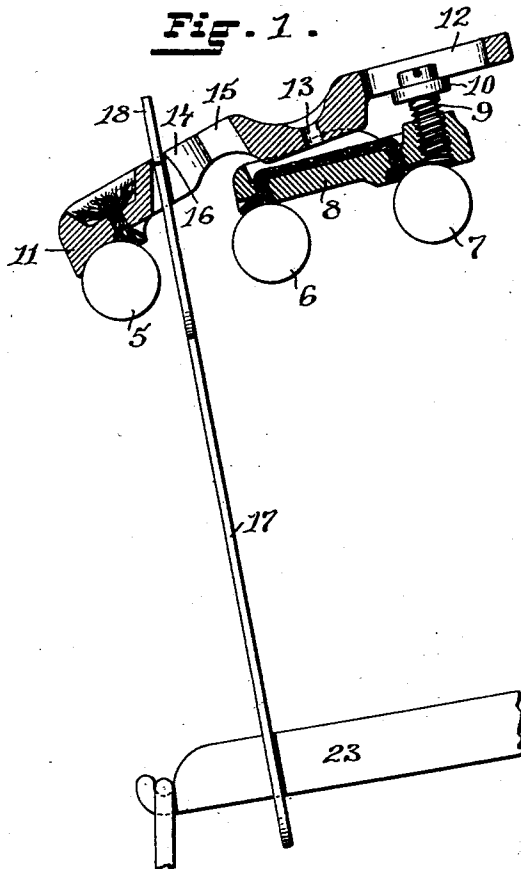


Fig. 3.

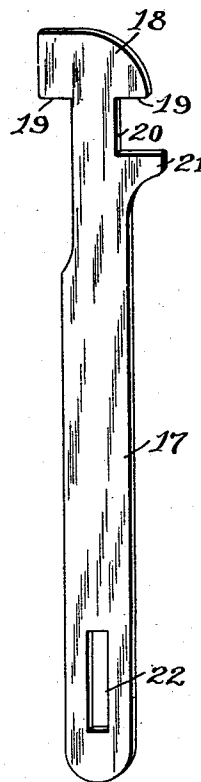


Fig. 2.

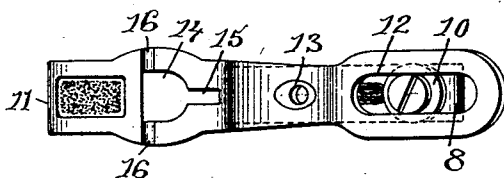
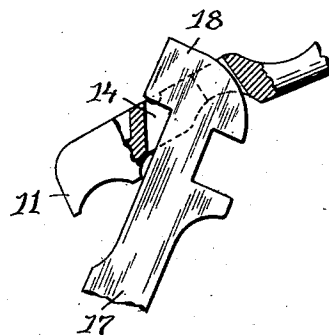


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY A. OWEN, OF WHITINSVILLE, MASSACHUSETTS, ASSIGNOR TO THE
WHITIN MACHINE WORKS, OF SAME PLACE.

TOP-ROLL SADDLE FOR SPINNING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 570,765, dated November 3, 1896.

Application filed February 26, 1896. Serial No. 580,866. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. OWEN, of Whitinsville, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Top-Roll Saddles for Spinning-Machines; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in the saddle used in spinning-machines to hold the top rolls in contact with the drawing-rolls.

The object of the invention is to so construct the saddle and its weight-stirrup that they may be more securely connected against accidental separation.

Another object of the invention is to so construct the saddle that the bearing of the upper saddle member on the lower member may be adjusted to vary the pressure on the intermediate roll.

Still another object is to improve the bearing connection between the saddle members.

The invention consists in a lower saddle member provided at its rear end with an adjustable supporting-post, the upper end of which has a supporting-flange and an engaging portion which may serve as a guide, and an upper member having a rearwardly-extending slotted portion adapted to be supported on the flange of the post and to receive the guide portion thereof.

The invention also consists in the peculiar construction of the upper saddle member with reference to the stirrup engagement, together with the stirrup having the novel engaging portion.

The invention also consists in such other novel features of construction and combination of parts as will hereinafter be more fully described, and pointed out in the claims.

Figure 1 represents a sectional view of the improved saddle shown with relation to the top rolls and the stirrup through connection with which weight is applied to the saddle. Fig. 2 represents a plan view of the saddle members. Fig. 3 represents a side view of the stirrup, Fig. 4 being a side view, partly

in section, of portions of the upper saddle member and its stirrup, showing the method of connecting the stirrup with the saddle.

Similar numerals of reference designate corresponding parts throughout.

Top-roll saddles of this nature comprise two members and are designed to sustain a weight and to distribute the pressure thereof to the top rolls, which in the drawings are numbered 5, 6, and 7, it being important that this pressure be varied from time to time to suit the condition under which the machine is working, while it is necessary that the upper saddle member and its stirrup should be so connected together that they will not accidentally become separated.

In the drawings, 5 indicates the front top roll, 6 the intermediate, and 7 the rear top roll, of any ordinary spinning-machine. The rear or lower saddle member 8 bears on the intermediate roll 6 and on the rear roll 7, being furnished with the usual bearings for these rolls. At the rear portion of the bearing for the roll 7 this member 8 is furnished with a screw-threaded perforation in which the screw-threaded post 9 is adjusted as to height. This post has at its upper end an annular supporting-flange 10, above which is a portion of reduced diameter serving as an engaging and, to an extent, a guiding portion for the upper member.

The upper member 11 is designed to bear at its forward end on the front roll 5, its rear portion being supported by some portion of the lower saddle member. The rear end of this member 11 has an extension in which is formed the slot 12. The guiding portion of the post 9 is engaged in this slot, and when the post is adjusted high enough the slotted extension of the member 11 is supported on the flange 10 and is free to slide thereon should the upper member be moved. The saddle 11 has the oiling-cup 13, by means of which the lower saddle is supplied with oil. It is also furnished with the transverse enlarged opening 14, having a forwardly-inclined wall, while the rear walls of this opening gradually contract to meet the open end of the slot 15, the closed end wall of which is inclined at its lower portion toward the rear

end of the saddle member. In the surface of the member 11 at the forward portion of the opening 14 are the depressions 16.

The stirrup 17 is formed of a flat sheet-metal bar having the head 18, furnished with the shoulders 19 19. At one side of the shank the line of the head extends at right angles with the shoulder 19, while at the opposite side the outline of the head curves inwardly from the end of the corresponding shoulder 19 to provide clearance for allowing this portion of the head to clear the end wall of the slot 15 of the upper saddle member. Below the shoulders 19 the width of the stirrup is reduced to form the neck 21 of a diameter less than that of the opening 14 in the upper saddle member, so that when the head 18 has been entered through the opening 14 and slot 15 it may be turned at right angles to allow the shoulders 19 19 to rest in the depressions 16 16. The arm 21 extends outward on one side of the neck and prevents the passage of the stirrup through the opening 14, and in the lower end of the stirrup is the slot 22 to receive the lever 23.

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

1. A top-roll saddle, comprising a lower member adapted to bear on the intermediate and rear top rolls, a post adjustably mounted at the rear portion thereof, having a support-

ing-flange and an engaging portion above the flange, and an upper member adapted to bear on the front roll and having a slotted extension adapted to rest on the supporting-flange of the post. 35

2. The combination with the saddle 8, and the post 9 adjustably secured in the rear portion of the saddle and having the flange 9 and a portion of reduced diameter above the flange, of the upper saddle member 11 having an extension furnished with the slot 12 adapted to receive the upper reduced end of the post 9 while said extension is supported by the flange 10. 40 45

3. The combination with the saddle member 11 having the opening 14 with its inclined front wall, the slot 15 having the rearwardly-inclined end wall and an open end to which the side walls of the opening 14 contract, and the depressions 16 in the upper surface of the member, of the stirrup 17 having the head 18, the neck 20 and the arm 21, the head 18 having the shoulders 19 19 and an outline above the shoulders which is rectangular at one side and inwardly curving at the opposite side, as herein shown and described. 50 55

In witness whereof I have hereunto set my hand.

HENRY A. OWEN.

Witnesses:

S. M. POLLOCK,
G. B. HAMBLIN.