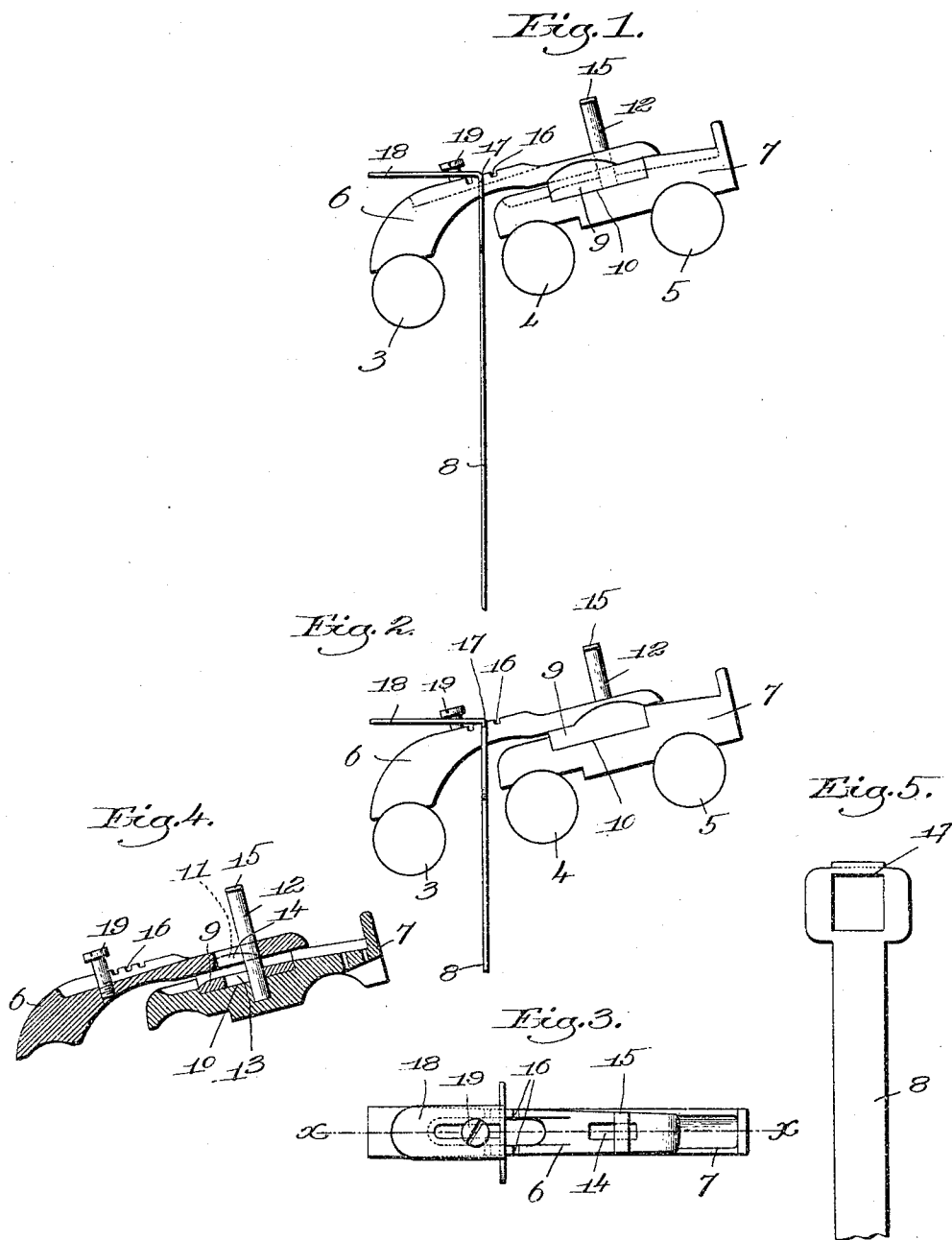


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C. A. PIERCE.  
TOP ROLL SADDLE.  
APPLICATION FILED DEC. 5, 1904.



Witnesses:

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# UNITED STATES PATENT OFFICE.

CLARENCE A. PIERCE, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR OF ONE-THIRD TO HARRY E. PARKER AND ONE-THIRD TO JOHN J. CRONIN, OF MANCHESTER, NEW HAMPSHIRE.

## TOP-ROLL SADDLE.

SPECIFICATION forming part of Letters Patent No. 784,276, dated March 7, 1905.

Application filed December 5, 1904. Serial No. 235,433.

*To all whom it may concern:*

Be it known that I, CLARENCE A. PIERCE, a citizen of the United States, residing at Manchester, county of Hillsboro, and State of New Hampshire, have invented an Improvement in Top-Roll Saddles, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

My present invention relates to top-roll saddles for spinning-machines, and has for one of its objects to provide a novel construction of saddle in which the weight on the middle top roll may be varied as desired; and another object is to provide a top-roll saddle having means for preventing the upper member and rear saddle from falling apart when the top-roll saddle is removed from the spinning-machine.

I provide for varying the weight which comes on the middle top roll by making the rear saddle with an adjustable bearing member, on which the rear end of the upper member rests, so that by adjusting said member on the rear saddle the point where the rear end of the upper member engages the rear saddle may be shifted toward or from the middle roll.

The upper member and rear saddle are prevented from falling apart by a headed pin, which is secured to the rear saddle and projects through an aperture in the upper member, the head being so shaped that by giving the upper member a quarter of a turn it can be disengaged from the rear saddle.

In the drawings, Figure 1 is a side view of the top roll of a spinning-machine having my improved top-roll saddle applied thereto. Fig. 2 is a similar view showing the bearing member reversed. Fig. 3 is a top plan view. Fig. 4 is a section on the line *xx*, Fig. 3, showing the bearing member raised from the rear saddle and in position to be reversed; and Fig. 5 is a view of the weight-stirrup.

3, 4, and 5 designate the front, middle, and rear top rolls, respectively, of a spinning-machine.

6 designates what is sometimes called the

"upper member" of the top-roll saddle, and 7 designates the rear saddle. Said rear saddle rests on the rear and middle top rolls, and the upper member rests at its front end upon the front roll 3 and at its rear end upon the rear saddle, all as usual in this class of devices.

8 designates the usual weight-stirrup, which is hung from the upper member 6.

In my improved top-roll saddle the rear saddle 7 is provided with an adjustable bearing member 9, on which the rear end of the upper member rests. In this form of my invention said adjustable bearing member rests in a recess 10, cut in the top of the rear saddle, and said member is provided with a bearing-surface 11, situated nearer one end thereof than the other. Said member is arranged to be placed with the bearing-surface 11 toward either end of the recess 10—that is, either in the position shown in Fig. 1 or that shown in Fig. 2.

12 designates a retaining-pin, which projects upwardly from the rear saddle and which passes through a suitable slot 13 in the bearing member, said pin also projecting through a slot 14 in the end of the upper member 6. This pin serves to hold the bearing member from lateral movement on the rear saddle.

When the bearing member is in the position shown in Fig. 1, the bearing-surface 11 thereof is considerably nearer the middle roll 4 than when said bearing member is reversed, as shown in Fig. 2. The result is that the point where the weight on the stirrup 8 is transmitted to the rear saddle is nearer the middle roll when the parts are in the position shown in Fig. 1 than when they are in the position shown in Fig. 2, and consequently in the former position of the bearing member a greater proportion of the weight will be received by the middle roll than in the latter position. To reverse the bearing member, it is raised out of the recess, and when in this position it may be turned end for end and then dropped back in the recess again. Since the retaining-pin 12 is not located exactly in the middle of the recess 10, said bearing member is provided with the elongated

slot 13, so that it will occupy the recess in both of its adjusted positions. Said retaining-pin is provided with an elongated head 15, which normally stands across the slot 14 when the parts are in operative position, as best seen in Fig. 3. With this relative position of the head 15 and slot 14 the upper member and rear saddle can only be disconnected by giving the former a quarter-turn to bring the slot 14 and head 15 in parallelism. This simple construction prevents the two elements from falling apart in case the top-roll saddle is removed.

The upper member 6 is provided with a plurality of notches 16, and the stirrup 8 is formed with a flange 17 to engage one of said notches and a laterally-projecting slotted arm 18, through the slot of which a retaining-screw 19 is passed. By shifting the position of the weight-stirrup on the upper member and bringing the flange 17 into the desired notch 16 the proportion of the weight borne by the front roll and the rear saddle, respectively, can be varied. It will thus be seen that with my improvements any desired proportion of the entire weight carried by the stirrup can be thrown on any one of the top rolls. While I have described one simple way of accomplishing this, I do not wish to be limited to the exact details of construction shown, as the shape and arrangement of the parts may be varied without departing from the invention.

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

1. In a top-roll saddle, a rear saddle to bear on the rear and middle top rolls, an upper member resting at one end on the front top roll and supported at the other end on the rear saddle, and a reversible member interposed between said rear saddle and upper member.

2. In a top-roll saddle, a rear saddle to bear on the rear and middle top rolls, a reversible bearing member carried by said rear saddle, and an upper member resting at one end on the front upper roll and at the other end on said bearing member.

3. A top-roll saddle having a rear saddle to bear on the rear and middle top rolls, a reversible bearing member carried by said saddle, said bearing member having a bearing-surface nearer one end than the other, and an upper member resting on the front top roll and said bearing-surface.

4. A top-roll saddle having a rear saddle to bear on the rear and middle top rolls, a reversible bearing member carried by said saddle, said bearing member having a bearing-surface nearer one end than the other, an upper member resting on the front top roll and said bearing-surface, and a weight-stirrup adjustably supported by the upper member.

5. In a top-roll saddle, a rear saddle resting on the rear and middle top rolls, a headed retaining-pin projecting from said saddle, an upper member resting at one end on the front top roll and at the other end on said rear saddle, said member having a slot through which said retaining-pin extends.

6. In a top-roll saddle, a rear saddle, a reversible bearing member carried thereby, said bearing member having a bearing-surface nearer one end than the other, an upper member resting at one end on said bearing-surface, and a headed retaining-pin projecting from the rear saddle and extending through said bearing member and adjacent end of the upper member.

7. In a top-roll saddle, a rear saddle, a reversible bearing member carried thereby, said bearing member having a bearing-surface nearer one end than the other, an upper member resting at one end on said bearing-surface, and a headed retaining-pin projecting from the rear saddle and extending through slots in the bearing member and adjacent end of the upper member, said head extending across the slots when the parts are in normal position.

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

CLARENCE A. PIERCE.

Witnesses:

GEORGE A. STOKES,  
HARRY E. PARKER.