No. 783,072. PATENTED FEB. 21, 1905.

J. E. PREST.

TOP ROLL SADDLE.

APPLICATION FILED JUNE 15, 1904.

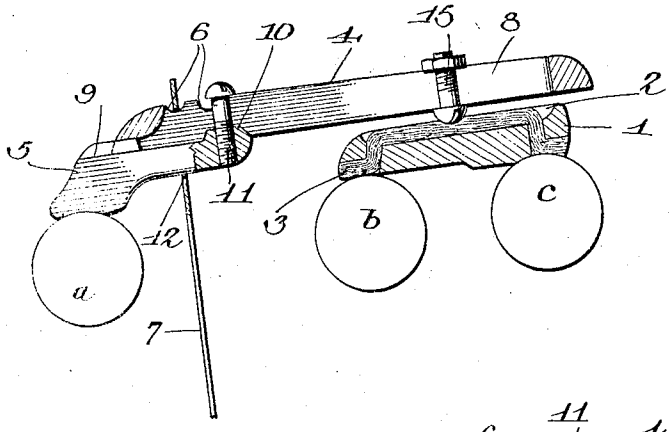


Fig. 1

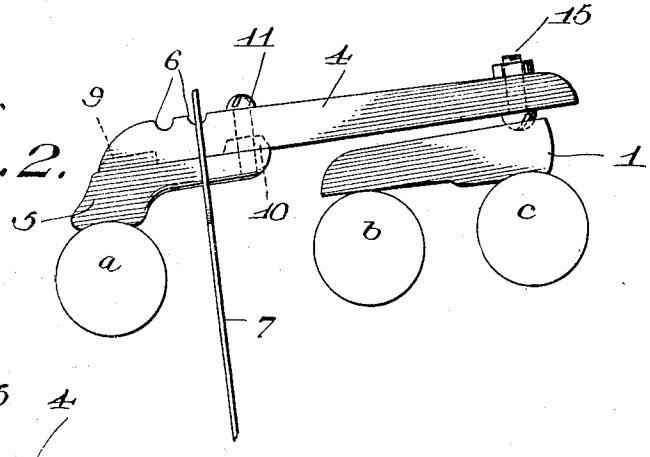


Fig. 2.

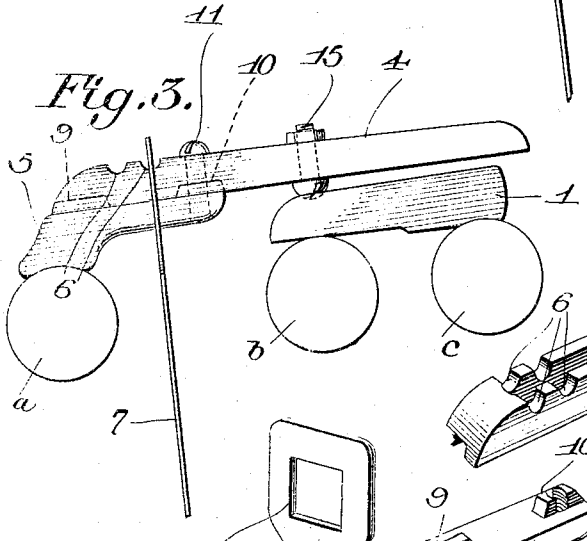
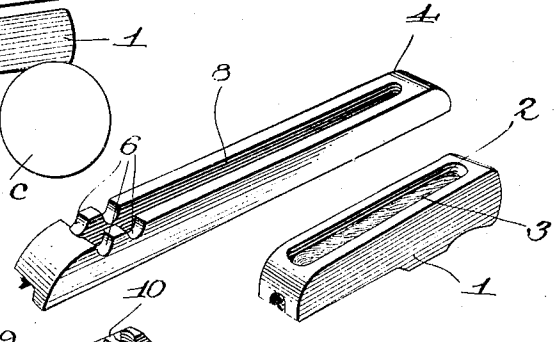


Fig. 3.



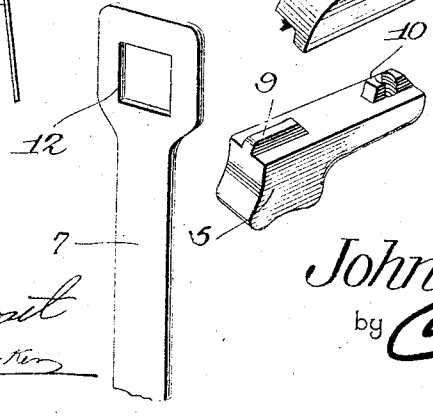


Fig. 4.

Witnesses,

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No. 783,072. Patented February 21, 1905.

UNITED STATES PATENT OFFICE.

JOHN E. PREST, OF WORCESTER, MASSACHUSETTS.

TOP-ROLL SADDLE.

SPECIFICATION forming part of Letters Patent No. 783,072, dated February 21, 1905.

Application filed June 15, 1904. Serial No. 212,720.

To all whom it may concern:

Be it known that I, JOHN E. PREST, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Saddle for Top Rolls of Spinning-Machines, of which the following is a specification.

This invention relates to saddles for top rolls of spinning-machines, and has for one of its objects to provide means whereby the stirrup or weight-link may be properly held in any position to which it is adjusted, thereby to insure the proper distribution of the weight on the top roll or rolls in accordance with the character of the sliver.

A further object of the invention is to provide a means whereby the position of the stirrup or weight-link will be constant when once adjusted, it being impossible to displace the stirrup through carelessness in the replacing of a saddle in the event of the temporary removal of one of the top rolls.

A still further object of the invention is to provide means whereby the stirrup or weight-link will be accurately adjusted to varying positions in order to distribute the weight.

A still further object of the invention is to provide a two-part saddle in which the weight of the upper saddle member may be imposed on the lower saddle member at any point in the length of the latter, thus to place the weight on the middle or back roll only or to distribute such weight in any desired proportion between the middle and back rolls.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in the novel construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view of a two-part saddle constructed in accordance with the invention, showing the same in position on the upper rolls. Figs. 2 and 3 are side elevations of the same, showing the parts adjusted to different positions. Fig. 4 is a detail perspective view of the several parts of the device detached.

Similar characters of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In the drawings are shown the top rolls, including the front roll *a*, the middle roll *b*, and the back roll *c*, all of which may be of any approved construction. The lower saddle member 1 is designed to rest on the middle and back rolls, and in its upper face is a longitudinal groove 2, through which is placed a wicking 3, that is saturated with a lubricating material, as usual. The upper saddle member is formed of two parts 4 and 5, of which the upper part 4 is provided with one or more transverse slots 6 for the reception of the stirrup or weight-link 7. The upper part 4 is provided with a longitudinally-disposed slot 8, that extends for almost the entire length of such member, and the lower front portion of the slot is continued out to the extreme front end of the part 4 in order to permit longitudinal adjustment of the upper part 4 of the saddle. The lower member is recessed in order to the better engage the front roll, and the upper face of said part is provided with a pair of upwardly-extending spaced lugs 9 and 10, that are guided within the slot 8, and this permits of free longitudinal movement of the upper part 4, and as said part is moved it will carry with it, either to the front or to the rear, the stirrup or weight-strap, and thus alter the weight on the rolls or distribute the weight in accordance with the character of the sliver. In some cases it will only be necessary to employ a single slot, this giving a comparatively wide range of adjustment; but two or more slots may be employed in order to increase the extent of such adjustment, if necessary. The parts are held in adjusted position by means of a locking-screw 11.

In saddles of the ordinary construction there is always danger of the shifting of the stirrup

through carelessness on the part of attendants, especially when a saddle is restored to place after the temporary removal of a roll. The result of this is a damaged yarn and considerable waste and loss. In order to overcome this difficulty, provision is made for locking the stirrup in any position to which it is adjusted, and for this purpose the opening 12 of the stirrup is of a height less than the combined height of the two parts 4 and 5, so that the stirrup cannot ride out of the notch 6, nor can it be removed until the screw 11 has first been removed and the lower member 5 separated from the part 4. As will be noted on reference to Figs. 1 and 2, the position of the stirrup may be adjusted to any desired point from the front roll, so as to distribute the weight as required.

While drawing long staple only the front and back pair of rolls are utilized, while in drawing short staple all of the rolls are used. It therefore becomes desirable to provide means for distributing the weight on the back and middle rolls, and this is accomplished by the employment of a bolt 15, which extends through the slot 8, the rounded head of the bolt being adapted to the groove in the upper face of the lower saddle member 1. When the parts are adjusted to the position shown in Fig. 1, with the head of the bolt at about the center of the lower saddle member, the weight is evenly divided between the middle and back rolls, or by shifting the position of the bolt to a point near the rear end of the slot the weight may be imposed almost wholly on the back roll, or when in the position shown in Fig. 3 the weight is imposed on the middle roll. Any other adjustment of the bolt may be made in order to distribute such weight in any desired proportion between the middle and back rolls.

Having thus described the invention, what is claimed is—

1. In combination, a rear saddle, and a two-part front saddle comprising upper and lower members, the lower member bearing on the front roll, and the upper member bearing on the rear saddle, said upper member supporting the weight-strap and being adjustable with respect to the lower member.

2. In a saddle construction, a pair of members, one bearing on the front roll, and the other on the middle and back roll, and a third member adjustable with respect to both of the bearing members.

3. A two-part front saddle comprising an upper grooved member notched for the reception of the weight-strap, the lower member having lugs entering the slot, and a screw extending through the slot and adapted to a threaded opening in said lower member.

4. The combination with a lower saddle member for engaging the middle and back rolls, of an upper slotted saddle member, and a bolt adjustable in the slot and adapted to bear on the lower saddle member.

5. The combination with a lower saddle member, of a two-part upper saddle member of which the two parts are adjustable relatively to each other, one of said members having a longitudinally-disposed slot, a set-screw extending through the slot and adapted to engage and lock the other part, and a bolt also extending through the slot, the head of the bolt resting on the lower saddle member.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN E. PREST.

Witnesses:
JOHN E. DAY,
J. A. DAY.