E. DIXON.

TOP ROLL SADDLE.

APPLICATION FILED MAR. 16, 1903.

905,667. Patented Dec. 1, 1908.

Fig. 1.

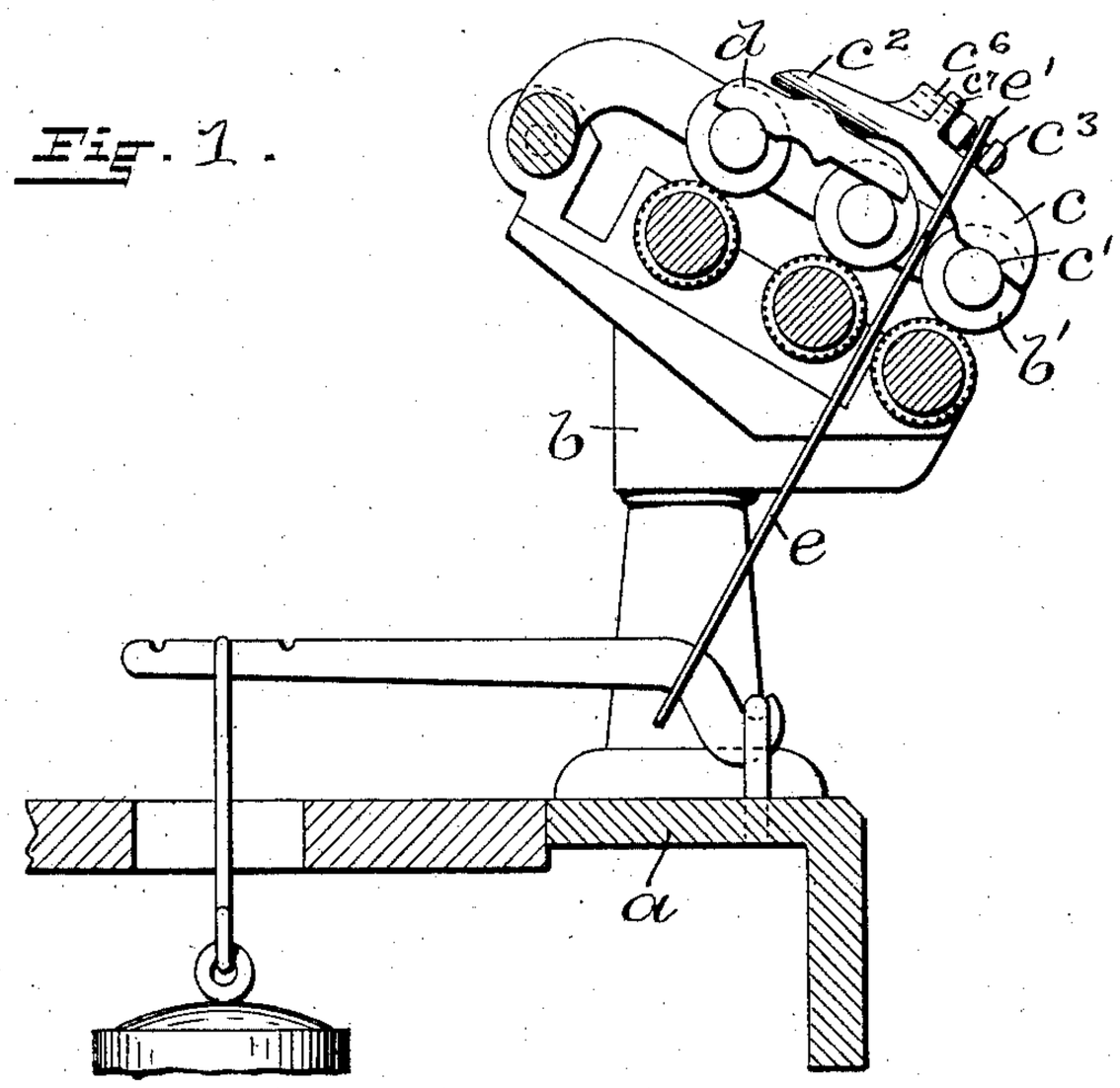



Fig. 2.

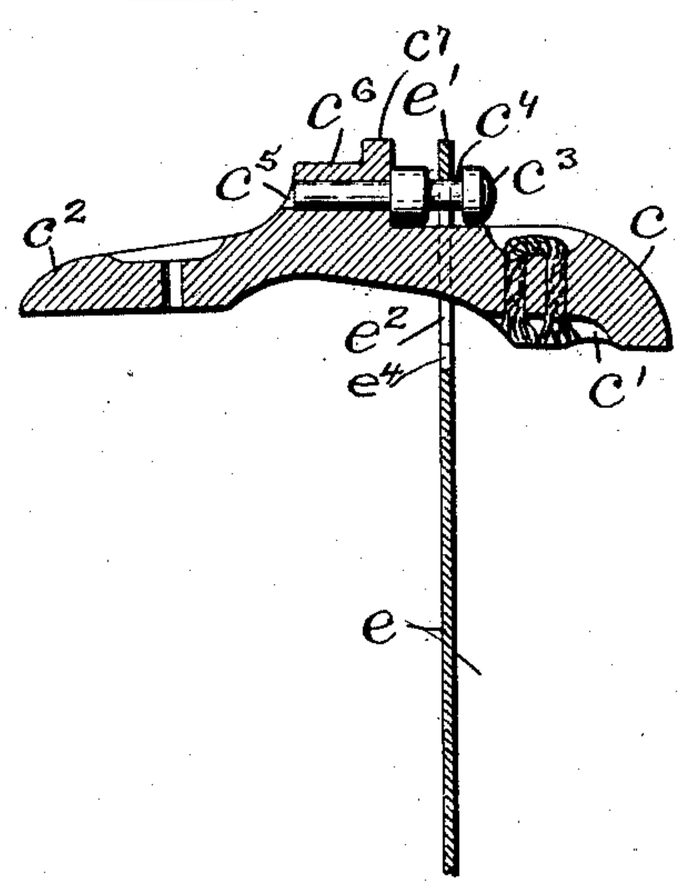



Fig. 3.

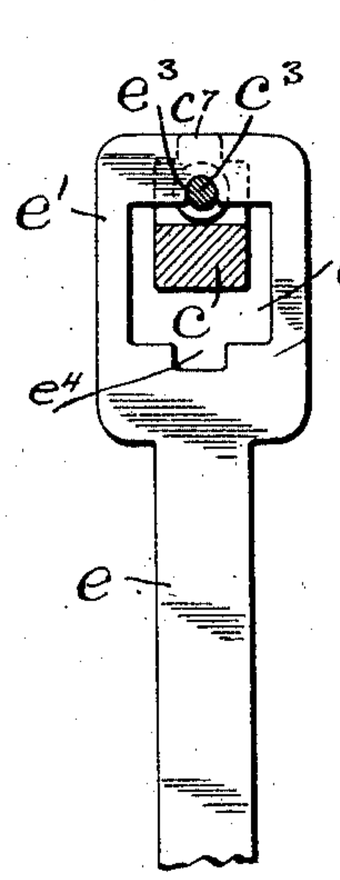
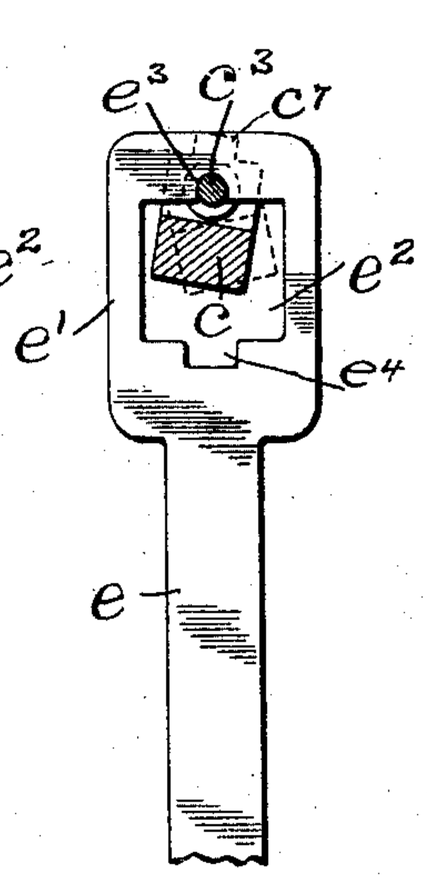



Fig. 4.




WITNESSES:

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# UNITED STATES PATENT OFFICE.

EZRA DIXON, OF BRISTOL, RHODE ISLAND.

## TOP-ROLL SADDLE.

No. 905,667. Specification of Letters Patent. Patented Dec. 1, 1908.

Application filed March 16, 1903. Serial No. 148,013.

*To all whom it may concern:*

Be it known that I, EZRA DIXON, a citizen of the United States, residing at Bristol, in the county of Bristol and State of Rhode Island, have invented new and useful Improvements in Top-Roll Saddles, of which the following is a specification.

This invention has reference to an improvement in top roll saddles used to hold the top rolls in contact with the drawing rolls of spinning-machines, and more particularly to an improvement in the means for attaching the stirrup to the front saddle.

In top roll saddles as heretofore constructed with the usual weighted stirrup to hold the front saddle bearing on the front top roll journal, the journal would cramp on the bearing of the front saddle, causing increased friction and unevenness in wear on the journal and bearing. This cramping of the journal on the bearing of the front saddle is caused by variations in the position of the sliver and by unevenness or bunches in the sliver, raising one of the journals of the front top roll out of its normal position and throwing the bearing of the front saddle out of alinement with the journal of the top roll.

The object of my invention is to pivotally attach the stirrup to the front saddle so that the saddle can adjust itself sidewise to the variable positions of the front top roll journal.

My invention consists in the peculiar and novel construction of the front saddle and the stirrup, whereby the stirrup is pivotally attached to the saddle. By this method of attaching the stirrup the saddle can adjust itself sidewise, and the front top roll journal and its bearing on the saddle are always in alinement or parallel with each other, as will be more fully set forth hereinafter.

Figure 1 is a transverse sectional view of part of a spinning-machine, showing the drawing rolls, the weight connections to the stirrup and my improvement on the front saddle. Fig. 2 is an enlarged sectional view taken lengthwise through the top saddle, showing the means for pivotally attaching the stirrup to the saddle. Fig. 3 is a transverse sectional view through the saddle and pivot for the stirrup, showing the saddle in its normal position, and the construction of the stirrup, and Fig. 4 is a view similar to Fig. 3, showing the position the saddle would assume in adjusting itself to conform to the front top roll journal when the journal is raised out of its normal position.

In the drawings, *a* indicates part of a spinning-machine supporting the roller stand *b* with the usual drawing and top rolls. The front saddle *c* has the bearing *c'* for the journal of the front top roll *b'* and the half round elongated end $c^2$ resting on the back saddle *d* in the usual way. On the top of the front saddle I secure the pivot pin $c^3$ having the groove $c^4$ by driving it into the hole $c^5$ in the lug $c^6$ formed on the saddle *c*. The stirrup *e*, with the enlarged end *e'* having the opening $e^2$, is pivotally attached to the saddle by the semi-circular notch $e^3$ in the stirrup engaging with the pin $c^3$ in the groove $c^4$. The opening $e^2$ in the stirrup is made of a width sufficient to allow for any side movement of the saddle required, and the stirrup has the usual weighted lever attachment, as shown in Fig. 1. The top roll saddle is secured to the stirrup by inserting the same through the opening $e^2$ with the top of the saddle inverted. This permits the extension $c^7$ formed upon the lug $c^6$ to pass through the notch $e^4$ forming part of the opening $e^2$. By this means the saddle is locked to the stirrup and cannot be removed under ordinary conditions.

In the operation of my improved top roll saddle the normal position of the journals of the front drawing roll and top roll are parallel. When one of the journals of the top roll is raised out of its normal position, the front saddle adjusts itself to the position of the top roll journal, and this is done through the pivoted connection of the stirrup in the saddle, the saddle moving on its pivot in the stirrup, as shown in Fig. 4.

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

1. In a top roll saddle, a grooved pin on the saddle, a stirrup provided with an opening, a notch for pivotally supporting the stirrup on the grooved pin, and a notch to permit the removal of the saddle from the stirrup, and means consisting of an upwardly-extending projection on the saddle to prevent the accidental removal of the saddle from the stirrup.

2. In a top roll saddle, the combination with the front saddle *c* having the bearing *c'*,

the half round elongated end $c^2$, the lug $c^6$ having the projection $c^7$, and the grooved pin $c^3$ secured in the lug $c^6$ on the saddle, of the back saddle $d$, and the stirrup $e$ having the enlarged end $e'$ with the opening $e^2$, the notch $e^4$, and the semi-circular notch $e^3$, for the purpose described.

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

EZRA DIXON.

Witnesses:
ADA E. HAGERTY,
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