No. 812,875. PATENTED FEB. 20, 1906.

G. L. PIERCE.

TOP ROLL SADDLE.

APPLICATION FILED APR. 18, 1905.

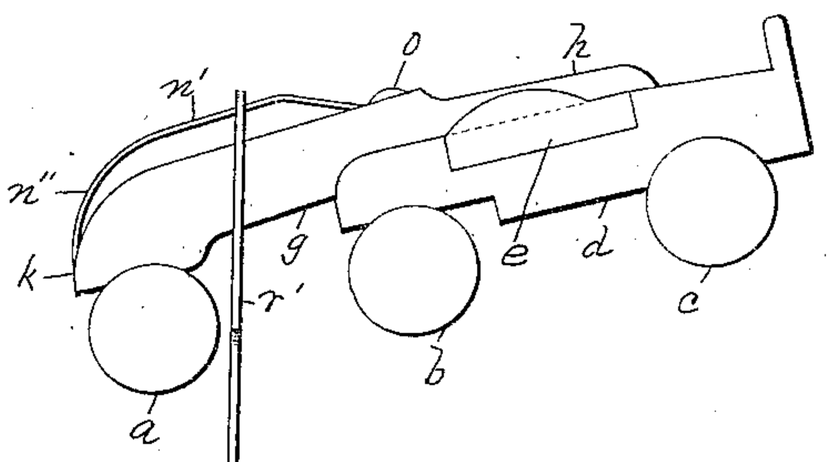

Fig. 1.

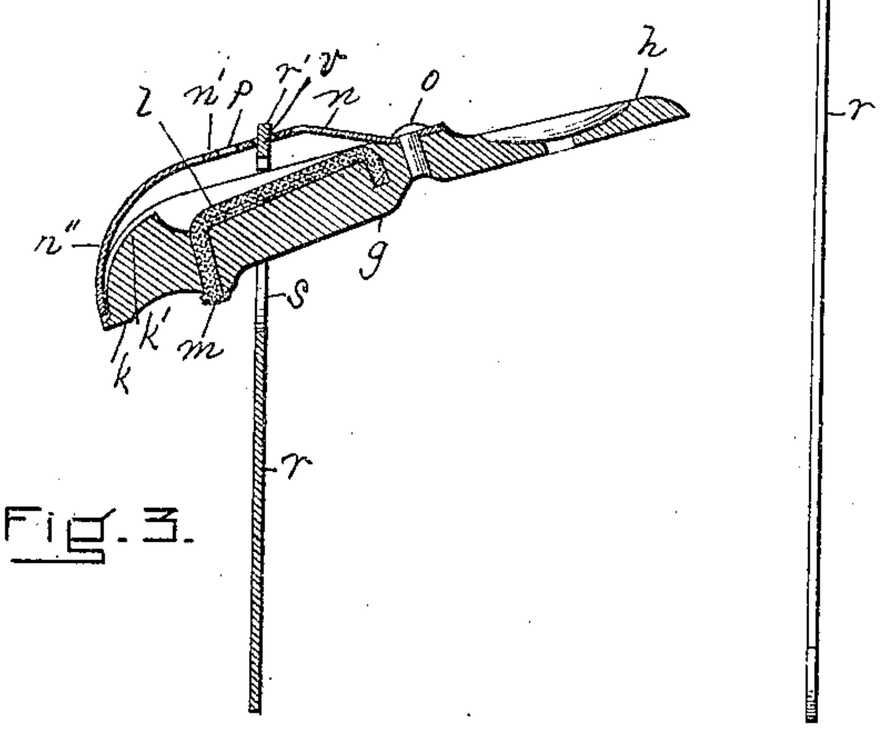

Fig. 3.

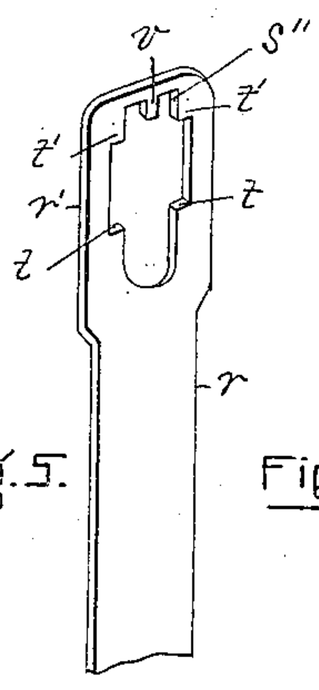

Fig. 5.

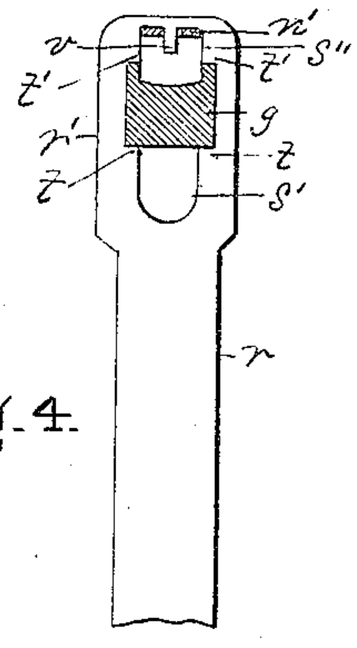

Fig. 4.

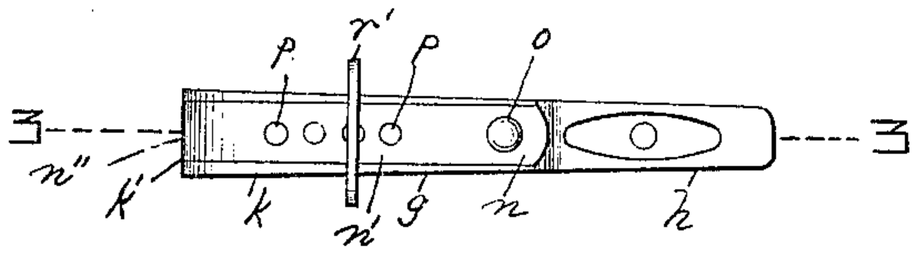

Fig. 2.

WITNESSES:

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TOP-ROLL SADDLE.

No. 812,875. Specification of Letters Patent. Patented Feb. 20, 1906.

Application filed April 18, 1905. Serial No. 256,233.

To all whom it may concern:

Be it known that I, GEORGE L. PIERCE, a citizen of the United States, residing in Manchester, in the county of Hillsboro and State of New Hampshire, have invented certain new and useful Improvements in Top-Roll Saddles, of which the following is a specification.

This invention relates to top-roll saddles for spinning-machines, and particularly to that class of top-roll saddles in which the weight-stirrup embraces or surrounds the upper member of the saddle and is connected therewith and held in place thereon by means of a spring.

In my present invention I do away with the locking slide and screw provided in many instances on the upper surface of the upper member and apply a non-sliding spring which is not only adapted to engage the weight-stirrup, but allows the saddle to be removed from the stirrup without turning said saddle, such removal being effected by simply pressing down the spring out of engagement with the stirrup, drawing the upper member out of the opening in the stirrup longitudinally and horizontally.

The nature of the invention is fully described below and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the top rolls of a spinning-machine and of a saddle applied thereto and embodying my invention. Fig. 2 is a plan view of the portion of the saddle which embodies my invention. Fig. 3 is a central longitudinal vertical section of the same, a portion of the stirrup being broken off. Fig. 4 is a cross-vertical section taken at the formed-up portion of the slide, a portion of the stirrup being broken off. Fig. 5 is a view of the upper portion of the stirrup removed.

Similar letters of reference indicate corresponding parts.

a, *b*, and *c* represent the front, middle, and rear top rolls, respectively, of a spinning-machine. *d* is the rear saddle resting on the rear and middle top rolls and provided with a bearing member *e*, none of the above being new in this invention.

g represents the upper member of the top-roll saddle provided with the rear end *h*, which rests on the rear saddle, and with the head *k*, which is formed centrally with a recess *l* for the reception of the lubricating-wicking *m*, none of which is claimed as new in this invention.

n represents a spring secured by a bolt *o* or other suitable means at its rear end to the surface of the member *g*, formed up centrally at *n'* into a substantially flat portion which is raised at a considerable height above said member *g* and formed down at its forward end into the curved portion *n''*, the extreme end of which rests in a suitable guiding-groove *k'*, formed in the head *k*. The central raised portion *n'* of this spring is provided with a longitudinal row of perforations *p*.

r represents the weight-stirrup, the upper end *r'* of which embraces and surrounds the member *g* and spring *n*, as illustrated, by means of the opening *s*. This opening is preferably narrowed at its lower end at *s'*, thus producing the shoulders *t*, and at its upper end at *s''*, thus producing the shoulders *t'*, and the member *g* of the saddle rests between these two sets of shoulders. From the upper edge of the opening *s* an integral engaging pin *v* extends down centrally between the shoulders *t'* into one of the holes or perforations *p*.

The stirrup and saddle are thus connected by means of the pin *v*, and the stirrup rests directly on the saddle by means of the shoulders *t'*. Adjustment is obtained by moving the pin *v* from one hole *p* into another. As the portion *n'* of the spring *n* is held normally up into engagement with the pin, to remove the saddle in order to clean it the spring is pressed down until the pin is out of engagement, the stirrup *r* being held up in position by the shoulders *t'*, which rest on the member *g* of the saddle, and the member *g* is then withdrawn horizontally without turning it in the opening *s* in the stirrup. In fact, said opening is made so narrow (see Fig. 4) that the saddle cannot be turned therein. It is evident that this spring *n* does not require an adjustable screw connection with the saddle, as in case of a locking-slide.

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

1. In a top-roll saddle of the character described, an upper member, a spring secured at one end to the top of said member and pro-

vided with suitable perforations, a weight-stirrup embracing or surrounding said member and spring by means of a suitable opening in the stirrup, and resting directly on the saddle, and a pin or projection adapted to extend down from the stirrup into one of the perforations in the spring and be released therefrom by pressing said spring out of engagement therewith.

2. In a top-roll saddle of the character described, an upper member, a spring secured at one end to the top of said member and formed up centrally into a portion which is normally raised above the top of the member, a weight-stirrup embracing or surrounding said member and resting directly on the saddle, and means for engaging said weight-stirrup with the spring, disengagement being produced by pressing on said spring.

3. In a top-roll saddle of the character described, an upper member provided with the curved head *k* formed on its surface with the longitudinal guiding-groove *k'*, a spring secured at its rear end to said member, formed up centrally into a normally raised portion provided with suitable perforations and with its forward end resting in said groove, and a weight-stirrup embracing said member and spring by means of a suitable opening and provided with an engaging pin *v* adapted to extend down into one of said perforations and to be released therefrom by pressure on the raised portion of the spring.

4. In a top-roll saddle of the character described, an upper member, a spring secured at one end to the top of said member and provided with the normally raised portion *n'* having perforations *p*, and the weight-stirrup provided with the opening *s* narrowed at its lower end whereby shoulders *t* are produced and at its upper end whereby shoulders *t'* are produced, the upper end of said opening being provided with the downwardly-extending pin *v* adapted to engage the spring by means of one of its perforations.

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

GEORGE L. PIERCE.

Witnesses:

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TIMOTHY F. O'CONNOR.