

(No Model.)

E. DIXON.
SADDLE FOR TOP ROLLS.

No. 482,789.

Patented Sept. 20, 1892.

Fig. 1.

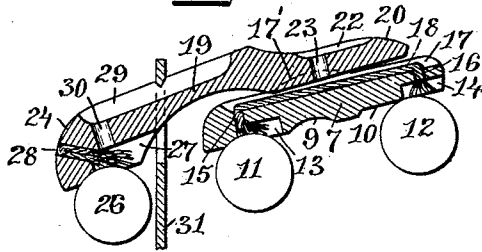


Fig. 2.

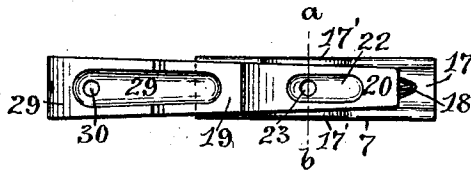


Fig. 3.

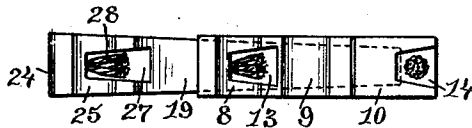


Fig. 4.

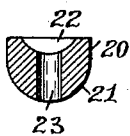
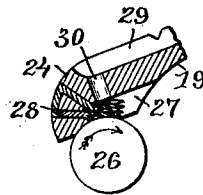


Fig. 5.



WITNESSES:

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EZRA DIXON, OF BRISTOL, RHODE ISLAND.

SADDLE FOR TOP ROLLS.

SPECIFICATION forming part of Letters Patent No. 482,789, dated September 20, 1892.

Application filed January 21, 1892. Serial No. 418,782. (No model.)

To all whom it may concern:

Be it known that I, EZRA DIXON, of Bristol, in the county of Bristol and State of Rhode Island, have invented certain new and useful
5 Improvements in Saddles for Top Rolls; 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.

10 This invention has reference to improvements in saddles used in drawing and spinning frames, and by means of which pressure is applied to the top rolls.

15 The object of the invention is to provide an increased bearing-surface at the forward end of the upper member of the saddle.

Another object of the invention is to produce a top-roll saddle in which the passages through which the lubricant passes to the
20 bearings will not be liable to be clogged.

The further object of the invention is to produce a saddle of the nature described, in which the bearings will be automatically cleared from accumulations of dust and fiber
25 by the revolution of the rolls.

The invention consists in certain peculiar features of construction and novel combination of parts, which will hereinafter be more fully described, and pointed out in the claims.

30 Figure 1 represents a longitudinal sectional view of the saddle mounted on the top rolls and in a contracted position. Fig. 2 represents a top view of the saddle, showing the reservoirs for holding the lubricant. Fig. 3 represents a bottom view of the saddle members, showing the construction of the self-clearing bearings and the arrangement of the lubricating-wicks. Fig. 4 represents a cross-sectional view of the upper member,
35 taken on a line *a b*, Fig. 2. Fig. 5 represents a longitudinal sectional view of the forward end of the upper member, showing the arrangement of the double wick and the passage through which the lubricant is supplied
40 to the same.

Similar numbers of reference designate corresponding parts throughout.

45 The saddle is formed of two members, an upper and a lower. The lower member 7 is provided with lower bearing-surfaces 8, 9, and 10, these bearings being formed with large bearing-surfaces to obviate the wearing of

the rolls 11 and 12, on either or both of which they bear. Adjacent to the bearings 8 and 10 are formed in the lower surface of this
50 member the tapering cavities 13 and 14, the wick ends of the same being at the rear, thus allowing the motion of the rolls in that direction to readily draw backward any accumulation of lint and dust which may lodge
60 therein. These cavities are connected by the passages 15 and 16 with the longitudinal groove 17, formed in the upper surface of the member 7 and containing a wick 18, the ends
65 of which extend through said passages into the tapering cavities. By means of this wick a lubricant may be conveyed to the bearing-surfaces 8 and 10. The sides of this member
70 7, forming the edges of the groove 17, are extended upward at their centers to form the lips 17' 17', which serve to retain the shank of the upper member in place in said groove. The upper member 19 is provided with the
75 rearwardly-extending shank 20, having the convex bearing-surface 21, adapted to rest in the groove 17 of the lower member, this shank having in its upper surface the depression 22, adapted to contain lubricating material, which is allowed to pass through the perforation 23 in the shank to the groove 17. The
80 upper member 19 is also provided with the enlarged depending portion 24, in the under surface of which is provided the roll-depression 25, adapted to bear on the front roll 26, while extending rearwardly from this depression
85 is the tapering cavity 27, into which the ends of the wick 28 extend, these ends of the wick also resting lightly against the surface of the roll 26, the main portion of the wick being secured in one or more perforations in
90 the forward end of the member. In the upper forward surface of this member is also provided a chamber 29, adapted to contain a lubricant and connected with the cavity 27
95 by the passage 30, which directs the flow of the lubricant directly onto the ends of the wick 28. By this construction the flow of the lubricant is not obstructed as when the wick extends through the passage 30, nor is this
100 passage apt to be clogged by dust to as great an extent as heretofore. The roll-depression 25, having a large bearing-surface, will not tend to wear the front roll as when the side walls of the cavity 27 extend to the end of the

upper member, and any dust or lint collecting in this roll-depression will be drawn therefrom by the motion of the roll 26. Across the upper face of the front end of the upper member is formed a notch, in which the upper bar of the weight-link 31 rests, the other end of the link being connected with any adjustable weight mechanism ordinarily employed with this class of devices.

10 The wick 28 may be secured in various ways in the forward end of the upper member, the object being to secure it in such a manner that the ends will extend beneath the lower end of the passage through which the lubricant is conveyed from the reservoir in the upper surface of the member to a point adjacent to the roll-depression 25 and to distribute the lubricating material evenly to the surface of the roll by means of the wick without obstructing the delivery-passage by extending the wick through the same.

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

25 1. A top-roll saddle the members of which are provided with transverse concaved bear-

ing-surfaces and cavities forming wick-containing chambers adjoining such bearings, gradually widening in the direction of the travel of the rolls, as described.

2. In a top-roll saddle, the combination, with a member provided with a lubricant-containing chamber in the upper surface and a passage connecting said chamber with a bearing-surface, of a lubricating-wick secured in perforations in the end of said member and extending below said passage, as described.

3. In a two-part top-roll saddle, an upper member 19, having a tapering shank 20, a forward depending end 24, and a roll-depression 25, and provided with the reservoir 29, passage 30, and the wick 28, secured in perforations in said depending end and extending beneath said passage 30, as and for the purpose described.

In witness whereof I have hereunto set my hand.

EZRA DIXON.

Witnesses:

J. A. MILLER, Jr.,
M. F. BLIGH.