R. BUTLER & E. A. TINSMAN.

SELVAGE TRIMMER.

APPLICATION FILED NOV. 29, 1915.

1,235,006.

Patented July 31, 1917.

2 SHEETS—SHEET 1.

FIG. 2.

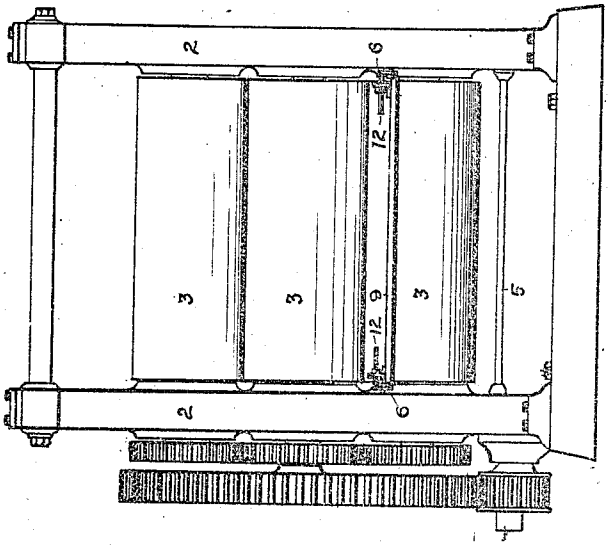
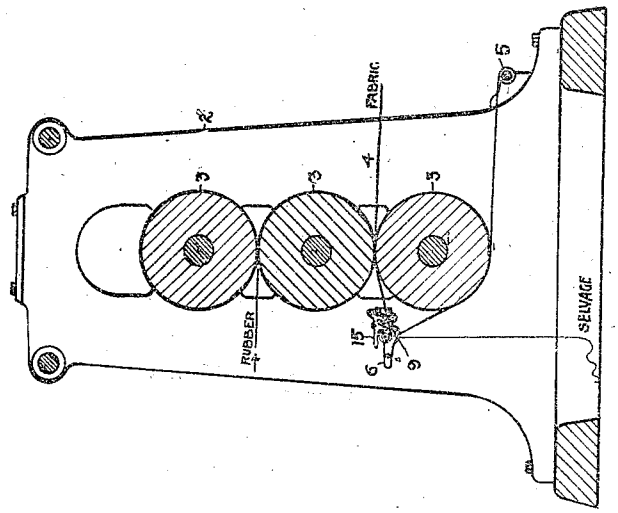


FIG. 1.



WITNESS

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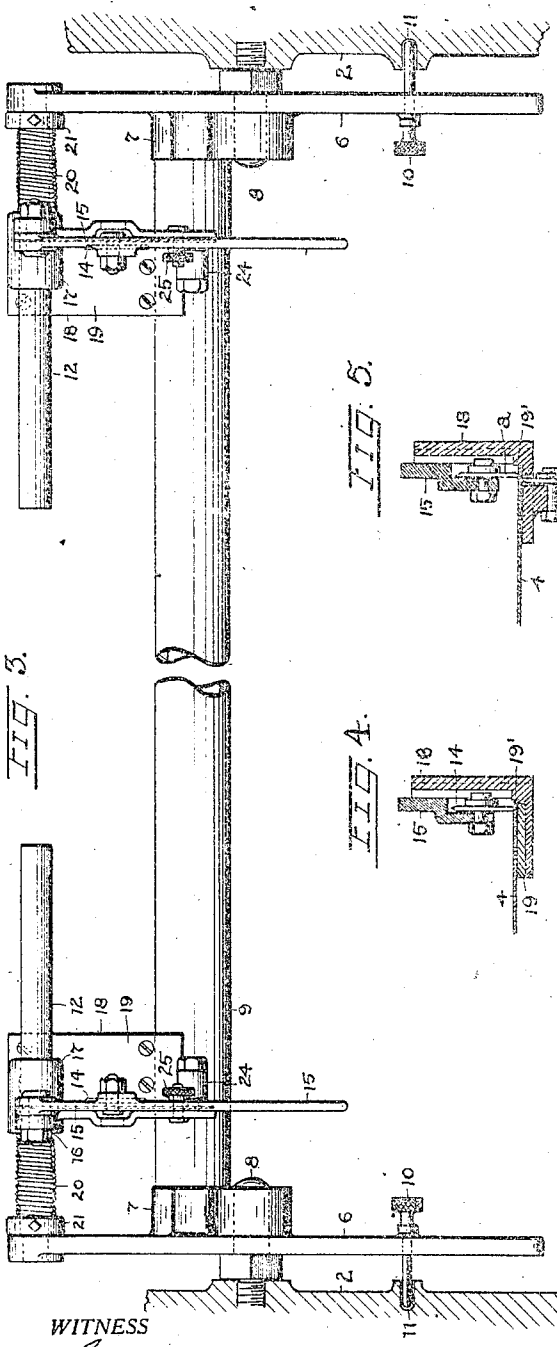


FIG. 3.

FIG. 4.

FIG. 5.

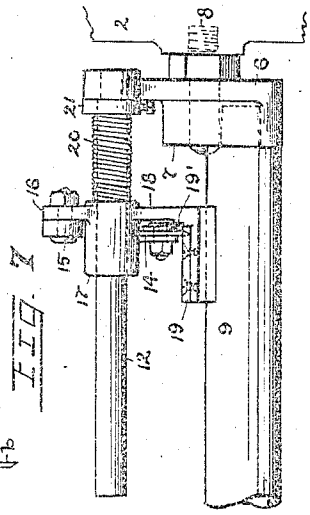


FIG. 7.

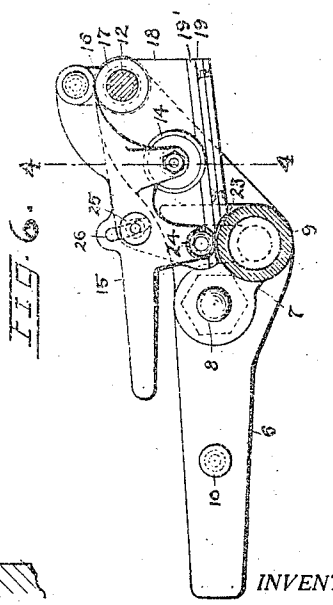


FIG. 6.

WITNESS

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UNITED STATES PATENT OFFICE.

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SELVAGE-TRIMMER.

1,235,006. Specification of Letters Patent. Patented July 31, 1917.

Application filed November 29, 1915. Serial No. 64,047.

To all whom it may concern:

Be it known that we, ROBERT BUTLER and EDGAR A. TINSMAN, citizens of the United States, residing at Barberton, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Selvage-Trimmers, of which the following is a specification.

This invention relates to a selvage trimmer, and the invention as shown and described herein comprises an attachment for the calenders or similar machines now in use wherewith the selvage of the rubber fabric may be trimmed as it passes through or from the calendering rollers.

In the accompanying drawings, Figure 1 is a sectional view, and Fig. 2 is a side elevation on a reduced scale of a calender having our improved selvage trimmer attached in working position to the frame thereof opposite the lower calendering roller. Fig. 3 is an enlarged plan view of the attachment. Fig. 4 is a cross section of the cutter-arm and mounting on line 4—4, Fig. 6, and Fig. 5 is a similar view showing a modification embodying two cutting disks. Fig. 6 is a side view of one of the cutter brackets and a cross section of the idler roller, and Fig. 7 is a rear view thereof.

Generally the calenders in use comprise a main frame having standards 2 upon and between which a series of calendering rollers 3 are mounted in superposed relations. The rubber stock, a soft rubber called friction rubber, passes between the upper and middle rollers and is applied to the fabric 4 which enters between the middle and lower roller. Thence the rubber fabric passes to a winding-roll 5. Other working parts are embodied in such machines, but as these are well known to those skilled in the art and form no part of the present invention only the main and simpler elements are shown. Suffice to say that when the fabric is rubber-coated and passing to the winding roll 5 its selvage or border at each side is trimmed by my improved attachment which is constructed and mounted as follows: Two similar bracket members 6 having journal bosses or open keepers 7 are secured oppositely upon projecting pivot bolts 8 fixed in the sides of the standards 2 at a point rearwardly of the bottom calendering roller 3, and a rotatable shaft 9 or idler roller is mounted in the journal bosses 7 and extends across the machine parallel with the calendering rollers 3. The rubberized fabric passes around this idler roller 9 and affords a straight stretch before being wound upon the winding roll 5. A locking bolt 10 in the outer end of each bracket 6 engages in openings 11 in the sides of the standards 2 and holds the attachment from turning when alined with the straight stretch of the fabric coming from the calendering rollers. The inner upwardly-projecting ends of said brackets have each a short shaft 12 extending parallel with shaft 9 and the rollers 3, and a cutting or trimming knife or disk 14 is rotatably supported upon an arm 15 which is pivoted or hinged for vertical oscillatory movements above the straight stretch of fabric in its passage to the idler roller. The knife arm or bar 15 is also adapted to be shifted longitudinally of the idler roller or in other words transversely of the fabric, and for this purpose said arm is pivoted to an ear 16 integral with a boss 17 sleeved to slide upon short shaft 12. Boss 17 is part of a right-angled base-plate 18 having a flat piece of wood 19 removably seated thereon upon which the fabric is adapted to rest while passing beneath the knife or disk 14. The edge of the fabric also has running engagement with a guiding shoulder 19′ closely adjacent disk 14 and this relationship of parts determines the amount of selvage trimmed from the fabric and is maintained constantly during the running of the fabric by means of a coiled spring 20 sleeved upon short shaft 12 in bearing engagement with an adjustable collar 21 and the slidable boss 17 of base plate 18. This arrangement of parts also affords a convenient way of adjusting the cutters to any width of fabric passing through the machine, and the tension of coiled spring 20 is also adapted to be sensitively regulated.

The base plate 18 has a curved undercut 23 at its outer extremity where extended over tension roller 9 but the roller is uncovered otherwise for the fabric to pass thereround and to permit a bearing roller 24 to ride upon the fabric. This bearing roller 24 is secured to the knife arm 15 and regulates the depth of cut of the knife or disk 14, or such depth of cut may be regulated by adjustment of the arm 15 relatively to the base-plate and the fixing of these two parts

together by a thumb-screw 25 working in a slot 26 in the arm, see Fig. 6.

In Fig. 5, two cutting disks *a* and *b* are shown in shearing relations, disk *a* being mounted upon arm 15 and disk *b* upon a lug at the bottom of base plate 18.

What we claim is:

1. A selvage trimming attachment for calendering machines comprising pivotally mounted brackets and a roller carried thereby, a base plate carried by said bracket at each end of said roller and cutting devices secured upon said base plates adjustable longitudinally of said roller.

2. A selvage trimming attachment for calendering machines comprising a roller and a pivotally mounted bracket therefor having a pair of cutter members hinged and slidably supported through said bracket opposite the ends of said roller.

3. A selvage trimming attachment for calendering machines comprising a roller and pivoted brackets therefor at the ends thereof, means to lock the said brackets and roller in a stationary position, and cutter members mounted upon said brackets opposite said roller and adapted to be longitudinally adjusted in respect to said roller.

4. A selvage trimming attachment for calendering machines comprising pivoted brackets and means to lock the same, a shaft and a roller mounted in said brackets at their ends, and base plates supported on the ends of said shaft and cutting members slidably supported upon said shaft opposite said roller.

5. A selvage trimming attachment for calendering machines, comprising a parallel shaft and roller, and a base plate slidably supported upon said shaft opposite said roller, a spring to move said base plate longitudinally of said shaft and roller, and a trimming device carried by said plate.

6. A selvage trimming attachment for calendering machines, comprising a bracket having a projecting shaft, a base plate and an adjustable arm slidably mounted upon said shaft, a trimming device carried by said arm, a collar and a coiled spring adjustably mounted upon said shaft to hold said plate in yielding contact with the goods to be trimmed, and a stretching roller for the goods mounted adjacent said plate.

7. A selvage trimming attachment for calendering machines, a bracket having a journal bearing for a roller, a shaft projecting from said bracket having an adjustable collar thereon, a base plate for the goods to be trimmed slidably mounted upon said shaft, a coiled spring upon said shaft between said collar and plate, an arm hinged upon said plate having a trimming cutter, and means to lock said arm adjustably upon said plate.

In testimony whereof we affix our signatures.

ROBERT BUTLER.
EDGAR A. TINSMAN.