No. 627,305. Patented June 20, 1899.

F. MORAN & J. REARDON.

INTERNAL DANDY ROLL WIPING DEVICE.

(Application filed Dec. 11, 1897.)

(No Model.)

Fig. 1.

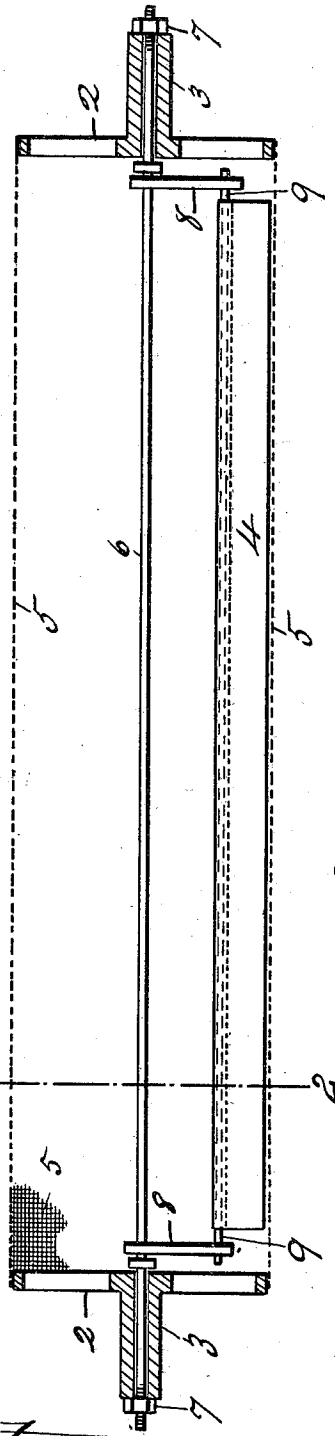


Fig. 3.

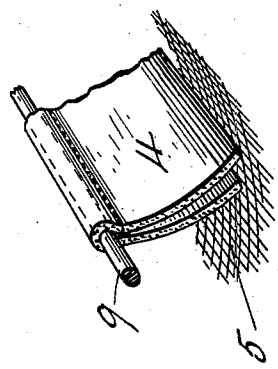
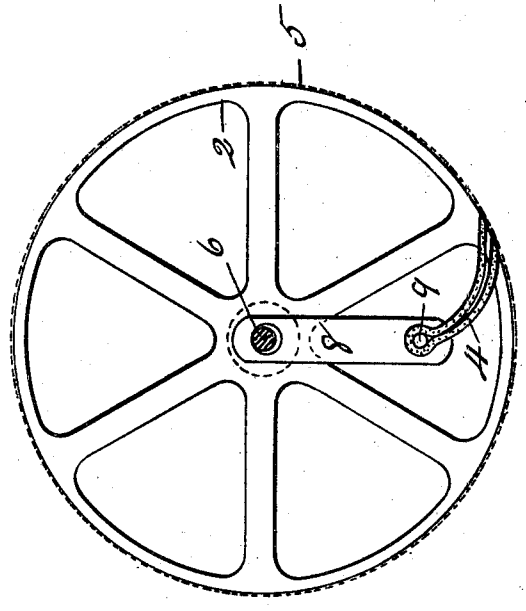


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANK MORAN AND JOHN REARDON, OF HOLYOKE, MASSACHUSETTS.

INTERNAL DANDY-ROLL WIPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 627,305, dated June 20, 1899.

Application filed December 11, 1897. Serial No. 661,544. (No model.)

To all whom it may concern:

Be it known that we, FRANK MORAN and JOHN REARDON, citizens of the United States of America, residing at Holyoke, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Internal Dandy-Roll Wiping Devices, of which the following is a specification.

This invention relates to dandy-rolls for paper-machines, and has for its objects the prevention of the accumulation of foam in such rolls during their operation on such machines, the injury to the paper resulting from said foam, and to obviate the stopping of said machines from time to time to remove the foam from said rolls; and the invention consists in providing a foam-wiper for the interior of said rolls and means for supporting said wiper within the same, all as hereinafter set forth, and more particularly pointed out in the claim.

In the drawings forming part of this specification, Figure 1 is a longitudinal sectional view of a dandy-roll having a foam-wiper applied thereto in accordance with our invention. Fig. 2 is a sectional view on line 2 2, Fig. 1; and Fig. 3 is a perspective view of a portion of the foam-wiping apron and its supporting-rod.

Referring to the drawings, 2 2 indicate the heads of the dandy-roll, and 3 3 the supporting-shafts of the roll projecting from each head, which support the roll, in connection with suitable bearing-boxes therefor for the rotary movement which is imparted to the roll by the contact of its open-work-body surface 5 with the wet paper mat on the paper-machine. For the purposes of this invention said roll-shafts are made tubular, as shown.

The foam-wiping devices of the interior of the roll consist of a foam-wiper of a strip of felt 4 or similar flexible material supported in the roll in such a way that one border thereof is brought near to or in contact with the interior surface of said open-work body 5, clearly illustrated in Figs. 2 and 3. The preferred devices for so supporting said foam-wiper 4 in said position in the roll consist of the following elements: a rod 6, extending axially through the dandy-roll from end to end, having its extremities entering said tubular supporting-shafts 3 loosely, so that the roll may rotate without imparting any rotary movement to said rod. It is preferable that a nut 7 be applied to each end of said rod 6 to prevent endwise movement thereof in the roll. On said rod, near the heads of the roll, are hung, loosely, two links 8 8, and said links support a wiper-holding bar 9, on which said felt or other wiper 4 is hung, as shown. The said rod 6, links 8, wiper-holding bar 9, and foam-wiper 4 are easily applied to the roll by passing all of said parts which are hung on the rod 6 through an opening or openings in the head 2 after said rod 6 shall have been placed in the roll with one end entering one of said supporting tubular shafts 3 and the opposite end extending more or less into the roll. A dandy-roll fitted with said foam-wiping devices is kept constantly clear of foam by the action of the wiper 4, which acts to crush and dissipate the foam as fast as it rises through the surface of the roll, thereby securing the aforesaid advantages relative to contributing to a steady continuous machine movement and to the improved quality of paper produced thereby.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination with the heads of dandy-rolls, of trunnions 3 thereon, a wiper-holding bar 9, links 8, one end of each of which is connected with opposite ends of said bar, a support axially located in said trunnions and secured therein, with which the other ends of said links are connected, and a wiper 4, of textile material, hung on said bar 9, whereby one border of said wiper may lie against the bottom interior surface of said roll, substantially as set forth.

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Witnesses:
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