

T. PUSEY.
Guide Roller for Paper Machines.

No. 229,636.

Patented July 6, 1880.

FIG 1

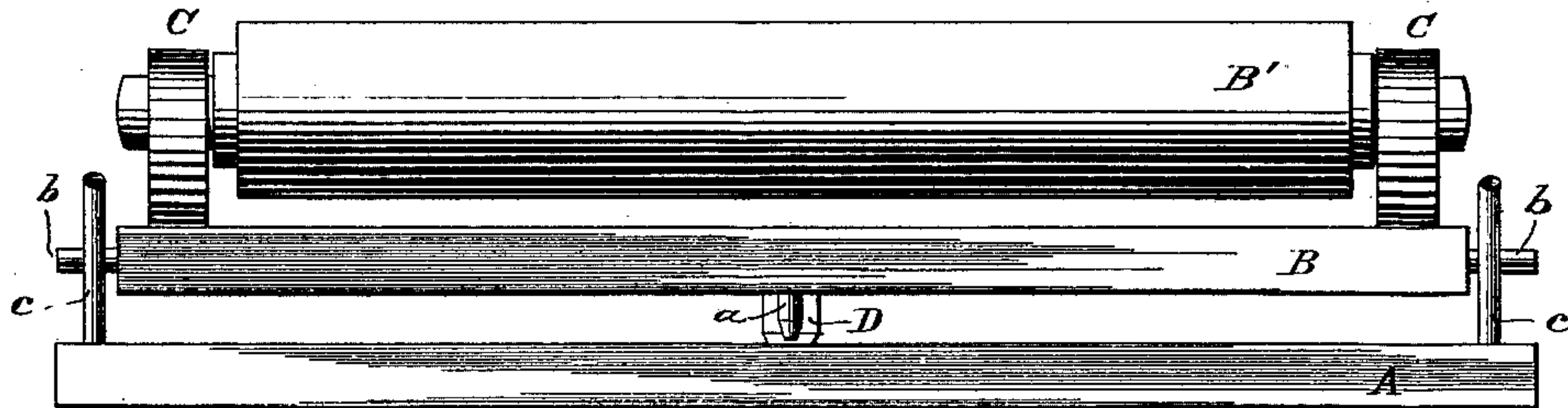


FIG 2

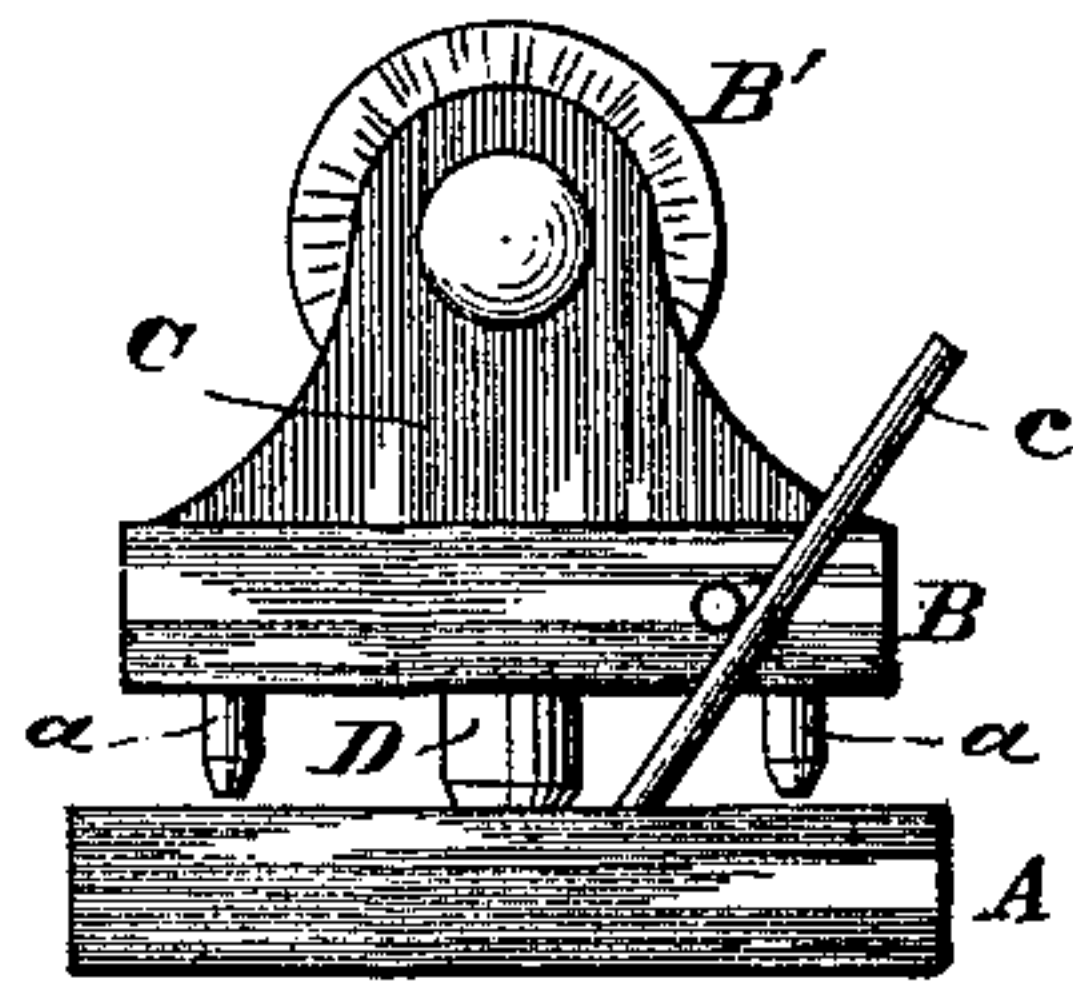
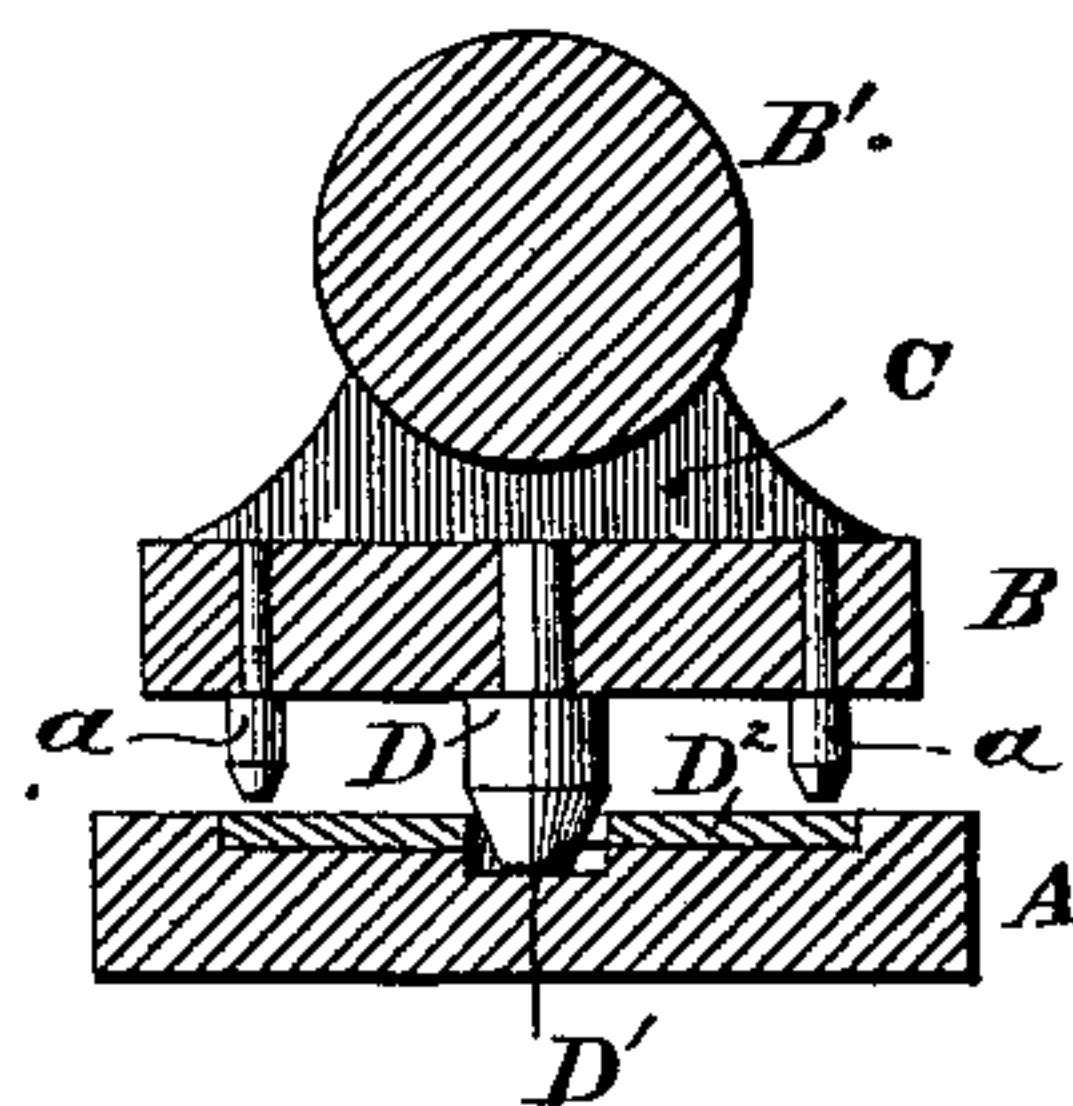


FIG 3



WITNESSES

Wilmer Bradford

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INVENTOR

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UNITED STATES PATENT OFFICE.

THOMAS PUSEY, OF STOCKTON, CALIFORNIA.

GUIDE-ROLLER FOR PAPER-MACHINES.

SPECIFICATION forming part of Letters Patent No. 229,636, dated July 6, 1880.

Application filed January 15, 1880.

To all whom it may concern:

Be it known that I, THOMAS PUSEY, of the city of Stockton, in the county of San Joaquin and State of California, have invented a new and useful Improvement in Guide-Rollers for Paper-Making Machines, of which the following is a specification.

This invention relates to guide-rollers for the wire web and blanket-felt of paper-making machines; and it consists in the construction and arrangement of the devices hereinafter described, whereby the said rollers are automatically adjusted to any unequal preponderance of the trend or travel of the blanket, which is thus enabled to assume a central course without curling at the sides.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is an end view. Fig. 3 is a transverse section taken through the center of the roller and frame.

On the cross-bar A, which is permanently attached to the machine, are placed the roller-frame B and roller B', which roller is suitably journaled in boxes or bearings C.

From the under side of the roller-frame extends a pin or pivot, D, which pivots in a hole, D', in a transverse plate, D², upon the cross-bar. At each side of this pin D is a steadying-pin, a a, which permits the roller and roller-frame to move up or down upon its center and pivot itself on the pivot D, while the pin a a prevents the roller from moving sidewise.

Guide-pins b b extend from both ends of the roller-frame and operate against pins c c, placed in an inclined position on the cross-bar, as shown. These inclined pins c c may be placed

in the cross-bar back of the roller and roller-frame when a wire web is employed, in which case the end pins, b b, may be dispensed with; but for a felt blanket I prefer the arrangement as shown. Ordinarily three or four of these rollers will be required in a machine.

The operation of the device is as follows: As the blanket-felt is caused to pass over the guide-rollers any deviation from a straight course, in which it travels, throws a preponderance of weight to that side and causes the roller to vibrate upon its pivot and pins up and down, forward and back, until the blanket automatically assumes its central trend or travel and a proper adjustment to its true course is had, the inclined pins c c acting as a guide to the movements of the roller and roller-frame, and thus it will be seen that the side of the blanket will be prevented from curling up or buckling.

I am aware that the guide-rollers of paper-making machines have been heretofore mounted upon a pivoted frame and adjusted by an up-and-down motion of said frame, in order to retain the felt in a central position; but this I do not claim.

What I claim as my invention is—

In a paper-making machine, the combination of the movable guide-roller B', journaled in bearings C on the frame B, with the central pivot, D, pins a a, and guide-pins b, all arranged and operating as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 25th day of November, 1879.

THOMAS PUSEY. [L. S.]

Witnesses:

C. W. M. SMITH,
HOLLAND SMITH.