(No Model.)

A. BESWICK.

MECHANISM FOR REGULATING THE PRESSURE UPON SPINNING MACHINE ROLLS, &c.

No. 246,711. Patented Sept. 6, 1881.

Fig. 1.

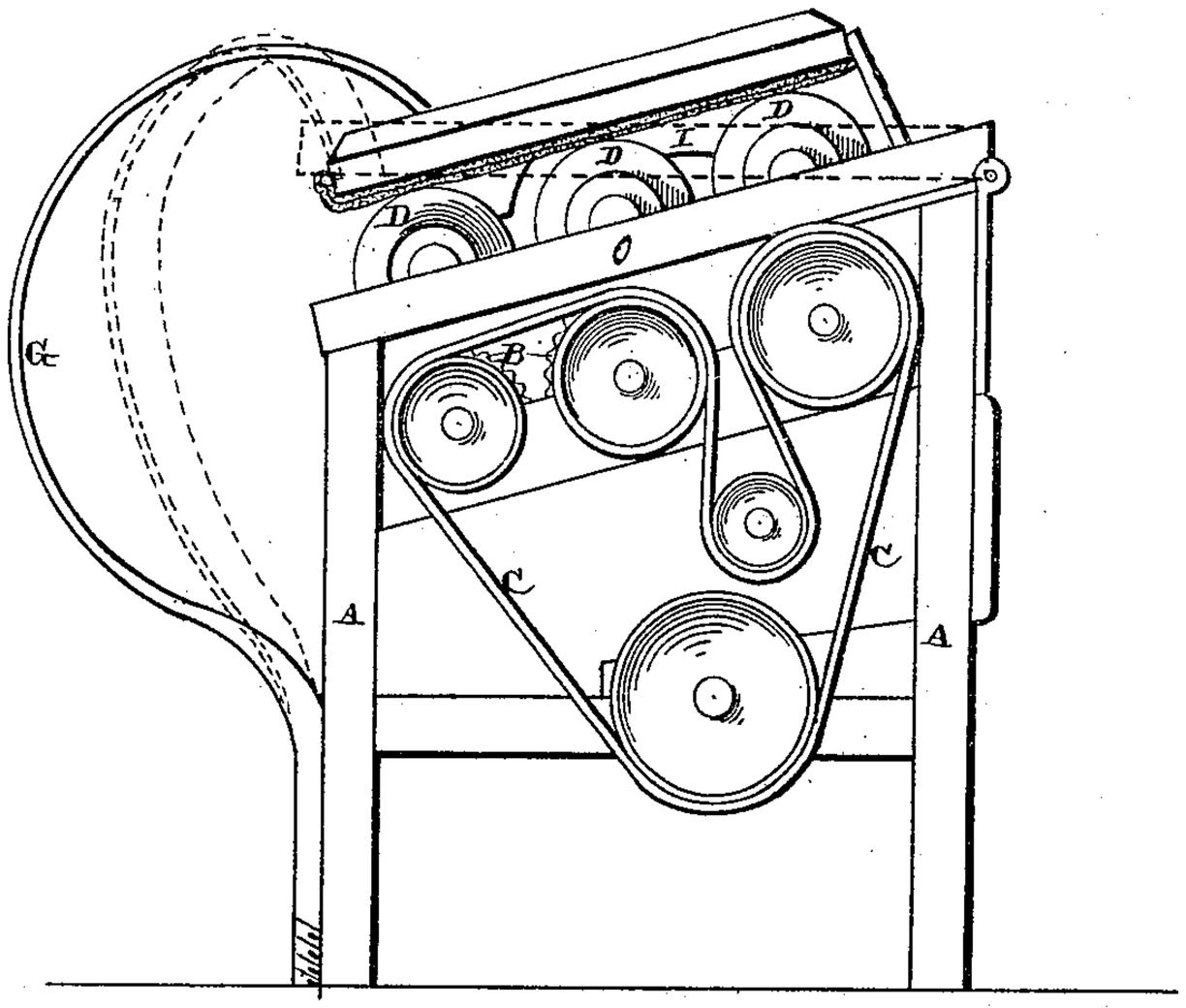


Fig. 2.

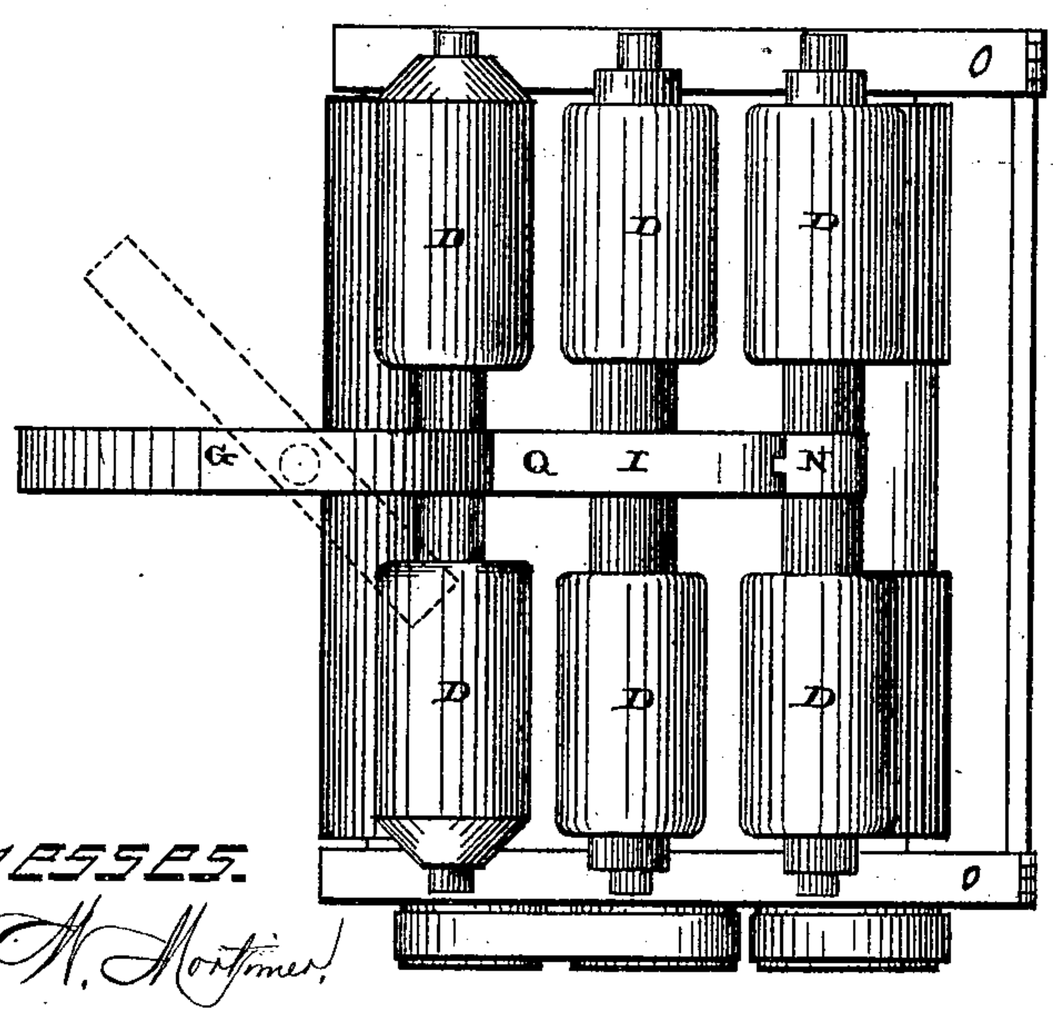
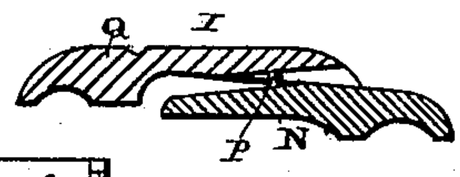


Fig. 3.



Witnesses.
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per
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UNITED STATES PATENT OFFICE.

ALBERT BESWICK, OF UTICA, NEW YORK, ASSIGNOR OF ONE-HALF TO C. B. TEFFT, OF SAME PLACE.

MECHANISM FOR REGULATING THE PRESSURE UPON SPINNING-MACHINE ROLLS, &c.

SPECIFICATION forming part of Letters Patent No. 246,711, dated September 6, 1881.

Application filed March 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT BESWICK, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Mechanism for Regulating the Pressure upon Spinning-Machine Rolls, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in spinning-machines; and it consists in pressing the two sets of rollers together by means of a curved spring, the lower end of which is screwed into the floor or base of the machine, and which spring can be turned partially around, so as to take the pressure of its upper end from the rollers, and thus allow the saddle and rollers to be readily removed from the frame, as will be more fully described hereinafter.

The object of my invention is to dispense with the weights which have heretofore been used, and to use a spring which can be applied to the rollers by simply turning it partially around, so that its upper end will rest upon the top of the saddle, and thus simplify and cheapen the cost of the machine, and enable the rollers to be readily removed from and replaced in the frame.

Figure 1 is a side elevation of a spinning-machine embodying my invention, partly in section. Fig. 2 is a plan view of the same, showing the spring in one position in solid lines and in another in dotted lines. Fig. 3 is a vertical section of the two parts of the saddle.

A represents the frame of the machine, which may be of any desired shape, size, or construction, and in which are journaled the usual corrugated rollers, B. These rollers are all operated together by the driving-belt C, and impart motion to the smooth rollers D, which are pressed down upon their tops by means of the spring G and saddle I. So far as the construction of the frame and the rollers is concerned no novelty is claimed.

The spring G has its lower end made so as to fasten into the frame of the machine, and has its upper end curved so as to catch upon the top of the saddle and exert a downward pressure upon the top rollers, which are journaled in the hinged bearings O. This spring can be turned partially around, as shown in Fig. 2, so that its upper end will be swung around to one side, and not bear upon the saddle, when it is desired to raise the rollers upward or to remove them from the frame for the purpose of cleaning, oiling, or to put in new ones. The upper end of the spring will be made wider than the saddle, with clamp-fangs, so as to prevent it being by accident removed therefrom. To remove the pressure of the springs from the rolls it is only necessary to turn the spring around until its end will no longer bear down upon the saddle; and as the spring can be readily turned back and forth, its pressure can be quickly applied to and removed from the rolls at the pleasure of the operator. The pressure of the spring can also be adjusted at will by simply screwing it in or out of the floor.

The saddle is made in two parts, the shorter one, N, of which bears upon the tops of two of the rollers, and has a pin, P, projecting from its top. The longer piece, Q, has a groove cut in the under side of its inner end for the pin to catch in, and thus hold the two parts together and bear upon the top of the third roller at its rear end. The pressure of the upper end of the spring upon the piece Q is transferred to the other part, and thus distributed to all three rollers.

Having thus described my invention, I claim—

In a spinning-machine, the combination of the frame or other suitable support and the saddle with a spring that can be revolved, and which is adjustable to variable pressure, and provided with a curved upper end and screw-threaded lower end, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT BESWICK.

Witnesses:
PARKER W. TEFFT,
CHAS. B. TEFFT.