

A. P. YOUNG.

Improvement in Wringing-Machines.

No. 132,228.

Patented Oct. 15, 1872.

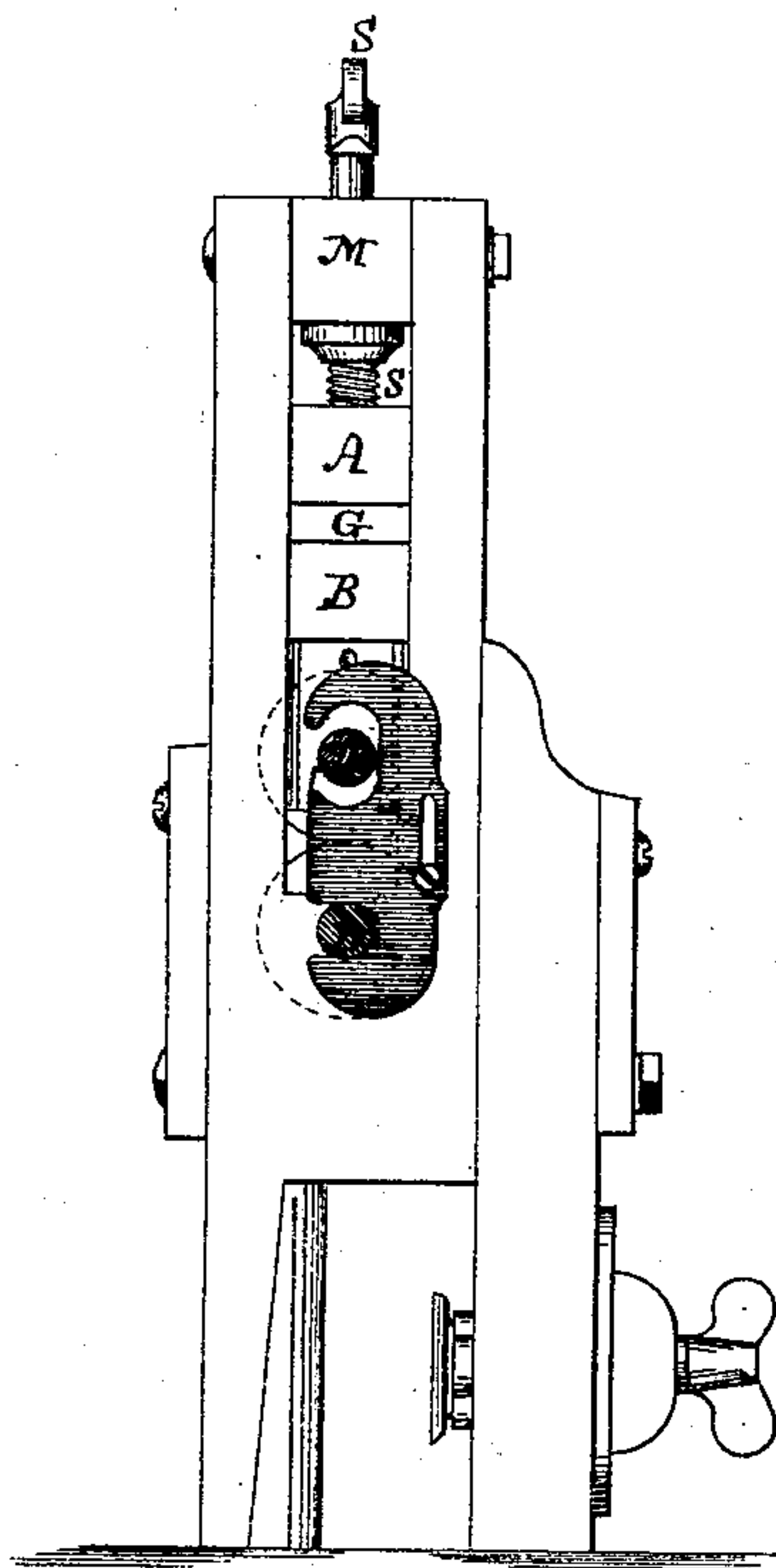


FIG. 2.

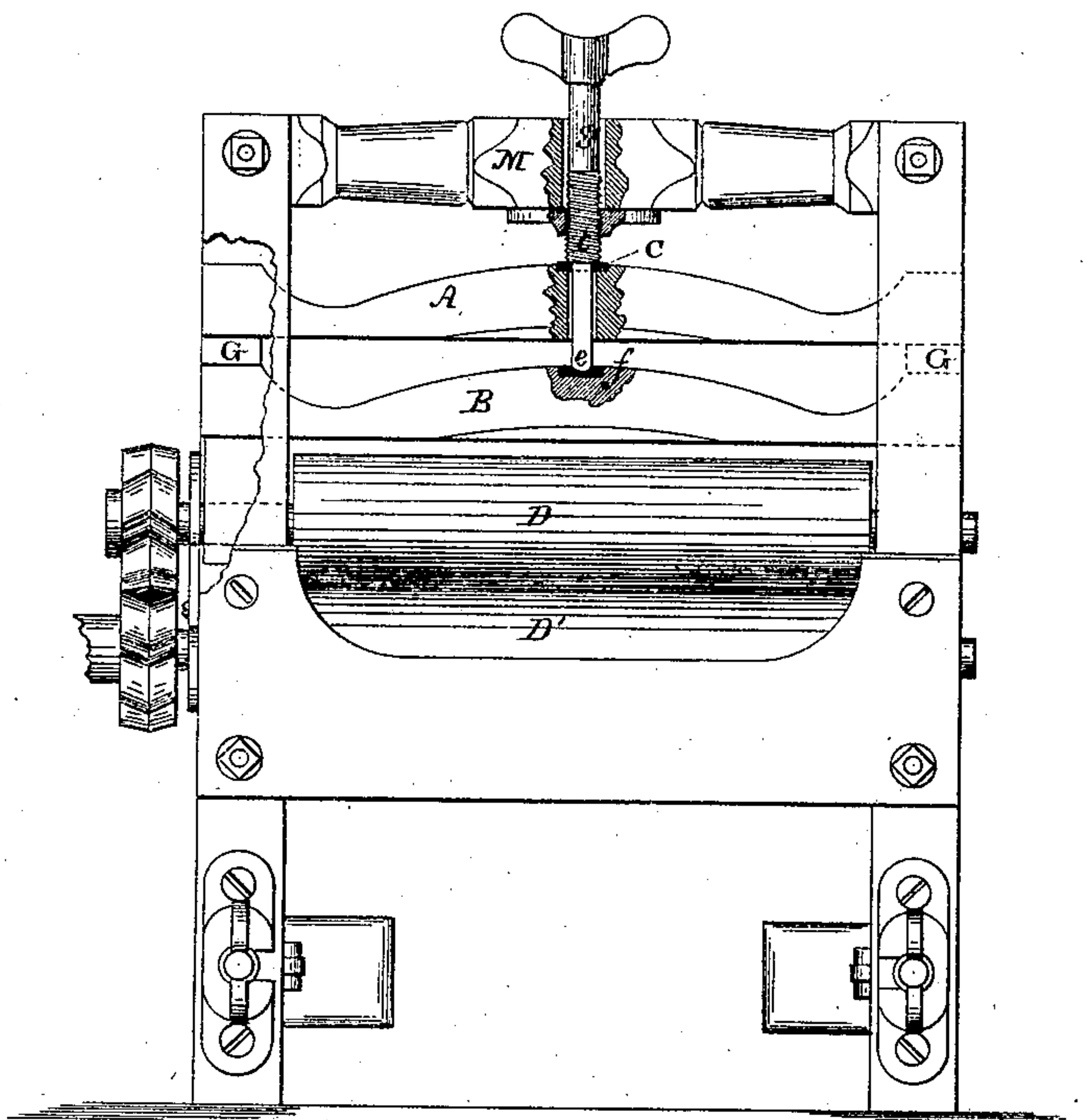


FIG. 1.

WITNESSES.

Ben F. Thurston
J. Knight

INVENTOR.

Allen P. Young

UNITED STATES PATENT OFFICE.

ALLEN P. YOUNG, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE
PROVIDENCE TOOL COMPANY, OF SAME PLACE.

IMPROVEMENT IN WRINGING-MACHINES.

Specification forming part of Letters Patent No. **132,228**, dated October 15, 1872.

To all whom it may concern:

Be it known that I, ALLEN P. YOUNG, of the city and county of Providence and State of Rhode Island, have invented a new and useful Improvement in Wringing-Machines, of which the following is a specification, referring to the accompanying drawing making part of the same.

My improvement relates to the apparatus by which the rollers of wringing-machines are set up to exercise the requisite resistance to their separation in the operation of extracting the water from the clothes in passing between the same. My invention consists in the combination and arrangement of two bow springs or braces with an elastic body between their ends and with the usual compressing-screw in the middle of both to set them down upon the bearings of the movable roller, so that the combined resistance of the two springs or braces is exerted equally against the bearing at both ends of the upper roller, with the variation produced by the yielding action of the elastic body at either end between the springs or braces to provide for any inequality in the mass of clothing which passes between the rollers.

In the drawing, Figure 1 is a front elevation of a wringing-machine with my improved apparatus. Fig. 2 is a side elevation of the same.

Similar letters mark like parts in both figures.

The wringing-rollers D D' are constructed and geared together in any of the well-known ways. The position of the lower roller D' is fixed, and the upper roller D is movable vertically in the frame, and subject to the action of the apparatus for setting the same down upon the rollers D' to perform the wringing operation effectively. In this instance the setting-up apparatus consists of two wooden bow springs or braces, A and B, of ash or maple, and almost rigid instead of being elastic. The two ends of the lower spring or brace B rest

on the journal-bearings of the upper roller D. The upper spring or brace A has an elastic body, G, which may be of India rubber, between each of its two ends and those of the lower spring or brace B. A compressing-screw, S, through the cross-beam M above, exerts a pressure equally on both the springs A and B, on a collar, C, beneath the shoulder formed by the screw-thread *t* on the spring A, and on the step *f* at the extended end *e* of the screw on the spring or brace B.

The apparatus being thus constructed and applied, the operation is that the compressing-screw S exerts an equal pressure, through both springs or braces A and B, on the bearings at both ends of the upper or movable roller A, which is almost rigid and unyielding at the same time, by means of the interposed elastic bodies G between the ends of the two springs or braces, with the lower brace capable of swiveling on the extended end *e* of the screw, midway between the two bearings. Any inequality or greater thickness of wringing material on either side of the swiveling-point will, in producing a greater separation of the rollers on one side, be resisted by the elastic force of the body of India rubber with the effect of an additional compressing force upon the thicker mass of clothing, while, at the same time, it permits the same to pass to avoid injury to the rollers or other parts of the machine.

What I claim is--

The combination and arrangement of the two springs or braces A B, with interposed elastic bodies G between their ends, and the compressing-screw S with the bearings of the movable roller D, substantially as described, and for the purpose of producing the effect specified.

ALLEN P. YOUNG.

Witnesses:

BENJ. F. THURSTON,
I. KNIGHT.