

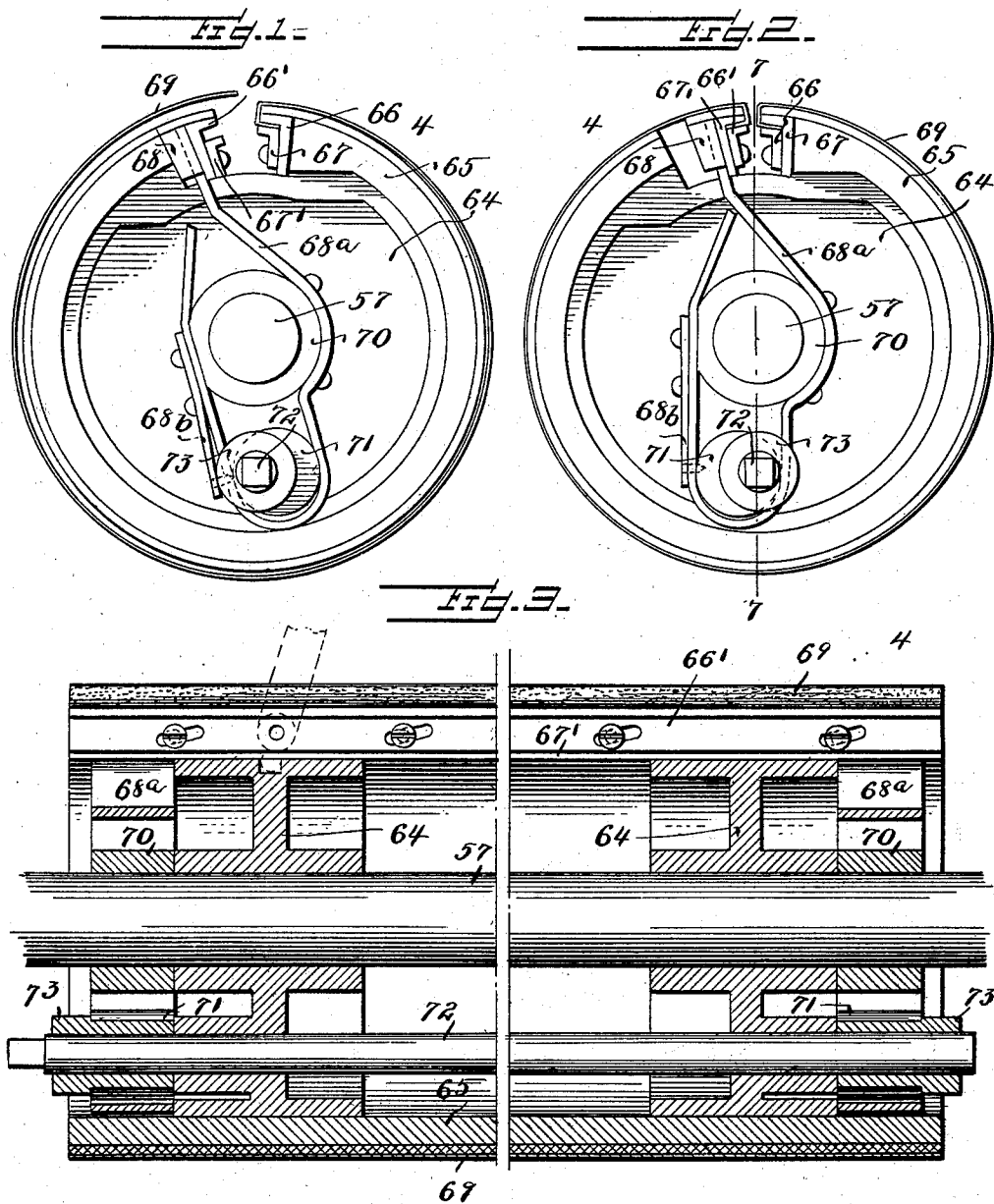
No. 657,358.

Patented Sept. 4, 1900.

J. L. PERRY.
SANDPAPERING MACHINE.

(Application filed Dec. 23, 1899.)

(No Model.)



Witnesses.

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JAMES L. PERRY, OF SMITHVILLE, NEW JERSEY, ASSIGNOR TO THE H. B. SMITH MACHINE COMPANY, OF SAME PLACE.

SANDPAPERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 657,358, dated September 4, 1900.

Application filed December 23, 1899. Serial No. 741,370. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. PERRY, a citizen of the United States, residing at Smithville, county of Burlington, and State of New Jersey, have invented a new and useful Improvement in Sandpapering-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object to provide an improved construction of drum for sandpapering-machines and improved means for quickly removing the sheet of sandpaper from and replacing it on the drum and retaining it on the drum under tension.

My invention can be best understood by reference to the accompanying drawings, in which—

Figures 1 and 2 are side elevations of the sandpaper-drum. Fig. 3 is a section on the line 7-7 of Fig. 1.

4 is the drum.

64 represents hubs on the drum-shaft, and 65 the periphery of the drum.

66 is an angle-iron secured to the periphery at one side of the cut-away portion. 66' is another angle-iron secured to a block 68, located within and toward the other side of the cut-away portion.

67 67' are angle-irons secured to the angle-irons 66 66', respectively, by means of bolts extending through slots in angle-irons 67 67' and entering angle-irons 66 66'. The sandpaper 69 extends around the drum-periphery. To fasten it on the drum, one end is placed between angle-irons 66 and 67, and by means of a wrench or other suitable tool the angle-iron 67 is moved laterally, which causes it, by reason of its slot-and-bolt connection with angle-iron 66, to also move toward the periphery, firmly securing that end of the sandpaper to the drum. The other end of the sandpaper is similarly secured between angle-irons 66' and 67'.

The block 68 is yieldingly supported by being fastened at each end to one end of a spring or tension device 68^a. Each spring is secured to a collar 70 on the drum-shaft, extends down around an eccentric 71, (on a shaft 72, having its bearings in the hubs of the drum,) and

thence up and secured to the opposite side of collar 70. It is obvious that by rotating the shaft 72 and eccentric 71 from the position shown in Fig. 1 to that shown in Fig. 2 the spring or yielding support 68^a and block 68 will be drawn into the position shown in Fig. 2, thereby drawing the sandpaper tightly around the drum.

73 is a collar fastened on each end of the shaft 72. Each spring is thus between one of these collars and the hub and will thereby be prevented from springing laterally. Any shrinkage of the sandpaper will increase the tension of the spring. Any stretching of the sandpaper will be taken up by the spring.

68^b is a catch to retain the spring 68^a and shaft 72 in the position shown in Fig. 2.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In a sanding-drum, the combination with the drum-shaft, of a hub, a periphery secured thereto, a portion of which is cut away clamping devices one of which is fixed and the other movable to and from the fixed clamping device, said movable clamping device being spring-supported and means to move said movable device positively toward the fixed device throwing the spring into tension.

2. In a sanding-drum, the combination with the drum-shaft, of a hub, a periphery secured thereto, a portion of which is cut away, clamping devices, one of which is fixed and the other movable to and from the fixed clamping device, means to move said movable clamping device to and from the fixed clamping device and a spring connection between the movable clamping device and said means whereby the movement toward the fixed clamping device throws the spring into tension.

3. In a sanding-drum, the combination with the drum-shaft, of a hub, a periphery secured thereto, a portion of which is cut away, clamping devices, one of which is fixed and the other movable to and from the fixed clamping device, a cam, a spring connection between the cam and the movable clamping device, the cam being adapted to act upon the spring connection to move the movable clamping device to and from the fixed clamping device.

4. In a sanding-drum, the combination with

the drum-shaft, of a hub, a periphery secured thereto, a portion of which is cut away, sandpaper engaging and fastening devices, one of which is secured at one side of the cut-away portion, the other of which is between the sides of the cut-away portion, a collar on said shaft, a tension device one end of which is connected with the last-named fastening device, said tension device being fastened to said collar at two points forming a loop between its points of attachment, an eccentric engaging said loop, and a shaft carrying said eccentric, substantially as described.

5. In a sanding-drum, the combination, with the drum-shaft, of a hub, a periphery secured thereto, a portion of which is cut away, angle-irons at one side of the cut-away portion, one of which is secured thereto, and has a bolt-and-slot connection with the other angle-iron, the sandpaper being adapted to be inserted between opposite flanges of the two angle-irons, whereby when the latter-named angle iron is drawn longitudinally said flanges are

brought toward each other to clamp the sandpaper, a block between the sides of the cut-away portion, angle-irons one of which is secured thereto and has a bolt-and-slot connection with the other angle-iron, the other end of the sandpaper being adapted to be similarly inserted and clamped between opposite flanges of the latter-named pair of angle-irons, a collar on said shaft, a tension device one end of which is connected with said block, said tension device being fastened to said collar at two points forming a loop between its points of attachment, an eccentric engaging said loop, and a shaft carrying said eccentric, substantially as described.

In testimony of which invention I have hereunto set my hand, at Smithville, New Jersey, on this 14th day of December, 1899.

JAMES L. PERRY.

Witnesses:

WM. S. KELLEY,
CHAS. H. CHICKERING.