

(No Model.)

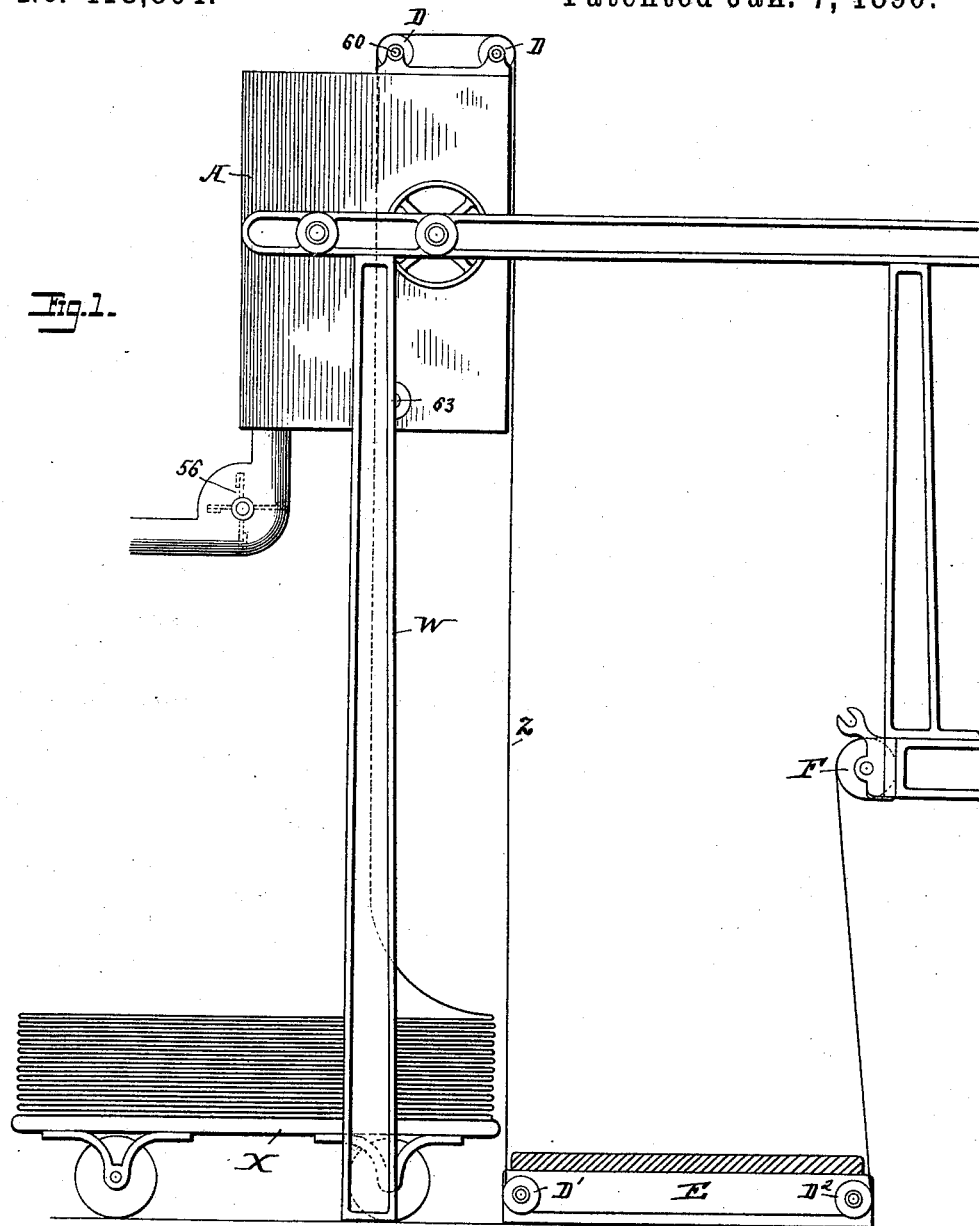
2 Sheets—Sheet 1.

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BRUSHING ATTACHMENT FOR CLOTH PRESSING MACHINES.

No. 418,804.

Patented Jan. 7, 1890.



Witnesses  
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*W. S. McArthur.*

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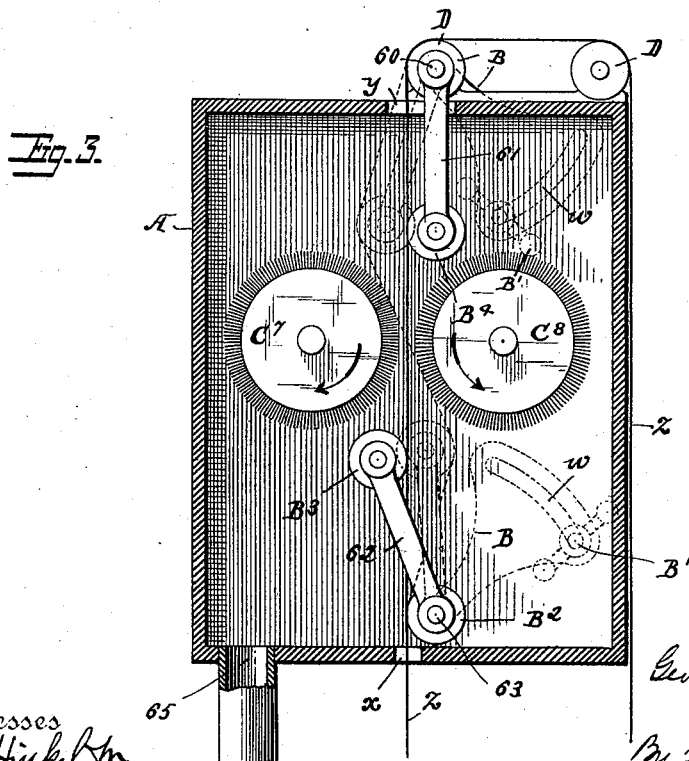
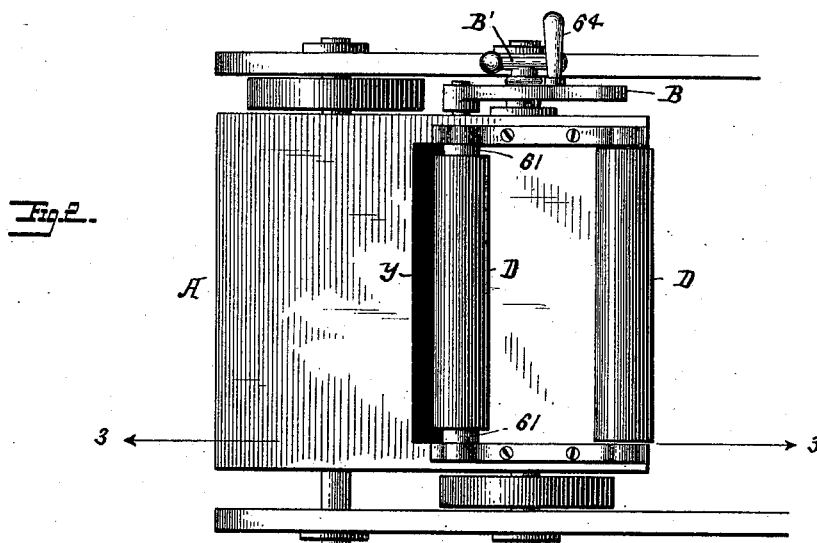
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# UNITED STATES PATENT OFFICE.

GEORGE W. MILLER, OF WOONSOCKET, RHODE ISLAND.

## BRUSHING ATTACHMENT FOR CLOTH-PRESSING MACHINES.

SPECIFICATION forming part of Letters Patent No. 418,804, dated January 7, 1890.

Application filed November 13, 1888. Serial No. 290,720. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. MILLER, a citizen of the United States, residing at Woonsocket, county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Brushing Attachments for Cloth-Pressing Machines, of which the following is a specification.

My invention relates to that class of machines in which cloth or other fabric is subjected to pressure for the purpose of finishing the same after one or both surfaces have been brushed; and my invention consists of means, fully set forth hereinafter, for preventing flock and other material removed from the fabric from being thrown back upon the fabric or upon parts of the machine, and for effecting this result without interfering with any movements of the operator in attendance upon the pressing-machine.

In the accompanying drawings, Figure 1 represents part of a frame of a cloth-press, together with the features involving my invention. Fig. 2 is a plan of part of the features shown in Fig. 1. Fig. 3 is a sectional elevation on the line 3 3 of Fig. 2.

W represents part of the frame of a cloth-press extended, so as to support in any suitable position in respect to the pressing mechanism a box or receptacle A. As shown, the said receptacle is closed, except where it is slotted for the passage of the fabric, and is supported in an elevated position at some distance from the floor and in front of the press, so as to permit a truck X, carrying the cloth to be pressed, to be brought to a position beneath a transverse slot *x* in the bottom of the box. In the top of the box, preferably directly above the slot *x*, is a corresponding slot *y*, both slots being of capacity to permit the passage of the cloth *z*, which is carried from the bundle upon the truck upward through the slots *x y*, over guide-rolls D D, and thence downward to other guide-rolls D' D<sup>2</sup>, arranged in a position to carry the cloth parallel and near to the floor to the front of the machine at the base thereof, from which it passes upward vertically to the usual friction-roll F of the machine.

In order to permit the elevated position of the box A, and yet conduct the cloth to the

roller F without interfering with the movements of the attendant or with his inspection of the parts of the machine adjacent to or above the roller F, the course of the cloth is directed by the guide-rolls, as above set forth, and a platform E (shown in section in Fig. 1) is arranged in position to extend over the rollers D' D<sup>2</sup> and over the cloth between the same, so as to support the attendant while engaged in operations with the machine. This arrangement has the further advantage of carrying the cloth both downward and upward in position to be inspected by the attendant twice before passing to the machine, so as to insure that any flaws or defects in the cloth shall not escape his observation.

It is common in cloth-presses to arrange the brushes in somewhat close proximity to the cylinder between the open frames of the machine. As a result, the flock and other matter to be removed by the brushes from the cloth is thrown in the form of very fine particles over the shafting, frames, bearings, &c., of the machine, and not only renders the same foul and dirty and gums up the bearings and increases the friction, but is also liable to be again deposited upon the face or back of the cloth before the same is pressed. In order to avoid these difficulties, I provide the box or receptacle A and arrange therein the brushes which act upon one or both faces of the cloth. Any suitable or desirable arrangement of brushes may be employed; but in the construction shown there are two brushes C<sup>1</sup> C<sup>2</sup>, arranged a short distance apart upon opposite sides of the vertical path traversed by the fabric Z, the brush-shafts being driven in any suitable manner to rotate the brushes in the directions pointed out by the arrows, Fig. 3.

In its normal position the fabric is not in contact with either of the brushes, and I therefore provide a guide or guides in the form of a roller or rollers B<sup>3</sup> B<sup>4</sup>, which may be adjusted so as to swing the cloth to one side or the other against either brush, or in some cases, as by the adjustment shown in dotted lines, Fig. 3, so as to be operated upon by both brushes. When two guide-rollers are employed, as shown, they are arranged upon opposite sides of the path of the fabric, and

the upper guide-roller B<sup>4</sup> is hung by arms 61 from a shaft 60, upon which turns freely the inner guide-roller D, and the lower guide-roller B<sup>3</sup> is hung between arms 62 upon a shaft 63, carrying a guide-roller B<sup>3</sup>, which maintains the fabric central with a slot x.

The shafts 60 63 may be rocked to change the positions of the guides and then secured in any suitable manner. Thus to the outer end of each shaft is secured a sector-arm B, having a slot w, curved to coincide with a circle having its center upon the axis of the shaft, and a set-screw B' passes through the slot, so as to clamp the arm B in any position to which it may be adjusted, or to release the arm and permit it to be swung to another position. Each arm B is provided with a handle 64, which is grasped by the operator swinging the arm.

By thus inclosing the cloth brushes in a practically tight receptacle the particles of flock and other materials removed by the action of the brushes, instead of being discharged into the room or thrown upon the parts of the press, are retained within the receptacle either until the completion of the operations upon the cloth or until they can be withdrawn through an outlet 65, connected with an exhaust-fan 56 or other exhausting apparatus.

Where it is desirable to have the brushes in closer proximity to the pressing devices, the box A may be arranged nearer the said devices and will conform in shape to the limits of the space which it must occupy.

Without limiting myself to the precise construction and arrangement of parts shown, I claim—

1. The combination of a receptacle through

which the cloth passes, brushes within the receptacle on opposite sides of the path of the cloth, two adjustable guide-rollers, one on opposite each of the faces of the cloth and one above and the other below the brushes, and means for adjusting the rollers, substantially as set forth.

2. The combination of a receptacle provided with slots through which a fabric is adapted to pass, brushes within the receptacle upon opposite sides of the path of the fabric, shafts supported adjacent to the slots in the receptacle, guide-rollers mounted on the shafts, arms secured to the shafts, guide-rollers hung in the said arms upon opposite sides of the fabric, and means for adjusting the said arms and the rollers carried thereby, substantially as set forth.

3. An elevated brushing-receptacle containing brushing-rollers interposed in the line of travel of the cloth between a source of supply and the cloth-feeding devices of a cloth-pressing machine, in combination with guide-rolls arranged to support and guide the cloth in a line extending through the box, thence downward adjacent to and along the floor and upward in front of the machine, a platform extending over the horizontal portion of the cloth, and the feeding devices of a cloth-pressing machine, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE W. MILLER.

Witnesses:

CHAS. E. BALLOU,  
A. J. PORTNER.