

No. 712,958.

Patented Nov. 4, 1902.

J. G. PETERSON.
BRUSH FOR FLOUR BOLTING MACHINES.

(Application filed Apr. 28, 1902.)

(No Model.)

Fig. 1.

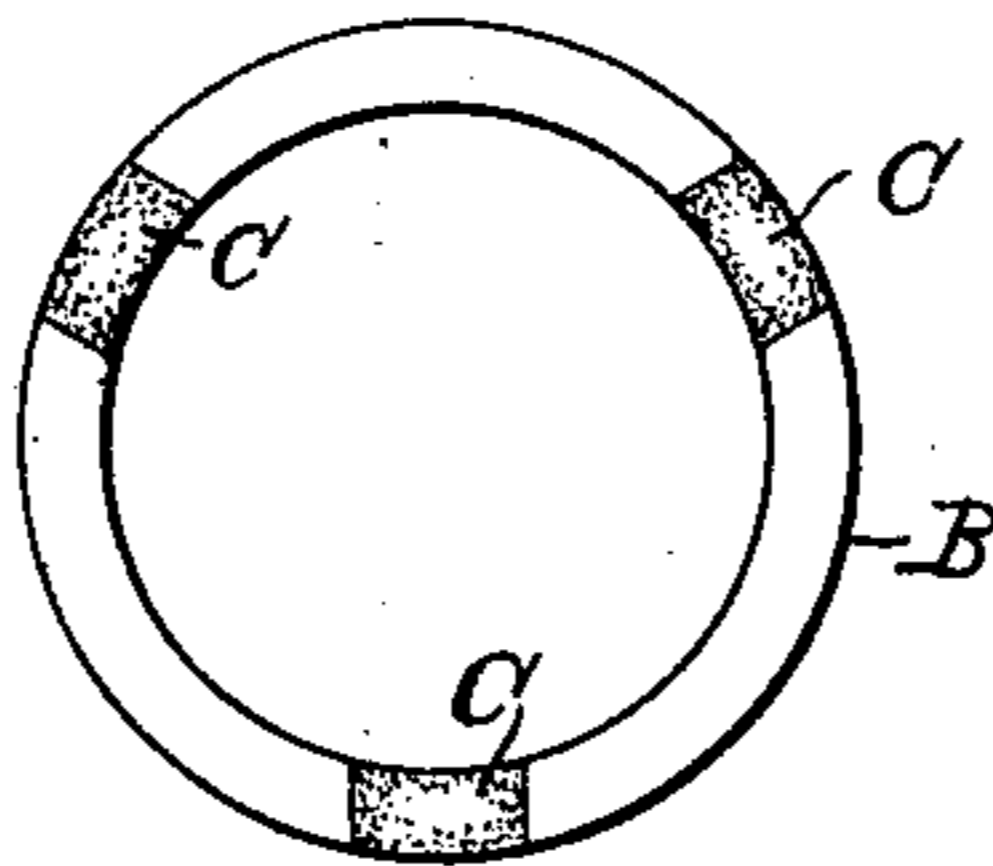


Fig. 2.

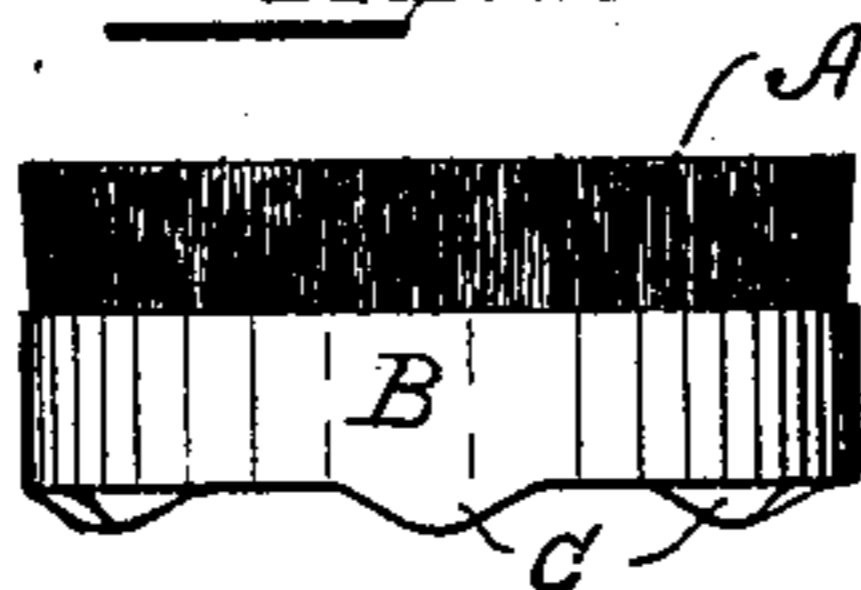


Fig. 3.

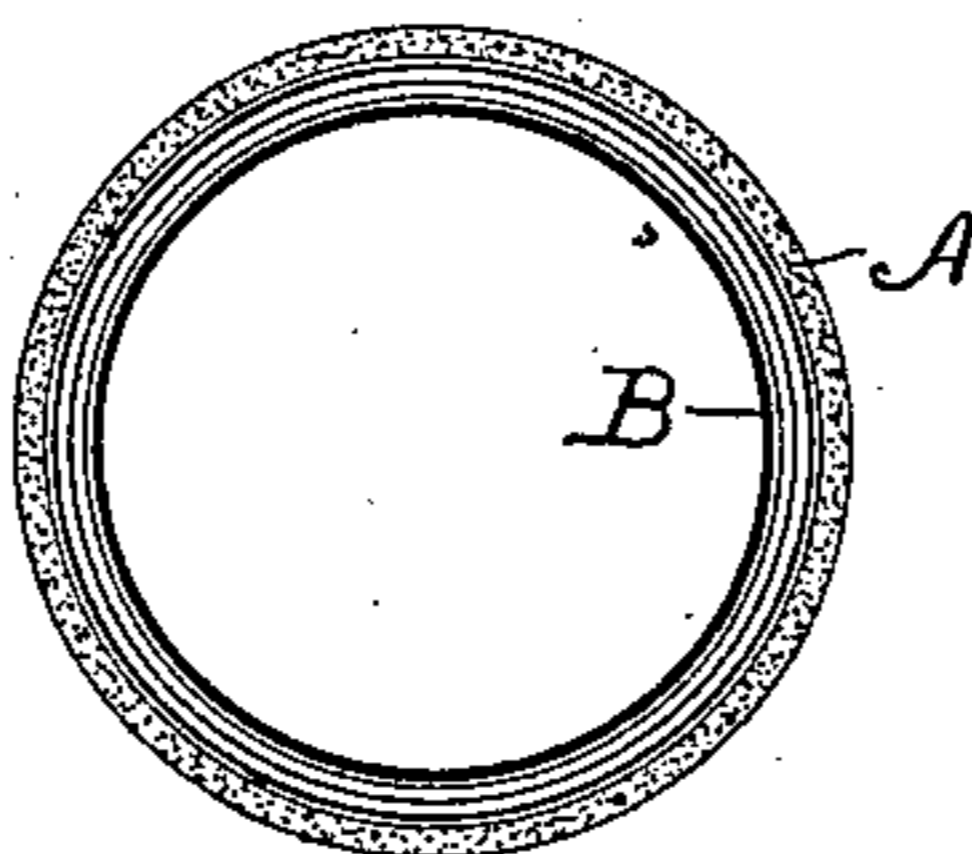


Fig. 4.

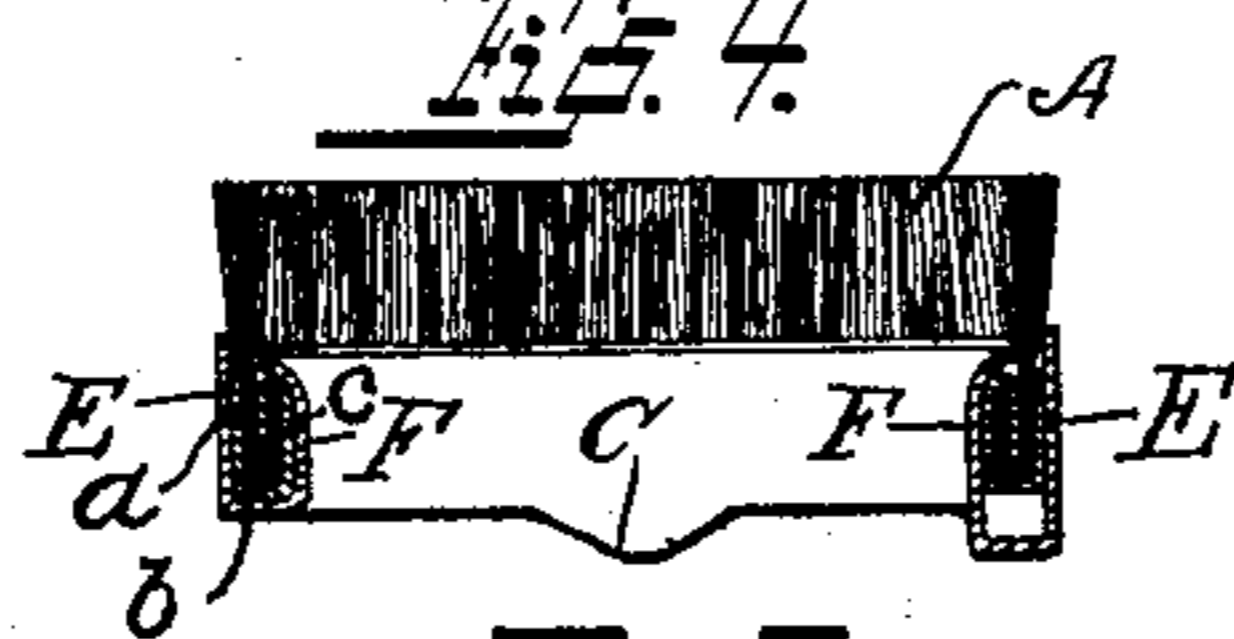


Fig. 5.

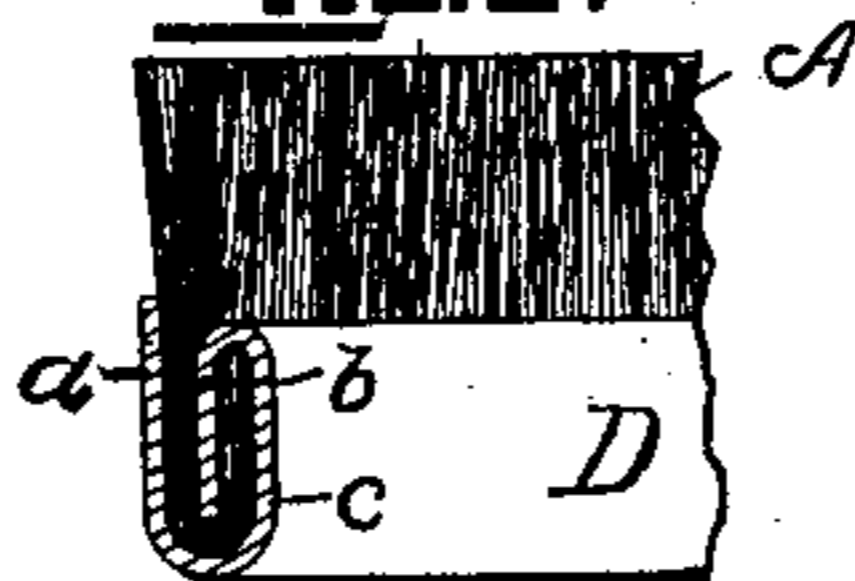


Fig. 6.



Witnesses:

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JOHN G. PETERSON, OF MILWAUKEE, WISCONSIN.

BRUSH FOR FLOUR-BOLTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 712,958, dated November 4, 1902.

Application filed April 28, 1902. Serial No. 104,967. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. PETERSON, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Brushes for Flour-Bolting Machines, of which the following is a specification.

My invention relates to improvements in that class of brushes which are used in connection with flour-bolting machines to prevent the meshes of the bolting-cloth from becoming obstructed with flour; and it pertains more especially to the peculiar construction of the metallic frame by which the bristles of the brush are held in place.

The construction of my improved brush is explained by reference to the accompanying drawings, in which—

Figure 1 represents a bottom view. Fig. 2 is a side view. Fig. 3 is a top view. Fig. 4 is a vertical section. Fig. 5 is a detail showing the preferred form of the clamping-collar by which the bristles are held in place preparatory to being placed in the exterior supporting-frame; and Fig. 6 represents a modified form of device for holding the bristles, in which wire is substituted for the metallic flange shown in Fig. 5 for binding and holding the bristles together.

Like parts are identified by the same reference-letters throughout the several views.

Heretofore it has been common in this class of brushes to support the bristles in a concavo-convex frame having a downward central projection which serves as a pivotal bearing upon which the brush is adapted to oscillate as it is moved across the surface of the screen of a bolting-machine with which it is adapted to be used. By my improvement the central part of the brush proper is open, the tuft of bristles A being supported in the annular frame B. The frame B is provided with one or more downwardly-projecting lugs or bearings C, which are adapted to rest upon the wire screen of the bolting mechanism, while the upper ends of the tuft of bristles A are adapted to move in close proximity to the surface of the flour-screen of the device in such a manner that as the supporting-lugs C slide upwardly and downwardly across the meshes of the screen as the same is shaken

the brush will thereby be thrown up against the undersurface of the flour-screen. While the desired oscillating movement may be attained by the use of a single lug C, experience has shown that the best results may be attained by using three lugs, as shown in Fig. 1.

The annular frame B is struck up from a single piece of sheet metal, as indicated in Fig. 4, when the tuft of bristles A, which has been secured between the folds of the clamping-collar D, is inserted between the exterior wall E and the interior wall F of the frame, when the upper edge of the wall F is forced outwardly against the bristles, whereby the bristles are held firmly in place and their projecting ends are caused to extend outwardly in line with the outer surface of the wall E, whereby as the brush is used the bristles are adapted to be brought in close contact with the inclosing frame of the bolting-machine in which the brushes are used.

In brushes as heretofore constructed the exterior surface of the frame has usually projected beyond the line of the bristles, whereby the tuft of bristles is prevented from coming in close contact with the frame, thereby causing quite a large area of surface of the flour-screen along the margin of the frame to remain unbrushed; but by the construction shown this defect has been entirely overcome.

In the form of clamping-collar shown in Fig. 5 attention is called to the fact that but a single fold or thickness *a* of metal terminating upwardly is brought upon the outside of the projecting ends of the bristles, while the folds *b* and *c* of said annular collar are brought upon the inner circle of the inner side of said bristles, whereby the projecting ends of the bristles are (as stated) brought against the outer wall E of the annular frame B.

In the modified form of device for holding the bristles (shown in Fig. 6) the tuft of bristles A is held in place by being wound between and intermeshed with the strands of wire H H in the ordinary manner.

It will be noticed that in the preferred form of clamping device for holding the bristles (shown in Fig. 5) the inner ends of the bristles terminate with an upward bend between the folds *b* and *c*, whereby when said folds *a*, *b*, and *c* are pressed together said bristles will be secured firmly in place.

It will of course be understood that when the brushes are used they are located, as stated, between a sheet of bolting-cloth above and a wire screen below, upon which wire screen the back or lower surface of the brush rests, and that the brushes are automatically moved along the surface of the bolting-cloth by the movement of the bolting-machine in the act of bolting flour.

10 While it is obvious that bristles are preferably used in forming the tuft A, if desired folds of canvas, soft leather, or other equivalent material may be substituted for the tuft of bristles without departing from the spirit of my invention.

15 In view of the fact that the bolting-cloth is formed of a delicate silk fabric which is comparatively expensive it is of great importance to make the brush as light as possible, so that it will be less liable to injure the cloth when acting upon it. This desired object is accomplished without diminishing the area or contact-surface of the tuft of bristles by making the bristle-supporting frame open at its center.

25 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a brush for cleaning bolting-cloth of flour-screens, the combination of an integrally-formed annular metallic frame; a separate collar, comprising a plurality of annular bristle-retaining walls; and an annular tuft of bristles located between, and held in place by, said annular walls. 30 35

2. In a brush for cleaning bolting-cloth of flour-screens, the combination of an annular metallic frame, U-shaped in cross-section and open at its center, provided on its lower edge with a plurality of downwardly-projecting bearings; a separate collar comprising a plurality of annular bristle-retaining walls; and an annular tuft of bristles secured together between the walls of said separate collar, said tuft of bristles and bristle-retaining walls being in turn clamped together and held in place by and between the folding walls of said annular metallic frame, all substantially as and for the purpose specified. 40 45

In testimony whereof I affix my signature 50 in the presence of two witnesses.

JOHN G. PETERSON.

Witnesses:

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