

W. D. & J. G. ANDERSON.
BRUSH CLEANER FOR SIEVES AND BOLTERS.
APPLICATION FILED MAR. 7, 1910.

971,715.

Patented Oct. 4, 1910.

Fig. 1.

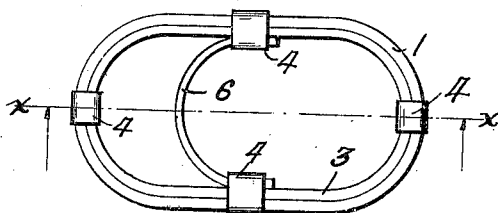


Fig. 2.

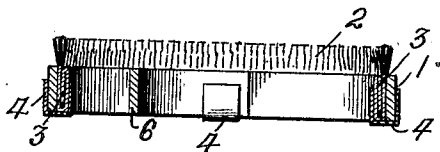


Fig. 3.

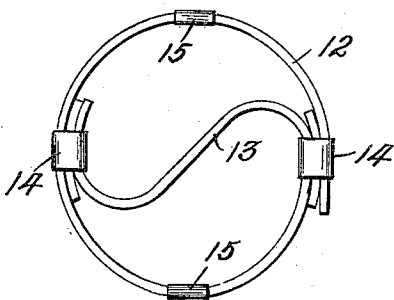
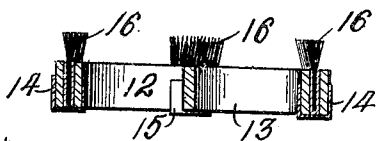


Fig. 4.



Witnesses

R. L. Farrington
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Fig. 5.

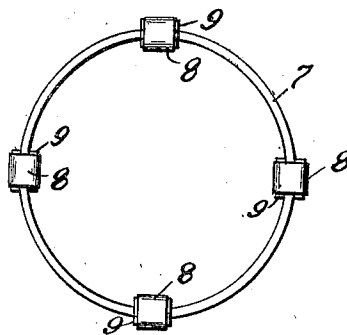


Fig. 6.

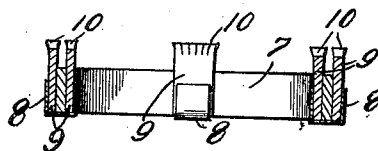
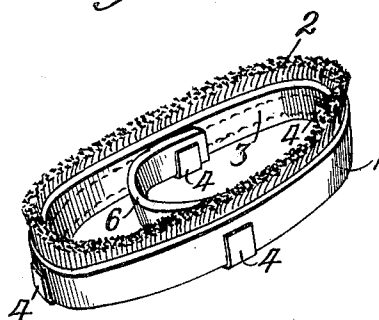


Fig. 7.



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BRUSH-CLEANER FOR SIEVES AND BOLTERS.

971,715.

Specification of Letters Patent.

Patented Oct. 4, 1910.

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To all whom it may concern:

Be it known that we, WILLIAM D. ANDERSON and JAMES G. ANDERSON, citizens of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Brush-Cleaners for Sieves and Bolters, of which the following is a specification.

Our invention relates to improvements in brush cleaners for sieves and bolters, and pertains to that class of devices, which are used in connection with flour bolting machines to prevent the meshes of the bolting cloth or sieve from becoming obstructed.

The object of our invention is to provide a frame for the brush or brushes, which will yield readily on striking the sieve frame and change its shape freely during the rapid vibrations to which such devices are subjected, so that it will not follow a uniform path over the surface of the sieve, but will be thrown in all directions and caused to traverse substantially the entire surface of the sieve or bolting cloth in irregular paths, the device having a non-metallic frame, which will not crystallize or break under repeated and rapid variations in the form thereof.

In the following description, reference is had to the accompanying drawings, in which—

Figure 1 is a view of a brush embodying our invention, as seen from the under side. Fig. 2 is a sectional view of the same, drawn on line $x-x$ of Fig. 1. Figs. 3 and 4 are views, similar to Figs. 1 and 2 respectively, but showing a modified form of construction. Figs. 5 and 6 respectively are also similar to Figs. 1 and 2, but showing a third modification. Fig. 7 is a perspective view of the preferred form shown in Fig. 1, with the bristles turned upwardly.

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

In Figs. 1 and 2 we have illustrated a frame 1, which, when at rest, has an oval form. This frame member 1 is composed of non-metallic and comparatively inelastic material preferably leather or soft raw hide and is provided with upwardly projecting bristles 2, which may, if desired, extend upwardly from all sides of the frame 1 forming a continuous marginal line or row of bristles, as shown in Fig. 7. These bristles may consist of the frayed edges of a strip of

fabric 3, such as mohair, the body of the fabric below the frayed edges being stitched to the frame member 1. The strip of fabric is preferably folded upon itself, preparatory to stitching it to the frame. It is also secured to the frame by metallic clips 4, U shaped, and arranged to embrace the lower margin of the frame 1 with the sides of the metallic clips serving as clamping members to bind the fabric 3 to the inner surface of the frame 1 at the points of clip engagement. As these clips securely fasten the strip 3 to the frame 1 at different points, it is not essential that the fabric should be stitched to the frame. The clips 4 not only secure the fabric 3 to the frame, but they also serve as bearing members, which support the frame from the surface of the bolting sieve. The clips 4 are preferably disposed symmetrically about the frame 1 and the sides of the frame are connected by a flexible stay 6, which also serves as a truss, and the ends of which are secured to the opposing walls of the frame, preferably by the clips 4. The stay 6 is adapted to prevent the frame 1 from assuming a true circular form under any conditions, we having found in practice that a circular brush frame will frequently travel repeatedly over the same path, striking the margin of the sieve frame at substantially the same points in traveling about such path or course. It is possible, however, to use the circular frame 7 shown in Figs. 3 and 4, by using material which possesses such flexibility and comparative inelasticity as to prevent it from retaining the circular shape when in use. This frame 7 is illustrated as provided with metallic clips 8, similar to the clips 4, and used not only as bearing members, but also to secure brushes 9 to the frame 7. These brushes 9 are illustrated as composed of leather strips, which extend upwardly from the frame 7 and have their upper ends slitted at 10 to increase their adaptability to serve as brushes.

Figs. 5 and 6 show a construction very similar to Figs. 3 and 4, the frame 12 illustrated in these views having a somewhat circular form, but one end of the leather strip composing the frame is extended in the form of an S-shaped truss 13, which crosses the space inclosed by the frame and is secured at its respective ends to metallic clips 14. In this construction, the metallic clips 14 located on opposite sides of the frame 12 are made of thicker material than the clips 15

located upon the band or frame 12 midway between the clips 14. With this construction, the frame will be supported in unstable equilibrium and will rock when subjected to the vibrations of the bolter sieve. This rocking movement assists in causing the frame to travel in an irregular path. In this construction also the bristles 16 constituting the brushes are stitched through the body of the frame 12 at those points in the frame, which are engaged by the clamping clips 14 and 15, said clamping clips supplying a binding pressure to the frame at these points, whereby the bristles are held in position.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A device of the described class, comprising a flexible non-metallic frame sufficiently inelastic to permit constant variations in outline when in use, and metallic bearing members embracing short portions of the under surface of the frame at separated points along its outer margin, and brushes clamped by said bearing members to the non-metallic frame.

2. A device of the described class, comprising a flexible non-metallic frame, metallic bearing members embracing the under surface of said frame, and brushes clamped by said bearing members to the non-metallic frame, and a flexible member extended horizontally across the central portion of the de-

vice and unconnected therewith except at its ends to form a flexible truss.

3. A device of the described class, comprising a continuous band of non-metallic material, metallic bearing members embracing short portions of the under surface of said band and supporting its outer margins at opposite sides of the frame, and brushes secured to said band by said bearing members and projecting upwardly therefrom.

4. A device of the described class, comprising an elongated frame of non-metallic flexible material, metallic bearing members embracing short portions of the under surface of said frame, brushes secured to said frame and projecting upwardly therefrom and a connecting piece secured to opposing sides of said frame and arranged to hold such sides apart and also to prevent the frame from assuming a circular form.

5. A device of the described class, comprising a frame of non-metallic flexible material, metallic bearing members embracing short portions of the under surface of said frame, and a strip of fabric secured to said frame with one margin projecting upwardly and frayed to form a brush.

In testimony whereof we affix our signatures in the presence of two witnesses.

WILLIAM D. ANDERSON.
JAMES G. ANDERSON.

Witnesses:

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LYMAN G. WHEELER.