J. P. N. ADAMS.

CARPET SWEEPER BRUSH.

APPLICATION FILED NOV. 27, 1917.

1,267,304. Patented May 21, 1918.

Fig. 1.

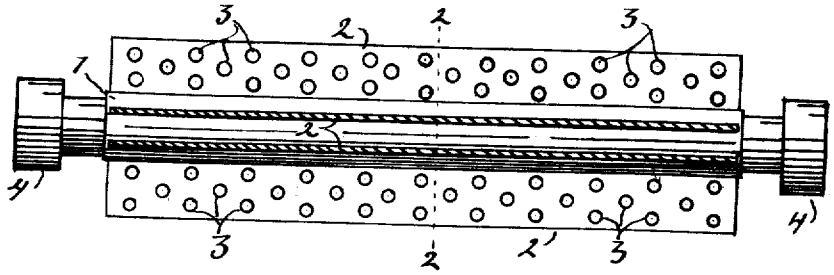


Fig. 2.

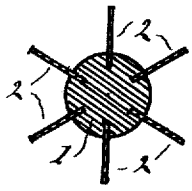


Fig. 4.

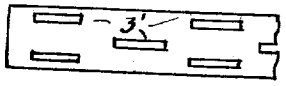


Fig. 5

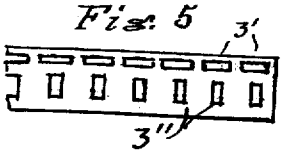
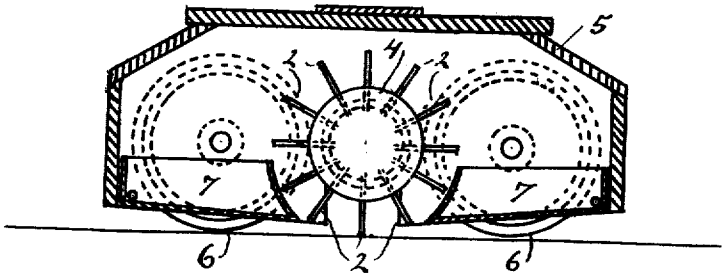


Fig. 3.



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CARPET-SWEEPER BRUSH.

1,267,304. Specification of Letters Patent. Patented May 21, 1918.

Application filed November 27, 1917. Serial No. 204,288.

To all whom it may concern:

Be it known that I, JAMES P. N. ADAMS, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweeper Brushes, of which the following is a specification.

My invention relates to improvements in carpet sweeper brushes, and its objects are: first, to provide a sanitary brush, or as nearly so as possible; second, to provide a brush that will not become entangled with hair, strings, ravelings, &c. when sweeping, and, third, to provide a brush that will not become heavily loaded with dust.

I attain these objects by the construction and arrangement of parts shown in the accompanying drawing, in which Figure 1 is a plan of my brush with two wings thereon shown in section to more fully disclose the construction of my completed wings. Fig. 2 is a transverse section of the brush, practically on the line 2—2 of Fig. 1. Fig. 3 is a transverse vertical section of the carpet sweeper case with my brush in place therein, showing its relative position with the dust pans. Figs. 4—5 show modified forms of openings in the wings.

Similar reference numerals indicate similar parts throughout the several views.

In the construction of this brush I dispense with the use of bristles in the brush and substitute some flexible sheet material, as rubber, in their place. This material is made in long narrow strips, as indicated at 2, placed in grooves in the roller 1, as indicated in Fig. 2, and are punctured with numerous holes, 3, so that currents of air may pass through the sheet material or wings 2. These holes are uniformly distributed, both longitudinally and laterally of the wings. This averts the danger of the air passing forcibly off of the edges of the wings, and fanning the dust into a thick cloud in the case 5, as would be the case if the perforations were not provided, with the result that instead of blowing the dust out from under the sweeper case, my brush will collect all dust and force it into the pans 7, more cleanly than with the use of an ordinary bristle brush. The uniformly smooth edges of the wings not only beat and loosen the dust in the nape of the carpet, but carry it uniformly into the pans.

My brush is made to revolve by the action of the wheels 6 upon the friction roller 4, on the brush roller, in the usual manner of operating carpet sweeper brushes.

In the construction of this brush any desired number of wings 2 may be used, but I seem to produce the best results with the use of six to eight wings.

It will be readily understood that it is not necessary to form round punctures in the wings, and that any other available form will answer, the desired result being to allow a large proportion of the air agitated by the wings, when revolving rapidly, to pass through the wings instead of passing off of the edges of the wings; as, for instance, oblong holes may be made longitudinally of the wings, as shown in Fig. 4, or crosswise of the wings, as in Fig. 5, or any other desired form or positioned holes that may be made available for the purpose stated, as indicated at 3′ and 3″.

An especially advantageous result growing out of this construction is the elimination of any possibility of insects getting into the cases and destroying the bristles, as frequently occurs with bristle brushes, especially when the sweepers are stored away in large quantities, in warehouses, on ship board, and in kindred places. These brushes, are, also, especially adapted for sweeping, and especially for washing varnished or waxed wooden floors, tile floors, and linoleums.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

In combination with a carpet sweeper brush roller, long, narrow, thin strips of flexible material secured at one edge to the roller and radiating therefrom, and provided with numerous uniformly positioned holes through them.

Signed at Grand Rapids, Michigan, November 21, 1917.

JAMES P. N. ADAMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."