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COMPLETE SPECIFICATION.

An Improved Cylinder or Rotary Brush for use in Finishing Boots and Shoes.;

I. ARTHUR JAMES THACKER, of the Firm trading as J. Thacker, of Nos. 3 and 5, Shenton Street, Leicester, in the County of Leicester, Findings Mcrchant and Shoe Mercer, being a communication from J. C. Ham and A. T. Condon, of The Condon Manufacturing Co., Belfast, Maine, one of the United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement: -

This invention relates to an improved cylinder or rotary brush for use in finishing boots and shoes and the invention consists essentially in forming the brush with strips of flexible material placed at intervals between the bristles preferably non resilient in character. The ends of the bristles projecting beyond the ends of the strips.

That this invention may be clearly understood a sheet of drawings accompanying

this specification, in which:

Figure 1 is an end elevation of the brush partially formed and with a portion

Figure 2 is a longitudinal section of the brush, and Figure 3 one of the bristles sections in perspective.

The bristles B are suitably secured in the brush and they have interposed 20 between them at intervals, strips of flexible material C which may be of chamois skin or other suitable material.

The material to be used for the strips should be thin and be as little resilient

as possible.

The strips C are preferably arranged parallel with the axis of rotation of the

brush, but they may be otherwise disposed as may be desired.

It will be seen in the drawings that the brush is made up of sections, each ofwhich is composed of a flat bunch of bristles to one side of which is secured the strip C, "Figure 3." The bases of the bristles are cemented to a transverse strip of leather board, card board or other suitable rigid-material e, the ends d of which 30 project beyond the sides of the section and these ends are reinforced by other thicknesses of similar material.

The strip C is cemented by its inner end to the base of the bristle section and according to the construction herein illustrated, the outer end does not extend to

the ends of the bristles.

A two part hub A constitutes the body of the brush and in each half section is 35 an annular groove into which fit the projecting ends d of the bristle sections. The two parts of the hub are fastened together by the screws a and they thus hold the bristle section firmly in place.

A brush constructed in this manner is much more durable than one composed

40 wholly of bristles.

The effect of the strips is to support the bristle sections, to prevent them from

[Price 8d.]

An Improved Cylinder or Rotary Brush for Use in Finishing Boots and Shoes.

spreading and from bending down on to the hub when an excess of pressure is exerted against, or placed on them. The said strips should be very flexible so as to yield readily when the bristles are pressed back by the work and with such strips the centrifugal force caused by the high revolution of the brush on its shaft will cause them to resist sufficiently the bending of the bristles and any resiliency 5 in the strips will make them too stiff and not sufficiently yielding.

The outer ends of the strips should be some distance back from the ends of the bristles so that the latter will bend over the ends of the strips, otherwise the

strips and not the bristles would do the work of the brush.

It will be well understood that this invention can be applied to brushes made of 10 hair or any such like material, and the term "bristles" is to be understood as including such material.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. The herein described cylinder brush having strips of flexible material placed at intervals between the bristles, the outer ends of the bristles extending beyond the outer ends of the strips.

2. A cylinder or rotary brush having strips of flexible material placed at intervals between the bristles, said strips extending transversely to the plane of rotation 20 of the brush, the outer ends of the bristles extending beyond the outer ends of the

strips, substantially as described.

3. A cylinder or rotary brush made up of a series of radial bristle sections extending transversely to the plane of rotation, and strips of flexible materials interposed between said sections, the outer ends of the bristles extending beyond the 75 outer ends of the strips, substantially as described.

4. A cylinder or rotary brush made up of a series of bristle sections, the base of the bristles in each section being cemented to a transverse strip of rigid material having projecting ends, a strip of flexible material cemented to the bristles at the base thereof, in combination with a two-part grooved hub adapted to engage 30 the said projecting ends, substantially as herein described and set forth.

the said projecting ends, substantially as herein described and set forth.

5. An improved cylinder or rotary brush for use at high speeds for use in finishing boots and shoes, having strips of thin, flexible and non resilient material placed at intervals between the bristles, substantially as hereinbefore described and

set forth.

Dated this 3rd day of March 1899.

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