

(No Model.)

H. A. WEBSTER.
ROTARY BRUSH.

No. 533,833.

Patented Feb. 5, 1895.

FIG. 1

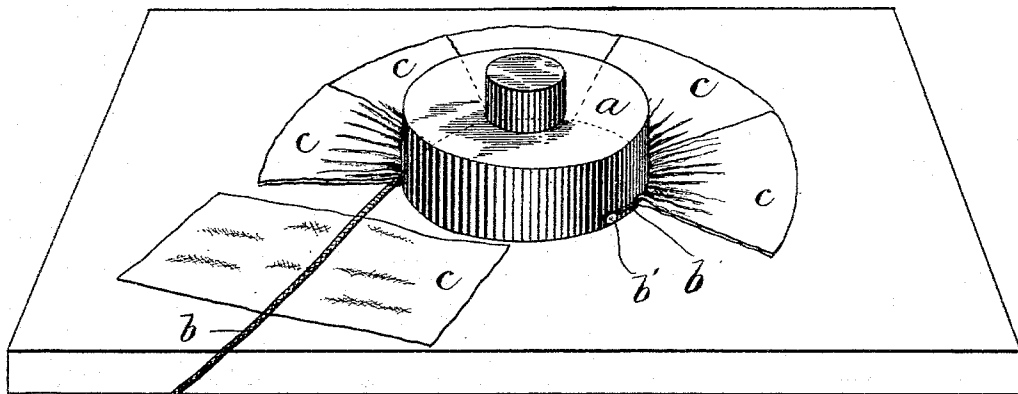


FIG. 2.

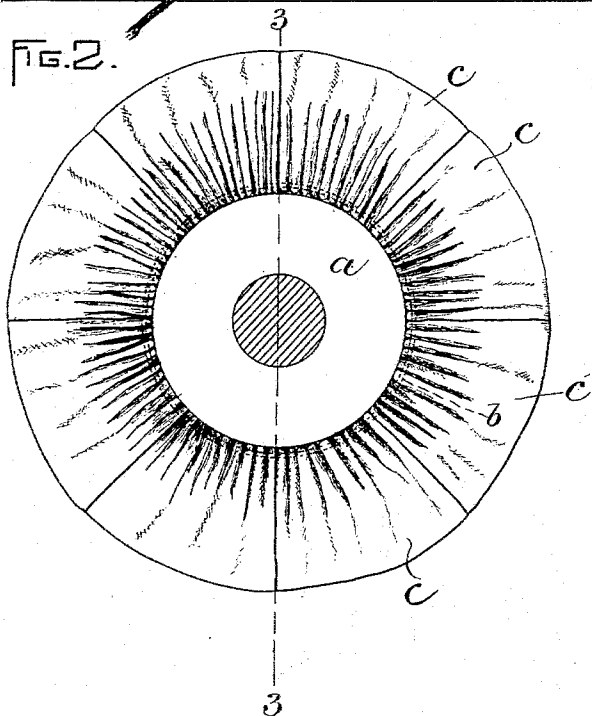
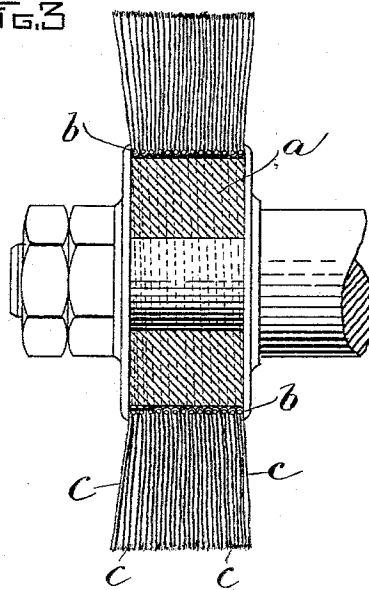


FIG. 3



WITNESSES:

H. Brower
A. D. Harrison

INVENTOR:

H. A. Webster
by Wright Brown & Family
Atty.

UNITED STATES PATENT OFFICE.

HAROLD A. WEBSTER, OF HAVERHILL, ASSIGNOR TO THE GLOBE BUFFER COMPANY, OF BOSTON, MASSACHUSETTS.

ROTARY BRUSH.

SPECIFICATION forming part of Letters Patent No. 533,833, dated February 5, 1895.

Application filed April 27, 1894. Serial No. 509,220. (No model.)

To all whom it may concern:

Be it known that I, HAROLD A. WEBSTER, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Rotary Brushes, of which the following is a specification.

This invention has for its object to provide a rotary brush adapted for cleaning and polishing parts of boots and shoes, and other articles, and it consists in a brush comprising the construction substantially as hereinafter described and claimed.

Of the accompanying drawings, forming part of this specification,—Figure 1 represents a perspective view of the hub, a portion of the ligature, and some of the strips, showing the manner of making the improved brush. Fig. 2 represents a side view of the brush, one of the end plates or collars being removed. Fig. 3 represents a section on line 3—3 of Fig. 2.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention I take a cylindrical core or hub *a*, which is preferably of wood, and attach to the periphery thereof one end of a flexible cord or ligature *b*, using any suitable fastening device, such as a tack *b'* driven into the hub and engaged with the ligature. I then fold or bend over the ligature a series of strips or pieces *c* of textile fabric, preferably thin woolen cloth, the central part of each strip bearing on the ligature. I arrange the strips edge to edge upon the ligature, and wind the latter helically upon the hub, thus securing the strips to the hub and causing them to stand out radially therefrom, large numbers of the strips being brought side by side by the winding operation, so that they collectively form a dense mass of radiating strips, the outer ends of which are exposed and constitute a soft, yielding brushing surface.

When the winding operation is completed, the other end of the ligature is permanently secured to the hub. I prefer to secure the convolutions to the hub by glue or cement applied to the ligature and to the portions of the strip in contact therewith as the winding progresses, thus preventing any possibility of the separation of the strips from the hub.

In applying the strips to the ligature, I crowd or pucker the portions lying on the ligature, to reduce the width of the strips at their inner portions. This puckering or crimping of the strips at their doubled inner portions, not only permits perfectly rectangular pieces to be used, but also renders the portions of the completed brush that are near the hub so dense that when an article to be polished is pressed hard against the brush, there can be no contact of said article with the hub or the side flanges usually employed. The rectangular pieces or flaps can readily be cut so that there will be no waste of material. In the completed brush, the flaps will collectively form a practically continuous brushing surface the edges of which are not liable to fray out at one point more than another, owing to the fact that each piece is originally rectangular so that its edges which form the brushing surfaces are parallel with the threads running in one direction.

I claim—

1. A rotary brush composed of a rigid core or hub, a flexible ligature secured to said hub and helically wound thereon, and a series of rectangular strips of textile fabric bent around said ligature and placed edge to edge thereon and crimped or puckered at their inner portions, said strips being held by the ligature in a helical series radiating from the hub and collectively forming a brush the free ends of the strips constituting the exposed surface of the brush, as set forth.

2. A rotary brush composed of a rigid core or hub, a flexible ligature secured to said hub and helically wound thereon, and a series of rectangular strips of textile fabric bent around said ligature and placed edge to edge thereon and crimped or puckered at their inner portions, the ligature and strips being glued or cemented to the hub, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 21st day of April, A. D. 1894.

H. A. WEBSTER.

Witnesses:

C. F. BROWN,
A. D. HARRISON.