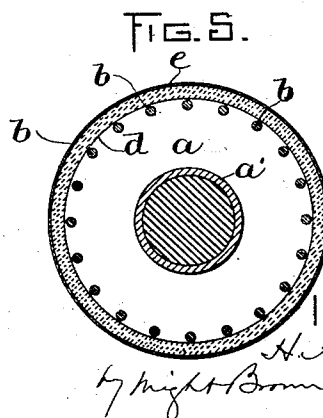
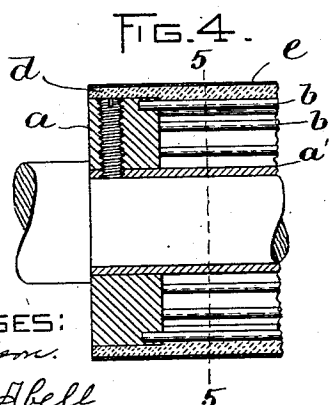
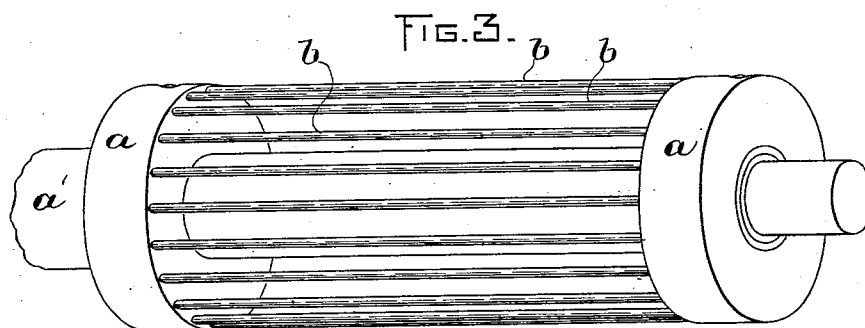
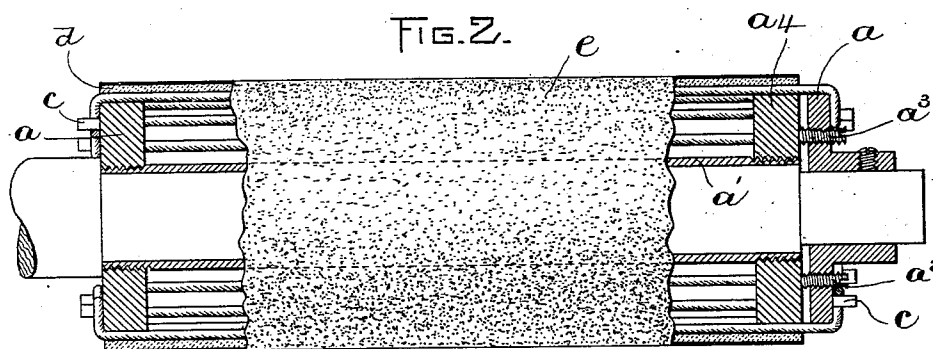
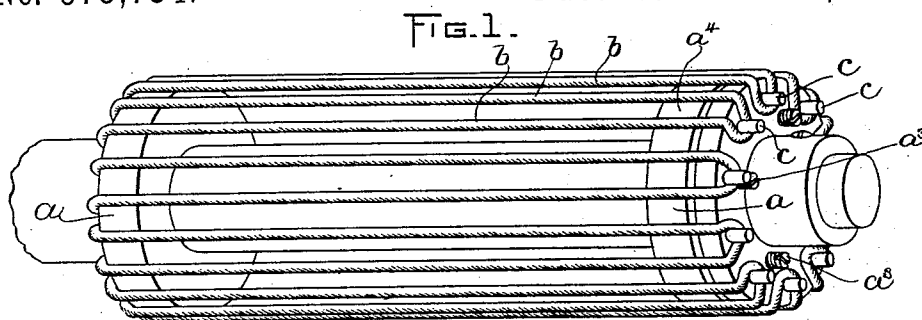


(No Model.)

H. A. WEBSTER.
BUFFING OR POLISHING DEVICE.

No. 573,734.

Patented Dec. 22, 1896.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HAROLD A. WEBSTER, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR TO
GEORGE H. P. FLAGG, TRUSTEE, OF BOSTON, MASSACHUSETTS.

BUFFING OR POLISHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 573,734, dated December 22, 1896.

Application filed October 16, 1895. Serial No. 565,845. (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 Buffing or Polishing Devices, of which the following is a specification.

This invention relates to rotary cushions or flexible supports adapted to yieldingly sustain a cover adapted for polishing or for buffing purposes, the cover being of some suitable fabric, such as silesia for polishing and of sandpaper or the like for buffing.

The invention has for its object to provide a simple and effective rotary support for a polishing or a buffing cover adapted to be distended by centrifugal force and thus exert an outward yielding pressure upon the cover when the appliance is in operation.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a rotary support or cushion embodying my invention. Fig. 2 represents a sectional view showing a portion of the cover in place upon the support. Fig. 3 represents a perspective view showing a different construction embodying the same invention. Fig. 4 represents a sectional view of a portion of the construction shown in Fig. 3. Fig. 5 represents a section on line 5 5, Fig. 4.

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

In carrying out my invention I provide a holder adapted to be rotated on a suitable axis, said holder, as here shown, comprising two collars *a a*, mounted upon a hub or shaft *a'*, to which rotary motion may be imparted by any suitable means.

b b b represent flexible strips or cushion members extending lengthwise of the said holder and secured at their ends to the holder, their intermediate portions being free, so that they can bulge or be deflected outwardly by centrifugal force when the appliance is rapidly rotated.

In Figs. 1 and 2 I show the strips *b* as parts of a continuous cord which extends back and

forth from one head *a* to the other around suitable studs or bearings *c c*, formed on or attached to said heads. In Fig. 3 I show the strips *b* as made in independent pieces, each being preferably a slender rod of steel or other suitable metal, the end of which may be engaged with the heads or collars *a a* in any suitable way.

d represents a tube or sheath which is placed upon the members *b* and encircles the same to prevent the strips from cutting into or indenting the working cover, hereinafter described, when pressed outwardly by centrifugal force. Said tube may be of any suitable material, such as canvas or other cloth; or, if desired, leather may be employed.

e represents the acting or working cover, which is formed to extend over the yielding surface backed by the strips *b*. Said cover may be of silesia for polishing purposes and of sandpaper for buffing purposes. It may be of any suitable form and secured to its support in any suitable way.

When the cover is in place and the appliance is rapidly rotated, the tendency of the flexible strips or members *b* to fly outwardly by centrifugal force causes them to exert a constant outward yielding pressure upon the cover and thus properly support the same.

When the appliance is constructed as shown in Figs. 1 and 2, the continuous cord forming the members *b* may be tightened by adjusting one of the heads, said head having adjusting-screws *a³*, bearing on a supplemental head *a⁴*, as shown in Fig. 2.

I claim—

1. An appliance of the character specified, comprising a rotary holder and flexible longitudinal strips or members arranged substantially parallel with the axis of the holder and secured at their ends thereto, said strips collectively constituting a cushion or support adapted to be distended by centrifugal force.

2. An appliance of the character specified, comprising a rotary holder having at its end portions two series of bearings, and a continuous cord or strip of flexible material engaged with said bearings and extending lengthwise of the holder from one series of bearings to the other, said continuous strip forming a series of parallel strips collectively

constituting a cushion or support adapted to be distended by centrifugal force.

3. An appliance of the character specified, comprising a rotary holder, flexible longitudinal strips or members arranged substantially parallel with the axis of the holder and secured at their ends thereto and also adapted to be distended by centrifugal force, and a cover-protecting tube or sheath placed upon said strips.

4. An appliance of the character specified, comprising a rotary holder, flexible longitudinal strips or members arranged substantially parallel with the axis of the holder and secured at their ends thereto and also adapted to be distended by centrifugal force, a cover-protecting tube or sheath placed upon said strips, and a working cover placed upon said sheath.

5. An appliance of the character specified, comprising a rotary holder having at its end portions two series of bearings, and a continuous cord or strip of flexible material engaged with said bearings and extending lengthwise of the holder from one series of bearings to the other, said continuous strip forming a series of parallel strips collectively constituting a cushion or support adapted to be distended by centrifugal force, and means for tightening said cord.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 9th day of October, A. D. 1895.

HAROLD A. WEBSTER.

Witnesses:

C. F. BROWN,

A. D. HARRISON.