F. M. LEVETT.

BUFFING OR POLISHING WHEEL.

APPLICATION FILED MAY 15, 1908.

945,177. Patented Jan. 4, 1910.

Fig. 1.

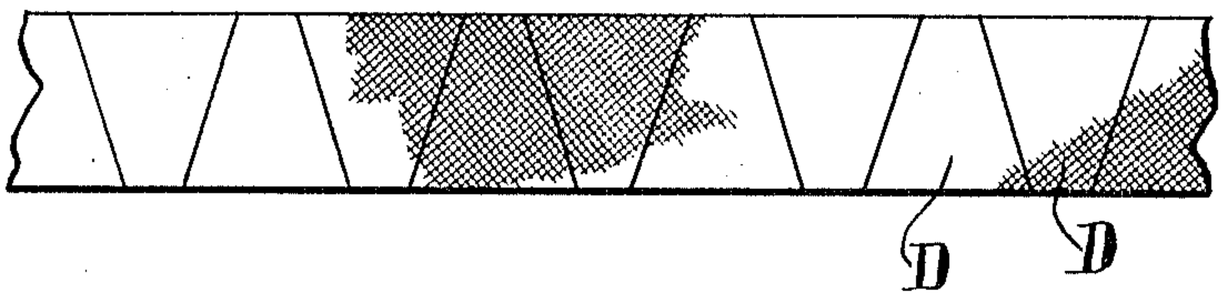


Fig. 2.

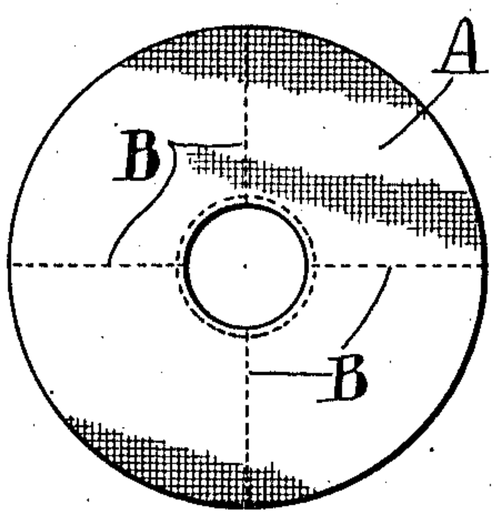


Fig. 3.

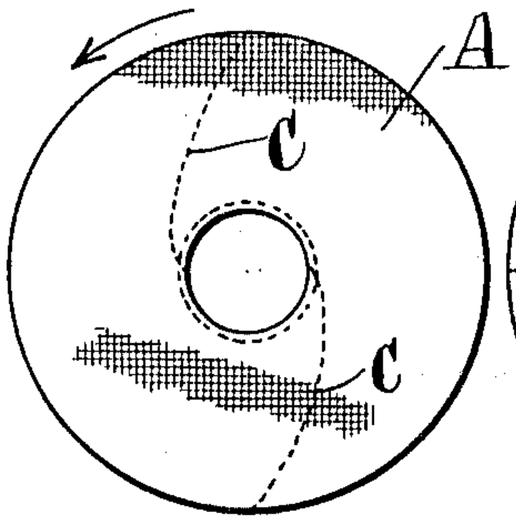


Fig. 4.

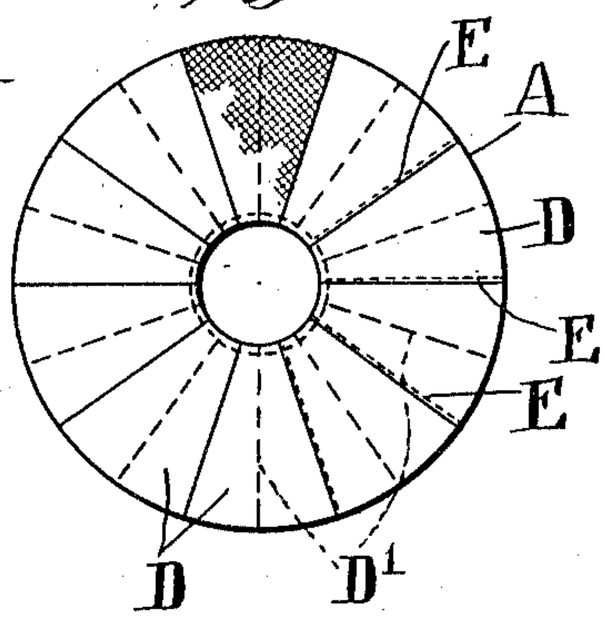


Fig. 5.

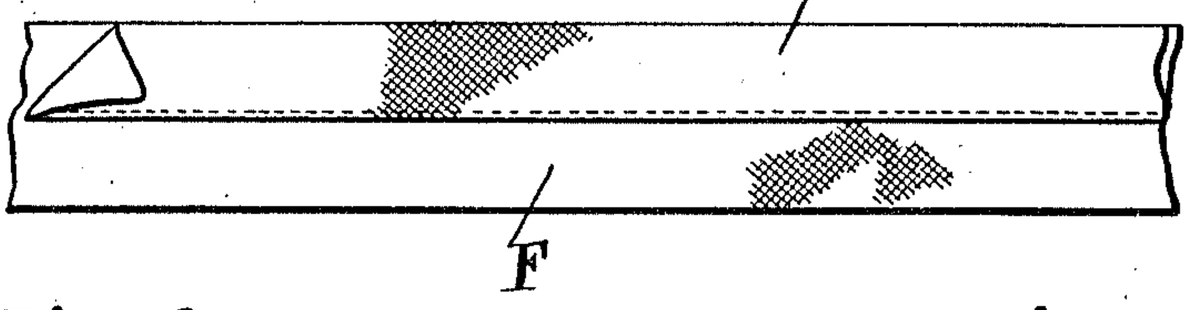


Fig. 6.

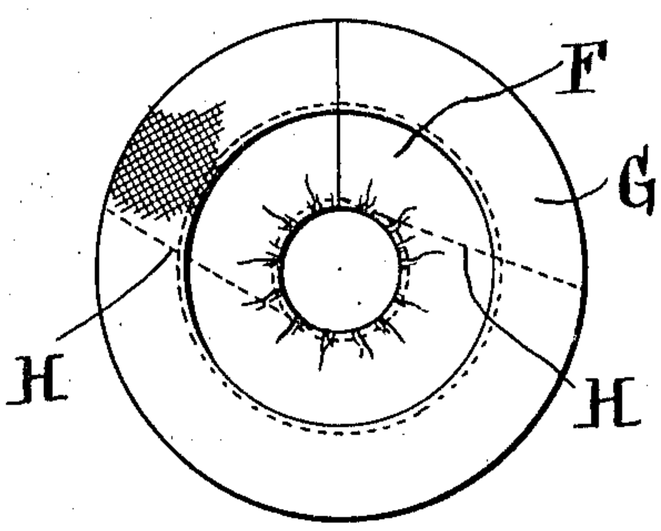


Fig. 8.

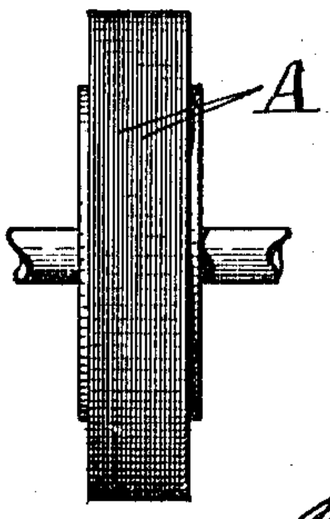
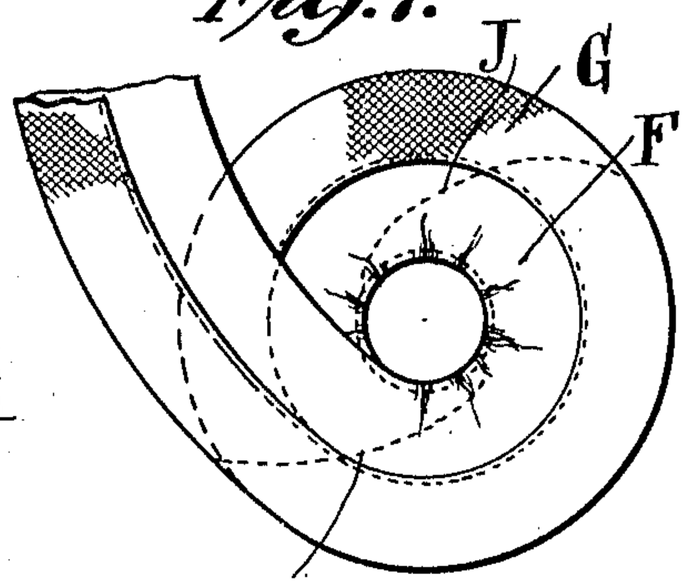


Fig. 7.



Attest:

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UNITED STATES PATENT OFFICE.

FRANK M. LEVETT, OF NEW YORK, N. Y.

BUFFING OR POLISHING WHEEL.

945,177. Specification of Letters Patent. Patented Jan. 4, 1910.

Application filed May 15, 1908. Serial No. 432,999.

To all whom it may concern:

Be it known that I, FRANK M. LEVETT, a citizen of the United States, and resident of the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Buffing or Polishing Wheels, of which the following is a specification.

This invention relates to buffing or polishing wheels made of cloth or other textile fabric and the objects of the invention are to provide buffing or polishing wheels formed of a plurality of layers of pieces of cloth which are sewed together on lines extending outward at different angles from at or near the center of the wheel so as to provide pockets which are adapted to receive and hold a buffing composition such as rouge or other compound employed in buffing or polishing.

Further objects of the invention are to provide a buffing or polishing wheel formed of a plurality of layers of cloth which are cut on the bias so that the peripheral edge of the wheel is not liable to fray or unravel, thus insuring the uniform wearing of the wheel.

Referring to the drawings: Figure 1 is a plan view of a strip of bias cut fabric from which the wheel is formed either by cutting the same into pieces or spirally winding the same into a desired number of turns; Fig. 2 is a plan view of one of the pieces of fabric cut in the shape of a disk and showing one form of outward stitching; Fig. 3 is a plan view showing another form of outward stitching; Fig. 4 is a plan view showing a disk made up of a plurality of keystone pieces of fabric, each of which are cut on the bias; this figure also shows another form of outward stitching; Fig. 5 is a plan view of a strip of bias cut fabric to which is sewed a narrower strip of fabric similarly cut; Fig. 6 is a plan view of one of the strips shown in Fig. 5 made into a disk; Fig. 7 is a plan view of one of the strips of bias cut fabric shown in Fig. 5 bent into spiral form to make a plurality of superposed disks; Fig. 8 is an end view of a buffing wheel made up of a plurality of disks of fabric secured together.

In the drawings, A designates a single piece of fabric cut in the form of a disk and B designates the outward stitching used in sewing a plurality of pieces A together so as to form pockets on the periphery of the pieces A adjacent the stitching B. It is usually customary to sew the pieces A together in sets of from two to four pieces and then to fasten a plurality of these sets together to form a buffing wheel as shown in Fig. 8. The lines of stitching may be made to coincide with each other so that the pockets formed on the periphery of the wheel will all be in line, but if desired the lines of stitches on the different sets of pieces may be spaced apart at different intervals so as to distribute the pockets along the surface of the periphery of the buffing wheel. As shown in Fig. 2 the stitches B are made on lines radiating from the center so as to form right angle pockets into which the polishing compound accumulates.

Instead of stitching the sets of pieces A on radial lines B, the same may also be stitched on the curved line C so that when the same is rotated in the direction of the arrow, the polishing material will be held in the pockets formed at the end of the stitching C on the periphery of the disk, but not to such an extent as is possible in radial stitching as shown in Fig. 2. This curved or tangent stitching prevents small objects, being polished, from catching in the pockets on the periphery of the wheel as often happens when the stitching is made as shown in Fig. 2. If on the contrary the pieces A in Fig. 3 are rotated in a direction opposite to the direction of the arrow, a great deal of polishing material is held in the pockets and this is very advantageous when it is desired to polish large objects which are not apt to catch in the pockets.

In Fig. 4 is shown a plurality of keystone pieces D fitted together and sewed as shown at E so as to form a plurality of pockets on the periphery of the disk, each disk of pieces D being overlapped as shown in dotted lines D′ in the figure. The keystone pieces D are preferably all cut from a bias cut strip of fabric as shown in Fig. 1 so that the peripheral edge of the disk is not liable to fray or unravel, thus insuring uniform wear of the disk.

Instead of making the disk A of a plurality of keystone pieces D, the same may be made of a single strip of fabric F which is cut on the bias and gathered as shown in Fig. 6, to make a complete disk out of one piece. In order to make the disk of uniform thickness on the inner and outer portions, a strip of similar material G is sewed

on the outer edge of the strip F so as to compensate for the extra thickness made at the center of the disk in gathering the fabric.

In order to make separate disks as shown in Fig. 6, the strip of fabric F may be wound spirally to the total thickness of the wheel as shown in Fig. 7.

In Fig. 6 the disk is sewed on the tangential lines H and in Fig. 7 the disk is sewed on the curved tangential lines J similar to that shown in Fig. 3, it being immaterial how many of these disks are sewed together, depending largely upon the kind of polishing for which the wheel is required.

The disks may all be sewed together by means of concentric rows of stitching so as to suitably hold the same together.

What I claim is:—

1. A buffing or polishing wheel made of strips of woven fabric material, the strips being gathered or plaited around the hub or center of the wheel, and filling strips of woven material arranged on the outer portions of said other strips to compensate for the extra thickness caused by gathering.

2. A buffing or polishing wheel made of strips of woven fabric material cut on the bias, said strips being gathered or plaited around the hub or center of the wheel and sewed on lines radiating from the middle portion of said strips of woven fabric material to the outer edge thereof.

3. A buffing or polishing wheel made of woven fabric material, sewed on curved lines radiating from the middle portion of said woven fabric material to the outer edge thereof.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK M. LEVETT.

Witnesses:

LEO J. MATTY,

FRANK E. RAFFMAN.