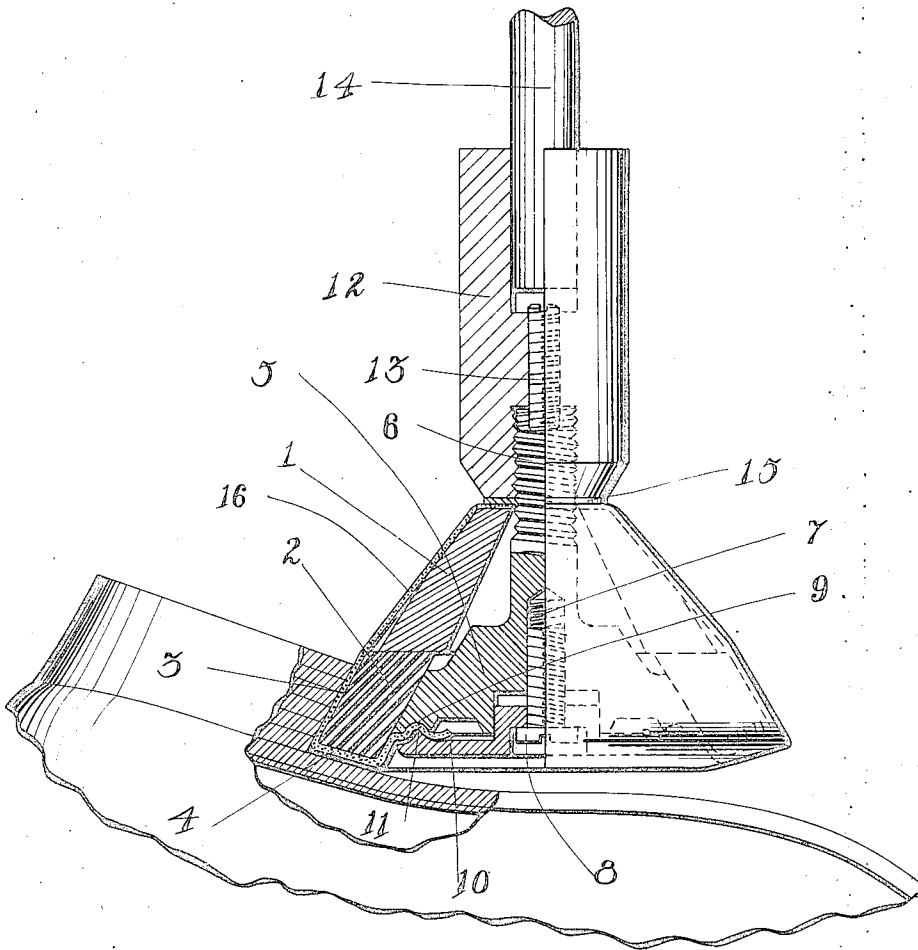


J. GOULDBOURN.
BURNISHING TOOL.
APPLICATION FILED APR. 17, 1916.

1,288,561.

Patented Dec. 24, 1918.



INVENTOR
Joseph Gouldbourn
By his Attorney,
Nelson & Howard

UNITED STATES PATENT OFFICE.

JOSEPH GOULDBOURN, OF LEICESTER, ENGLAND, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A COR-
PORATION OF NEW JERSEY.

BURNISHING-TOOL.

1,288,561.

Specification of Letters Patent. Patented Dec. 24, 1918.

Application filed April 17, 1916. Serial No. 91,649.

To all whom it may concern:

Be it known that I, JOSEPH GOULDBOURN, a subject of the King of England, residing at Leicester, Leicestershire, England, have
5 invented certain Improvements in Burnishing-Tools, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like
10 parts in the several figures.

This invention relates to tools for burnishing parts of boots and shoes. In machine finishing of boots and shoes difficulty has
15 been experienced heretofore in properly burnishing that portion which lies at the junction of the heel breast and the shank. It is the object of my invention to provide a burnishing tool of simple and economical
20 construction which shall be capable of producing an improved quality of work and whereby difficulties heretofore experienced may be obviated.

A feature of my invention is a novel burnishing tool having an annular base member
25 and a cover adapted to be drawn over and into said base member whereby a smooth hard burnishing surface is produced.

This and other features of the invention, comprising certain arrangements and combinations of parts, will be described in the
30 following specification and pointed out in the claims.

In the drawing which shows a preferred embodiment of the invention, a frusto-conical member 1 is formed of wood or other
35 rigid material and a base portion 2 of india rubber or like resilient material is mounted upon it. The element 2 has two working surfaces 3 and 4 both inclined to the axis of rotation of the tool for a purpose which will
40 be described. The members 1 and 2 are hollow in order to receive a clamping member as shown.

This clamping member comprises a portion 5 having a threaded shank 6 and tapped
45 at 7 for the screw 8. It has an annular depression 9 in its outer end and carries a cap 10 having a lip 11 adapted to enter the annular depression 9. The screw 8 draws the cap 10 firmly into clamping position
50 upon the member 5. The shank 6 projects through the open end of the member 1 and screws into a tapped hole in the end of a member 12 which is tapped for a set screw

13 and is adapted to be mounted in any convenient way upon the rotating shaft 14 which is power driven in any desired way. A washer 15 is mounted upon the shank 6 between the members 1 and 12.

Knitted or woven fabrics as covers for
60 burnishing tools are liable to suffer considerably from abrasion and wear and I have found that leather or similar material, particularly when in the form of a continuous sheet and preferably merely tightly
65 strained over the supporting members 1 and 2, forms a very effective burnishing cover. The cover 16 is formed of a sheet having a central orifice through which the shank 6 passes and is preferably subjected to
70 some preliminary molding operation which roughly forms it to the shape which it will take up when on the tool. The margin of the sheet is preferably slit to facilitate plaiting into the clamp and is turned over
75 the base of the conical member 2 and inserted between the cap 10 and the clamping member 5. The screw 8 is then tightened to clamp the cover 16 firmly between these
80 two members while the other end of the cover rests between the washer 15 and the member 1. The relative rotation of the member 12 and the screw 6 will draw the clamp 5 into the cone, stretching the cover
85 16 over the members 1 and 2 and at the same time expanding the member 2, whereby a smooth, hard and yet resilient burnishing surface is obtained at 3 and 4. The screw 13 is set up against the shank 6 when the cover has been properly adjusted in order
90 to retain it properly in position.

The corner formed by the heel breast and the shank of the shoe will be applied to the edge of the tool as shown and the sharp resilient corner of the tool will fit into the
95 sharp corner on the shoe and burnish it. It will be noticed that the surfaces 3 and 4 are set at such an angle with the axis of rotation of the tool that the burnishing of the corner between the heel breast and the shank is not
100 interfered with by contact between the fore part of the shoe and the tool.

It is a particular advantage of the arrangement described that the edge of the tool between the surfaces 3 and 4 retains its
105 sharpness to a very marked extent in use and does not lose its form and therefore its power of entering into and satisfactorily

burnishing the angle in question until the cover is practically worn through.

Having described my invention, what I claim as new and desire to secure by United States Letters Patent is:—

1. In a burnishing tool, an annular base member, a burnishing cover for said member, means for positively holding one part of said cover and for positively drawing an edge of said cover into the base member whereby said cover is positively stretched over said base member.

2. In a burnishing tool, a base member formed of solid but resilient material, and a tubular cover for said member and means for positively stretching said cover parallel and transverse to the axis of the tubular member over said base member.

3. In a burnishing tool, a base member composed of resilient material, and a cover for said base member and means for stretching said cover over said base member in one direction and for expanding said base member within said cover in a direction substantially perpendicular to the first mentioned direction.

4. A burnishing tool comprising an annular resilient base, and an annular cover and means for gripping one edge of said cover and for gripping and tensioning the other edge of said cover whereby said cover is stretched over said base.

5. A burnishing tool comprising a substantially conical base member, a cover, means for clamping said cover at the apex of said base member and for drawing said cover radially over the base of the conical member toward the center of said conical member.

6. A burnishing tool comprising an annular substantially conical base, a clamping member having a shank mounted in said base, a cover for said base arranged to be gripped by said clamp and to extend to the apex of the cone, and means for drawing said clamping member into said base member and for clamping said cover to said apex.

7. A burnishing tool comprising a sharp edged, resilient ring, and means for holding one edge of a cover and for drawing said cover over said ring and expanding said ring within said cover to stretch the cover, whereby a sharp edged, firm, resilient burnishing surface is produced.

8. In a burnishing tool, an annular base member formed of resilient material, a cover for said member, and means for stretching the cover around the base member in planes parallel and perpendicular to the axis of the annular base member.

In testimony whereof I have signed my name to this specification.

JOSEPH GOULDBOURN.