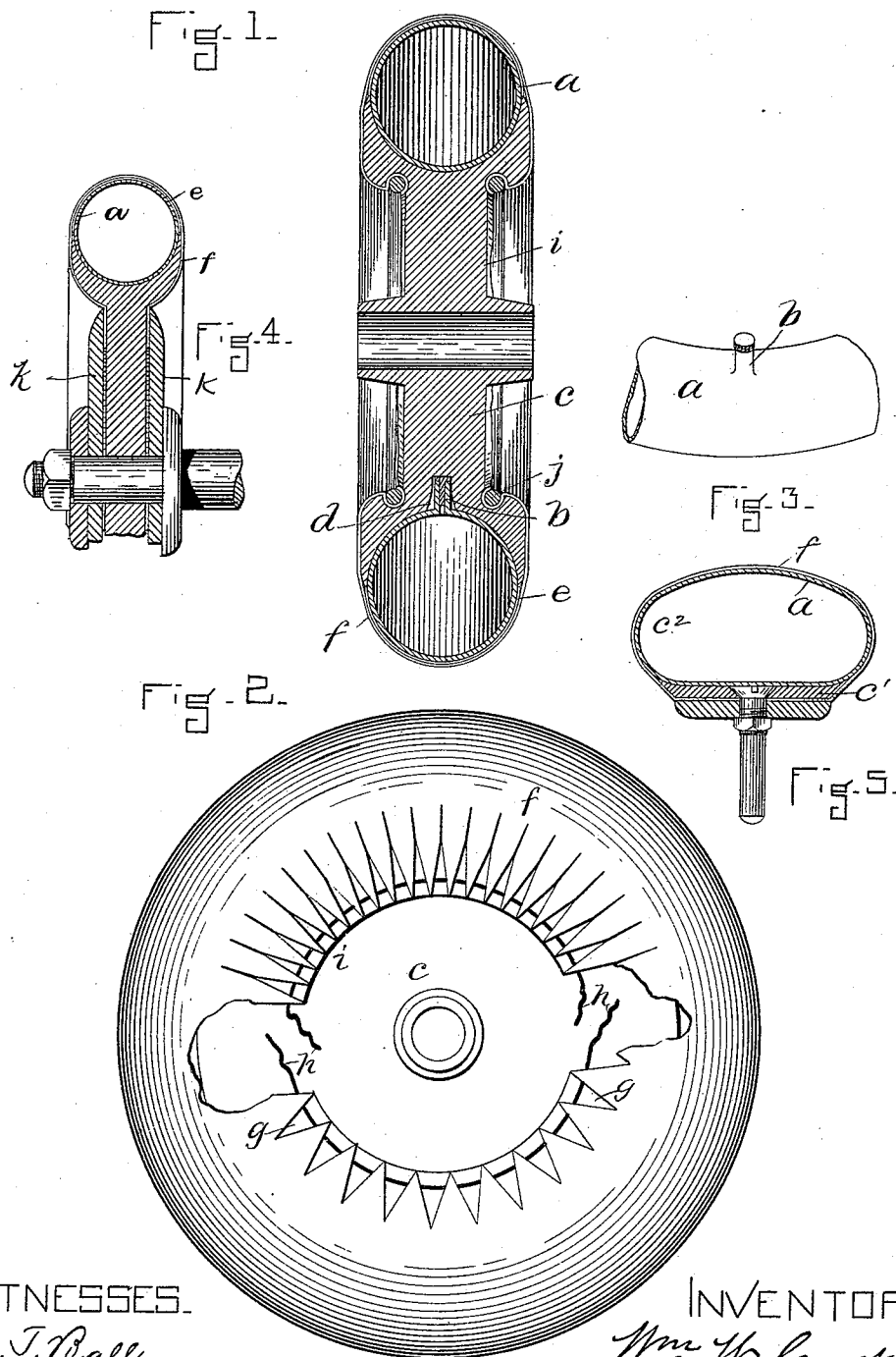


(No Model.)

W. W. CROOKER.
BUFFING WHEEL.

No. 472,287.

Patented Apr. 5, 1892.



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM W. CROOKER, OF LYNN, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE ELECTRIC BOOT AND SHOE FINISHING COMPANY, OF MAINE.

BUFFING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 472,287, dated April 5, 1892.

Application filed September 26, 1890. Serial No. 366,211. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. CROOKER, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Mediums for Finishing or Polishing Parts of Boots or Shoes, of which the following is a specification.

My invention relates to means provided with a yielding surface for waxing or polishing parts of boots or shoes; and it has for its object the provision of such improvements as will enable the polishing part or surface to be adjusted to varying degrees of firmness or solidity in order to meet varying circumstances or needs.

To the foregoing ends my invention consists of a medium for devices for waxing or polishing parts of boots or shoes, comprising an elastic hollow air-tight cushion adapted to be adjusted by means of inflation to varying degrees of solidity or firmness, as I will now proceed to describe and claim.

Reference is to be had to the annexed drawings and to the letters of reference marked thereon, the same letters designating the same parts or features, as the case may be, wherever they occur.

In the drawings, Figure 1 is a vertical central sectional view of a polishing-wheel equipped with my improvements. Fig. 2 is a side view of the same, part of the covering fabric being represented as torn away and the means for clamping the fabric on the wheel not being represented. Fig. 3 is a perspective view of a portion of the elastic cushion. Fig. 4 is a sectional view of a portion of the wheel, showing a modified form of means for clamping or holding the covering fabric in place on the wheel. Fig. 5 is a sectional view of a modified form of the invention.

In carrying out my invention I provide a hollow air-tight elastic cushion *a*, constructing the same of caoutchouc or rubber or other suitable material, the said cushion having a hollow teat or stem *b*, connected therewith and communicating with the interior thereof, so that the cushion *a* may be inflated with air or other gas or liquid to any desired extent. A cushion so constructed is arranged upon the periphery of a wheel *c*, or it may be upon

a flat bed *c'*, as shown in Fig. 5, suitably constructed to receive it. I prefer that the periphery of the wheel, when a wheel is used, should be provided with a groove having the form of a segment of a circle in cross-section, as is shown in Fig. 1, though any other means for maintaining the cushion in position will answer the purpose.

d designates a recess formed in the grooved periphery of the wheel for the reception of the inflating stem or teat *b*, any efficient means for closing said stem being employed for that purpose.

The cushion may be covered by any suitable material, dependent somewhat upon the kind or style of work to be performed, it being essential, however, that the covering material should be non-abrasive in contradistinction to an abrasive material, such as sand or emery paper, &c., by which polishing could not be effected. As herein shown, the cushion is covered first with a strip of flannel *e* and with an outside covering of cloth *f*, the edges of the latter being notched, as at *g*, gathered by a thread *h*, and clamped against the web *i* of the wheel by means of rings *j*, sprung into grooves in the wheel over the cloth, as is shown in Fig. 1, or it may be by means of clamping-disks *k*, clamped against the web of the wheel over the cloth, as is shown in Fig. 4, or in any other suitable way.

The essential feature of my improvement is the elastic adjustable cushion whereby I am enabled to vary the degree of firmness or solidity of the polishing-surface to meet the varying requirements of the work to be performed.

My invention is adapted for use in waxing, finishing, or polishing the soles, shanks, edges, heels, and other parts of boots and shoes, whether such parts are dyed or stained or of natural color, and though I have shown the cushion as of annular form arranged on the periphery of a wheel it may be given a different form and have a different arrangement with respect to other parts without departing from the nature or spirit of the improvement. For example, the cushion may be made as a substantial disk *c'*, with a flat surface mounted upon a flat bed *c'*, as shown in Fig. 5, or be

given any other suitable form and be rotated or reciprocated or otherwise moved or manipulated.

Having thus explained the nature of my improvement and described a way of constructing and using the same, I declare that what I claim is—

1. A medium for polishing parts of boots or shoes, consisting of a wheel *c*, capable of rapid rotation, provided upon its periphery with a hollow inflatable air-tight cushion *a*, covered with a non-abrasive material, as set forth.

2. A medium for polishing parts of boots or shoes, consisting of a wheel capable of

rapid rotation, provided upon its periphery with a hollow inflatable air-tight cushion, and means, substantially as described, for inflating it to varying degrees of firmness or solidity and covered with a non-abrasive material, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 23d day of September, A. D. 1890.

WILLIAM W. CROOKER.

Witnesses:

ARTHUR W. CROSSLEY,
A. D. HARRISON.