

(No Model.)

W. GORDON.
BURNISHING TOOL.

No. 308,604.

Patented Dec. 2, 1884.

Fig. 2.

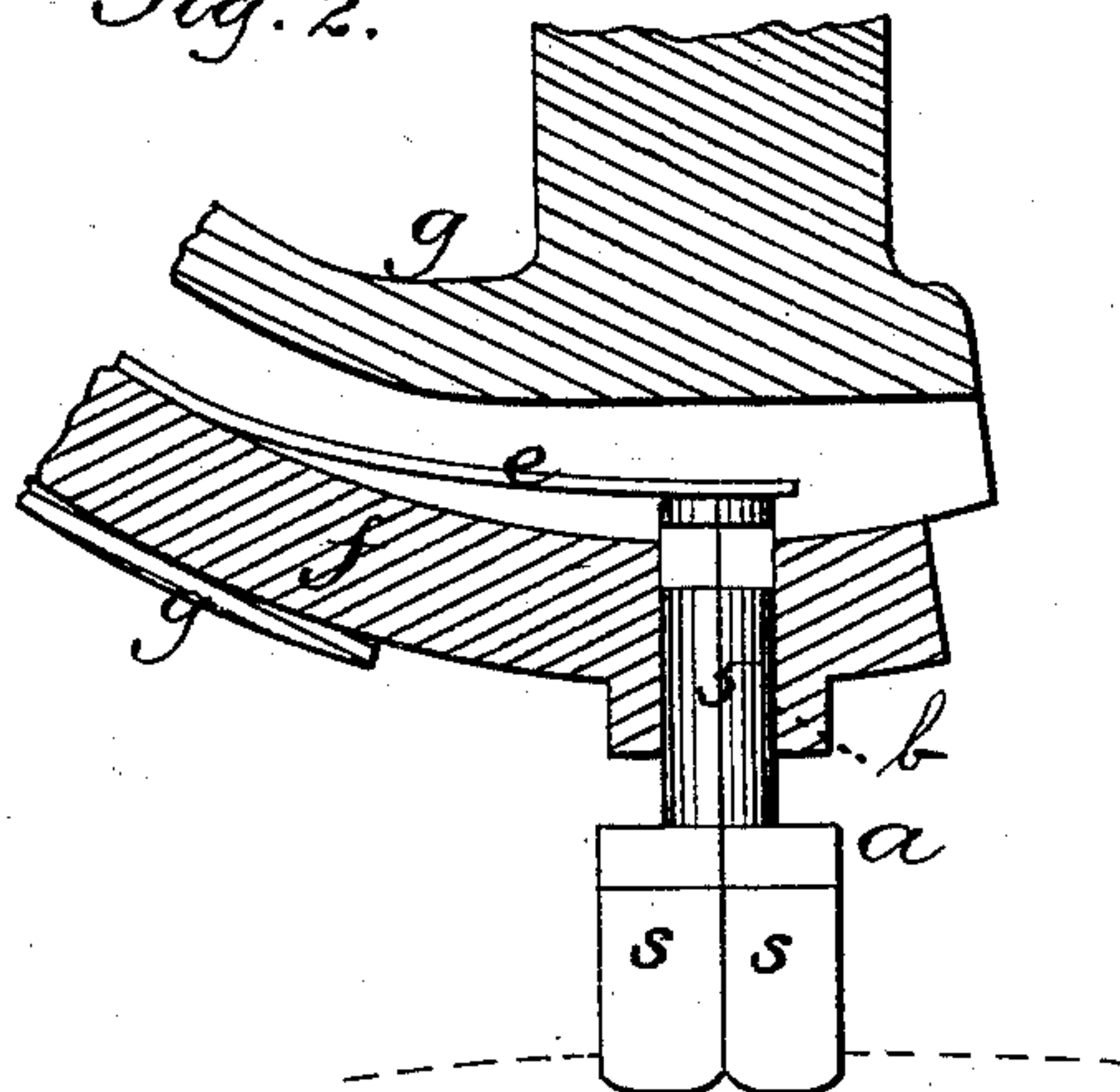


Fig. 1.

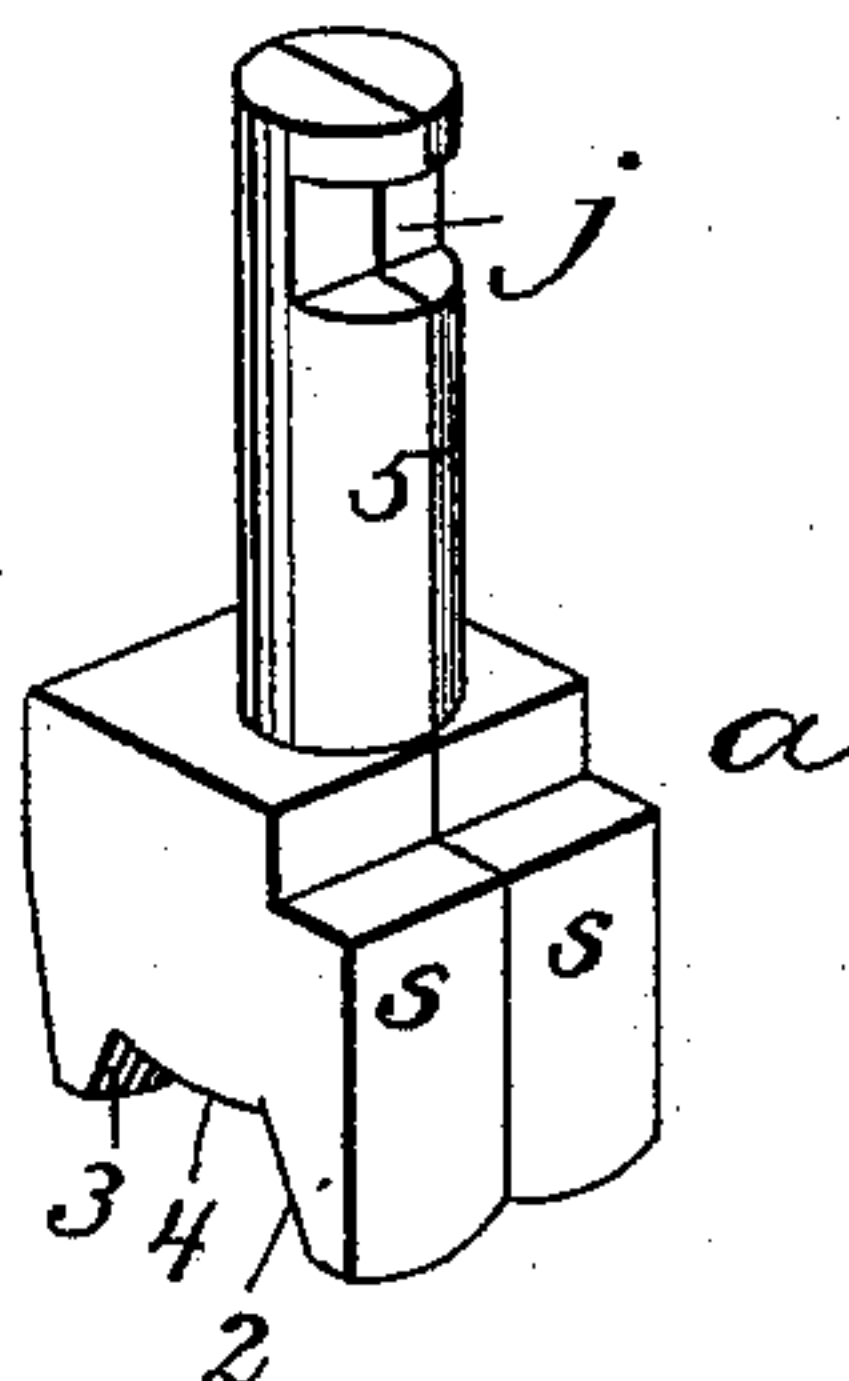


Fig. 3.

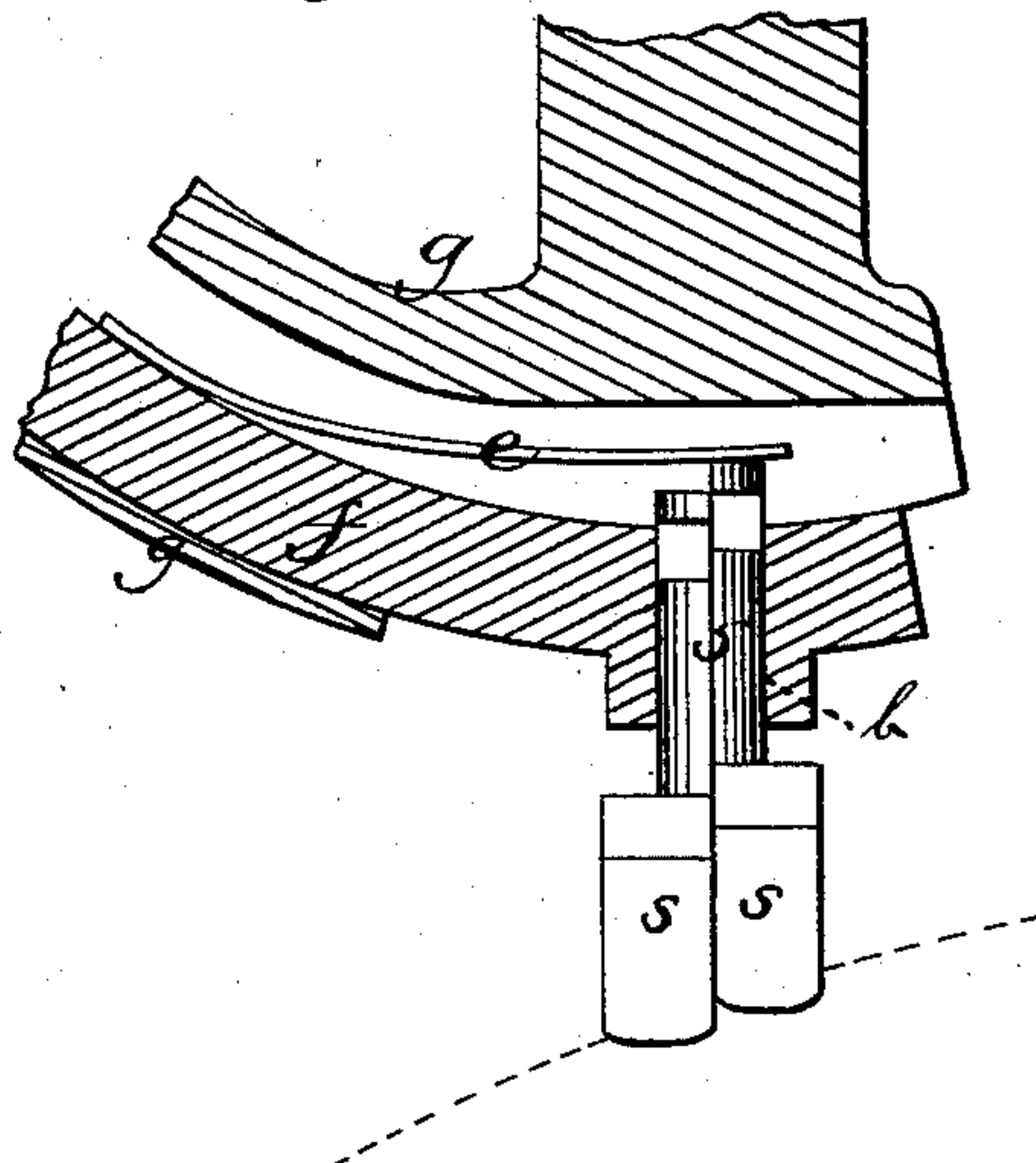
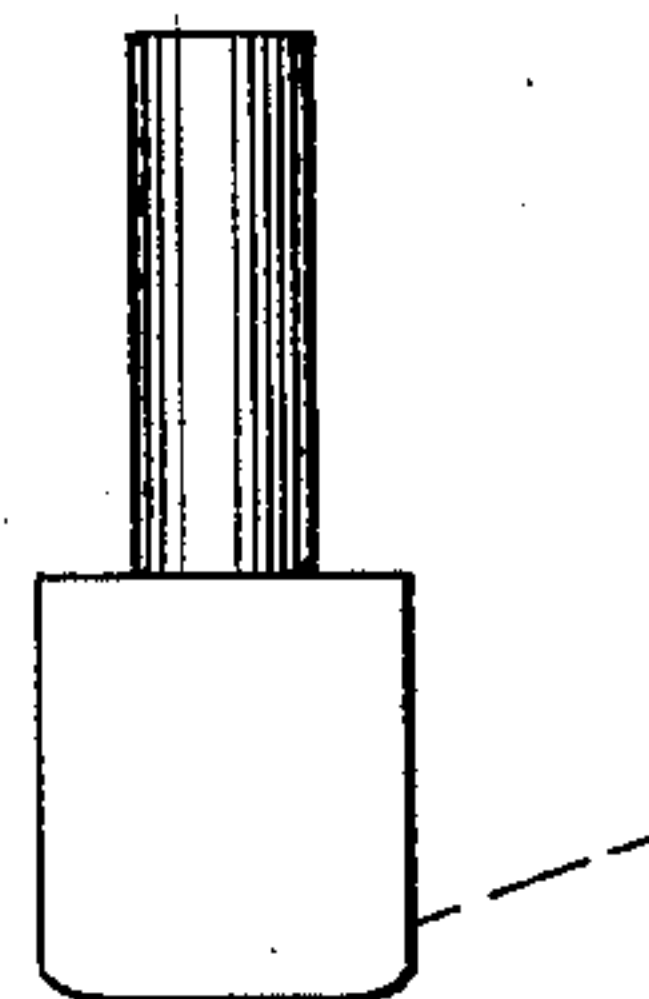


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM GORDON, OF BOSTON, ASSIGNOR OF ONE-HALF TO J. WESLEY DODGE, OF MALDEN, MASSACHUSETTS.

BURNISHING-TOOL.

SPECIFICATION forming part of Letters Patent No. 308,604, dated December 2, 1884.

Application filed March 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GORDON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Burnishing-Tools, of which the following is a specification.

This invention has for its object to provide an improved reciprocating tool for burnishing the edges of boot and shoe soles; and it consists in a tool provided with the usual rand-lip and lip or rest for the face of the sole, and divided across said lips, so as to form two sections in contact with each other, and each adapted to yield independently, so that the burnishing-surface formed on the two sections can conform to various inclinations of the sole-edge on which it acts, and thus enable said lips to furnish suitable bearings for the sole under different circumstances, as I will now proceed to describe.

Of the accompanying drawings forming a part of this specification, Figure 1 represents a perspective view of my improved sectional tool. Figs. 2 and 3 represent side views of the same applied to a support or holder. Fig. 4 represents a side view of the ordinary tool.

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

In the drawings, *a* represents a burnishing-tool of the general form ordinarily used for reciprocating sole-edge-burnishing tools, and having a shank, 5, adapted to enter a socket or holder, *b*, and a suitably-molded acting face, including a rest or lip, 2, for the face of the sole, a rand-lip, 3, and an intermediate-edge-burnishing portion, 4, these parts being formed, as usual, to fit any desired form of sole or shank edge.

In carrying out my invention I divide the tool and its shank longitudinally across the molded acting face and the lips 2 and 3, so as to form two equal sections, *s s*, as shown, and mount said sections in the holder or socket *b* in such manner that each can yield endwise or longitudinally of the shank independently of the other. I provide a spring, *e*, bearing downwardly on the parts of the divided shank and holding the sections with a yielding pressure against the sole-edge, in the same manner that the solid tool is held against the sole-edge in

the burnisher shown in my pending application filed January 28, No. 118,911.

The holder or socket *b*, as illustrated, is formed on a segmental slide, *f*, adapted to reciprocate in a segmental guide in a stock, *g*, which is held and guided by the hand of the operator, as shown in my above-named application. It will be seen that the sectional construction of the tool enables it to bear at two points on a sole-edge which is inclined relatively to the line of movement of the tool, as shown in Fig. 2, the lips 2 and 3 of each section bearing on the rand and the face of the sole at two points, and thus affording extended supports against lateral displacement of the sole, whereas if the tool were solid, as heretofore, its lips would bear on the inclined edge only at one point, as shown in Fig. 4. The operator is thus enabled to preserve the operative relation between the tool and the sole-edge, and prevent lateral displacement of the tool in a burnisher of the class shown in my above-named application when acting on the abruptly-curved portions of the sole-edge, as at the toe, the extended bearing of the lips 2 and 3 on the rand-edge and the face of the sole keeping the tool in place on such curved portions.

A single spring, *e*, may be employed to press down both sections, as shown in Figs. 2 and 3, or each section may have an independent spring. When a single spring is employed, it is lifted by the higher section above the lower, as shown in Fig. 3, and in this case the lower section will not bear so forcibly against the sole-edge; but as the pressure exerted against it by its movement along the sole-edge is partially lateral, and causes it to bind to some extent against the wall of the socket and the side of the other section, it does not yield so readily as might be supposed, but bears with a considerable pressure on the sole-edge, so that it materially assists the other section.

The sections of the tool are prevented from dropping out of the socket by a spring projecting into a groove, *j*, on the side of the shank, as shown in my former application above referred to.

I do not confine myself to the use of the improved sectional tool in a machine guided and

controlled by the hand of the operator, as it may be used with good results in a machine in which the tool is reciprocated in a fixed frame and the boot or shoe sole is presented to the tool.

I am aware that a reciprocating burnishing-tool formed to fit the edge of a heel has been made in sections to enable the tool to conform more closely to the surface of the heel, and I do not therefore claim, broadly, a sectional tool.

I claim—

The combination, with a reciprocating socket or holder, of a sole-edge-burnishing tool having the lip or rest 2 for the face of the sole, the rand-lip 3, and the intermediate surface 4,

and divided across said lips and intermediate surface into two sections adapted to move independently in said socket, whereby the lips 2 and 3 are enabled to afford extended supports for a sole-edge which is inclined relatively to the line of movement of the tool, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 18th day of March, 1884.

WILLIAM GORDON.

Witnesses:

C. F. BROWN,

A. L. WHITE.