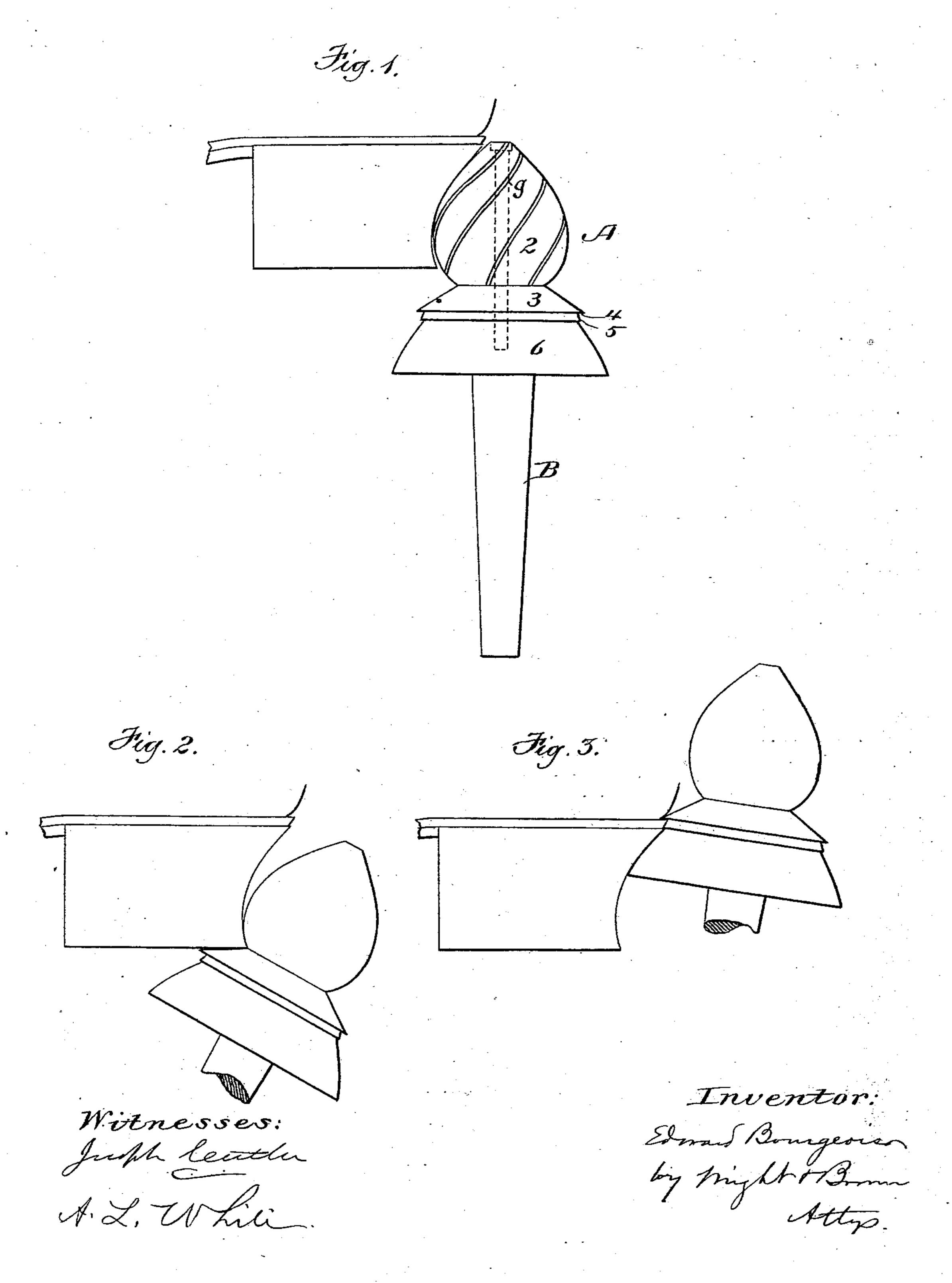
(No Model.)

E. BOURGEOIS.

HEEL BURNISHING TOOL.

No. 277,207.

Patented May 8, 1883.



United States Patent Office.

EDWARD BOURGEOIS, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND HIRAM BOND, OF SAME PLACE.

HEEL-BURNISHING TOOL.

SPECIFICATION forming part of Letters Patent No. 277,207, dated May 8, 1883.

Application filed January 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BOURGEOIS, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain Improve-5 ments in Heel-Burnishing Tools, of which the following is a specification.

This invention has for its object to provide an improved heel-burnishing tool for use in connection with a heel-burnishing machine 10 wherein a tool is rapidly rotated and capable of being moved in any desired direction by the operator.

The invention consists in the improved tool

hereinafter described and claimed.

Of the accompanying drawings, forming a part of this specification, Figures 1, 2, and 3 represent side elevations of my improved tool, showing it in different relations to the heel.

The same letters of reference indicate the

20 same parts in all the figures.

In carrying out my invention I provide a tool, A, having a shank, B, adapted for insertion into a suitable rotary holder. The tool A is composed of four operating-surfaces, viz: 25 first, the convex portion 2, which is curved to fit approximately the vertical curvature of the sides of the heel, as shown in Fig. 1; the beveled portions 3, forming, in connection with the portion 2, a re-entrant angle adapted to finish 30 the marginal portion of the bottom of the heel and the angle at the intersection of the bottom and sides of the heel, as shown in Fig. 2; the undercut portion or shoulder 4, forming, with the portions 3, a salient angle adapted to 35 finish the upper edge of the rand, as shown in Fig. 3; the narrow portion 5, adapted to finish the surface of the rand below the portion 4, as shown in Fig. 3, and inclined base 6, adapted to finish the upper portion of the heel while 4c the parts 4 and 5 are operating on the rand. Each of the described parts is circular in crosssection—that is to say, in any plane at right angles to the axis of the heel. The shank B of the tool is inserted in the usual manner in 45 a holder, which is positively rotated and supported in such manner that said holder and

tool can be moved in any desired direction required to present the tool to the heel in the different positions shown, the heel being supported on a suitable jack.

I prefer to make spiral grooves g in the surface of the part 2, to give the same a better smoothing effect on the heel. If desired, the part 2 may be made in a separate piece from the remaining portion of the tool, and secured 55 thereto by a screw, as shown in dotted lines in Fig. 1.

It will be seen that the improved tool is adapted to burnish all exposed parts or surfaces of the heel, and leave the latter in a 60

highly finished condition.

I claim—

1. A burnishing-tool constructed to be rotated by power, and provided with an end portion, 2, largest in diameter at the center and 65 contracted toward each end, and with an inclined annular burnishing face or shoulder, 3, arranged, as shown, to act upon the bottom of the heel at the same time the inwardly-curved part of the portion 2 acts upon the edge of the 70 heel, as set forth.

2. A burnishing tool provided with a terminal curved-sided cylindrical portion, 2, annular inclined shoulder 3, and annular faces 4 and 5, all relatively arranged as set forth.

3. The improved heel-burnishing tool having the parts 2, 3, 4, 5, and 6 relatively arranged, as shown, and adapted to be secured to a rotary holder, as set forth.

4. A burnishing-tool constructed to be ro- 80 tated by power, and provided with the annular parts 4 5 6, formed and arranged as specified.

In testimony whereof I have signed my name to this specification, in the presence of two sub- 85 scribing witnesses, this 21st day of December, 1882.

EDWARD BOURGEOIS.

Witnesses:

HIRAM BOND, DANIEL C. BARTLETT, JOHN J. WINN.