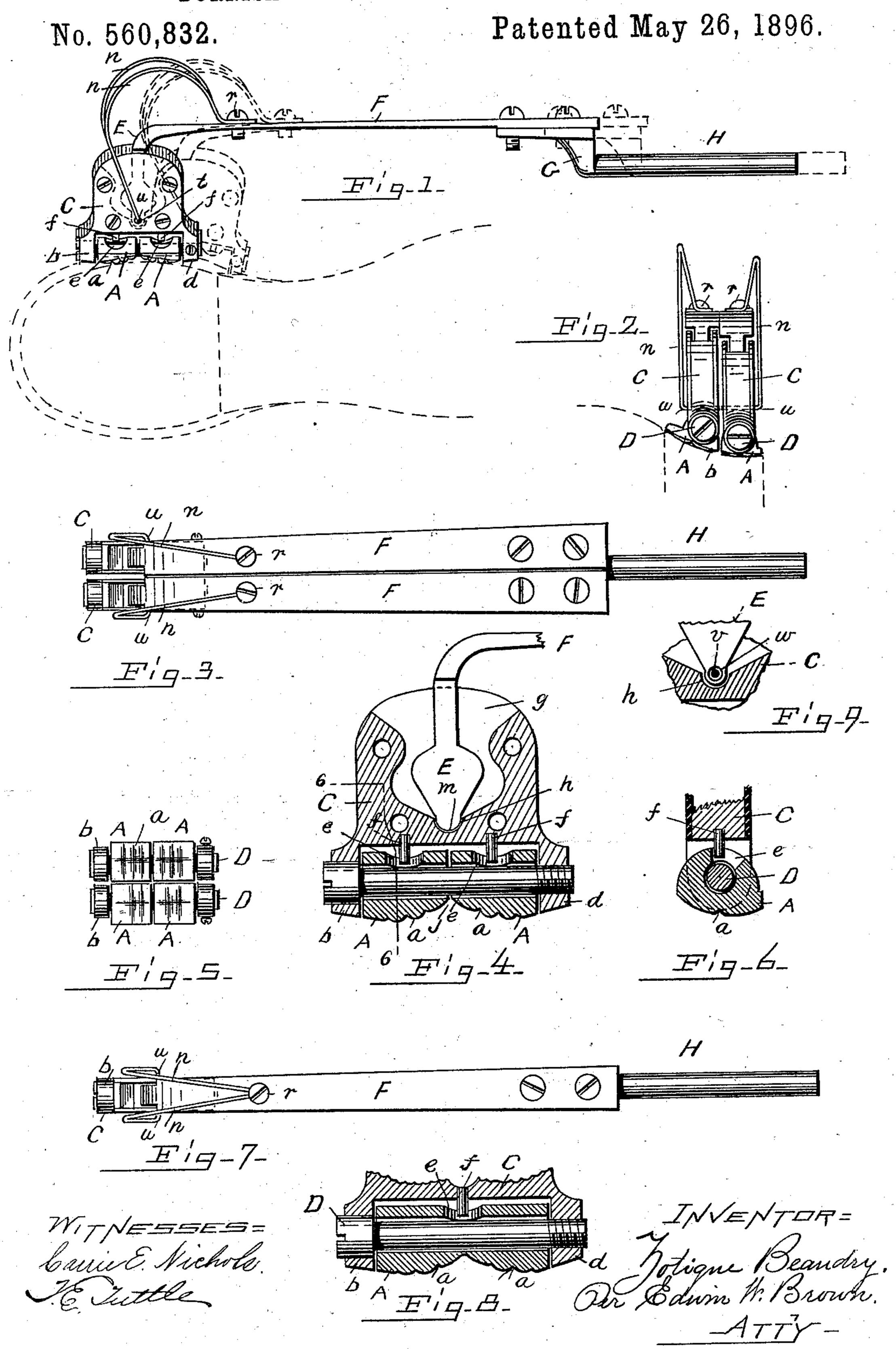
Z. BEAUDRY.
BURNISHING TOOL FOR BOOT OR SHOE HEELS.



## United States Patent Office.

ZOTIQUE BEAUDRY, OF LYNN, MASSACHUSETTS.

## BURNISHING-TOOL FOR BOOT OR SHOE HEELS.

SPECIFICATION forming part of Letters Patent No. 560,832, dated May 26, 1896.

Application filed January 16, 1892. Serial No. 418,272. (No model.)

To all whom it may concern:

Be it known that I, ZOTIQUE BEAUDRY, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Burnishing-Tools for Boot or Shoe Heels, of which the following is a full, clear, and exact description.

This invention consists of a tool for burnishing heels of boots and shoes, all constructed and arranged for operation on the heel of a boot or shoe, all substantially as hereinafter fully described, reference being had to the accompanying sheet of drawings, in which—

Figure 1 is a side view showing the manner of applying the tool to the heel of a boot, which is in dotted lines, and also showing in dotted lines the tool as moved onto another portion of the heel. Fig. 2 is an end view.

Fig. 3 is a plan view. Fig. 4 is a central vertical section of the tool. Fig. 5 is a detail view of the working face of the tool; Fig. 6, a detail section on line 6 6, Fig. 4. Fig. 7 is a plan view similar to Fig. 3, to be hereinafter referred to. Fig. 8 is a detail section to be hereinafter referred to. Fig. 9 is a detail section to be hereinafter referred to.

In the drawings, A and B represent burnishing-irons having their outer faces, which 30 are the working faces, corrugated or grooved crosswise, as shown at a, in cross-section more particularly in Fig. 4. These irons are secured to a block or holder C by a rod or pin D, which passes freely through one arm, b, of said holder and freely through the irons and screws into the other arm, d, of said holder, the irons being arranged to freely rock or swivel within certain limits on said rod or pin. Projecting downward from the 40 block and into openings e, one to each iron, is a pin f, against which the sides of the openings abut, limiting the movements of each iron, so that the irons will not rotate or turn fully around on their pivot to insure their 45 working face being always in position to operate on a boot or shoe heel. This block has a central opening g, which at its lower part forms a socket h, semicircular in outline of the length of the block, which bears and rests 5° against a correspondingly-shaped end m of the arm E, which projects down into said opening g, as shown in Fig. 4 more particularly. The arm is bent and then extends in the form of a flat spring F, its other end being secured to a block G, having a pin H, 55 which is adapted to fit in a suitable socket in a handle or arm for operation by hand or machine, but not shown in the drawings.

In Figs. 1 to 6 are shown two of these burnishing-tools arranged and secured side by 60 side to one common handle-block G, as shown more particularly in Fig. 3.

n are springs of wire, one to each arm E, and secured by their ends to their respective arm by screws r and bent in the arc of a cir-65 cle, as shown in Fig. 1 more particularly, their other ends extending down at the side of the block secured to the arm, and each being bent substantially at right angles, as at u, and projecting into a hole or socket t in 70 the side of the block, the tension of these springs acting to keep its block up to its bearing closely against the end m of the arm E, which practically makes a pivotal bearing-surface for the block when the tool is being 75

When two of these burnishing-tools are on one handle, as shown in Figs. 1 to 6, they are arranged side by side in such manner that one is a little higher than the other, the work-80 ing faces of the irons A making substantially a curved line in cross-section in order to fit the vertical curvature of the side or edge of the heel of a boot or shoe, as shown more particularly in Fig. 2. If desired, they can 85 be arranged substantially in a straight line or even to fit heels that are more or less flat or straight.

In the operation of this tool the boot or shoe is supported on a suitable jack for the boot 90 to turn on a center of which the peripheral edge of the heel is substantially the circumference, and the working faces a of the burnishing-irons are then placed upon the edge of the heel, substantially as shown in Figs. 1 95 and 2, the tool being supported by hand or in a suitable machine. The tool is then caused to move reciprocally in a longitudinal direction quite rapidly, and at the same time the boot or shoe is moved or turned on its 100 center to present all parts of its heel edge to the face of the tool as it is moved back and forth.

The tool can be operated by hand, but for

successful practical operation it is intended to be secured in a machine which will give the necessary reciprocating movement and

with the speed requisite.

The spring-arms yield more or less to give a yielding but firm pressure upon the heel, and where two tools are used together as one each is independent of the other, so far as its individual movements are concerned, al-10 though secured to a common holder and co-

acting together.

Each holder C being pivoted to its springarm F insures, as the boot-heel is turned or moved upon its support, the working face of 15 its irons laying close upon the heel edge, no matter what part of the heel edge is presented to the tool, as it is moved back and forth, without varying the angle with which the arm is held, as is shown in dotted lines in

20 Fig. 1.

Each pair of irons being carried by a separate spring-arm allows each iron to have a movement free and independent of the other, and as each iron will thus adjust itself to its 25 work and to the varying curves of heels of boots and shoes and be regulated as to its pressure on the heel the whole hollow surface of the heel will be operated upon, and all portions will be burnished equally and effec-30 tually and with a great saving of time, and with the rocking, oscillating, and reciprocating movement given to the tool some portion of the burnishing surface or face of one iron or the other will surely pass over the heel 35 edge and cross the line of division that might be made by the irons, and thus remove any ridge or streak that might be left by any one of the irons and which would naturally occur if the irons were only moved longitudinally; 40 also having two or more irons enables them to be made narrow, which insures the better fit of the tool to the various shapes of boot or shoe heels.

It is preferable when using two irons to 45 have their surfaces at their adjacent ends cut away or of less height than the outer ends, as shown in Fig. 4 at J, by which the two inner edges will not bear upon the edge of the heel, and insuring the better bearing of the 50 irons thereon, and consequently the better

work.

In Fig. 9 is shown the block as secured to the arm E by a pivot or pin v; but its socket is large enough to have quite a play therein, 55 so that the socket and bearing of the arm

shall be the same, as shown in Fig. 4, the pivot practically being for the purpose of. holding the block to the arm so it will not become detached.

In lieu of two irons to each tool only one 60 need be used, as shown in Fig. 8; but it is preferable to use two irons; but where one is used its outline corresponds as to the lesser height of its middle portion to the same with the two irons.

Having thus described my invention, what

I claim is—

1. In a heel-burnishing tool, the combination with a holder, of a burnishing-iron pivoted to said holder, and a spring-arm sock- 70 eted in said holder, substantially as described.

2. In a heel-burnishing tool, in combination, burnishing-irons having suitable working faces, a holder to which said irons are pivoted, a seat in said holder, a spring-arm 75 having an end to bear in said seat, a spring attached to said holder by one end and by its other end to said spring-arm.

3. In a heel-burnishing tool, the combination with a holder, of burnishing-irons piv- 80 oted to said holder, a block, and spring-arms socketed at one end of said holder and at the other end secured to said block, substantially

as described.

4. In a heel-burnishing tool, in combina- 85 tion, burnishing-irons having suitable working faces, a holder to which said irons are pivoted, the irons having the working faces at their adjacent or inner ends depressed and their outer ends projecting.

5. In a heel-burnishing tool, the combination with a holder and a burnishing-iron pivoted therein, of a spring-arm pivotally connected to said holder, and a spring secured to said holder and to said spring-arm, sub- 95

stantially as described.

6. In a heel-burnishing tool, the combination with a holder, of burnishing-irons pivoted in said holder, devices for limiting the rocking movement of said irons, and a spring- 100 arm socketed in said holder, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ZOTIQUE BEAUDRY.

Witnesses:

EDWIN W. BROWN, CARRIE E. NICHOLS.