(No Model.)

2 Sheets—Sheet 1.

Z. BEAUDRY.

HEEL BURNISHER FOR BOOTS AND SHOES.

No. 284,167. Patented Sept. 4, 1883.

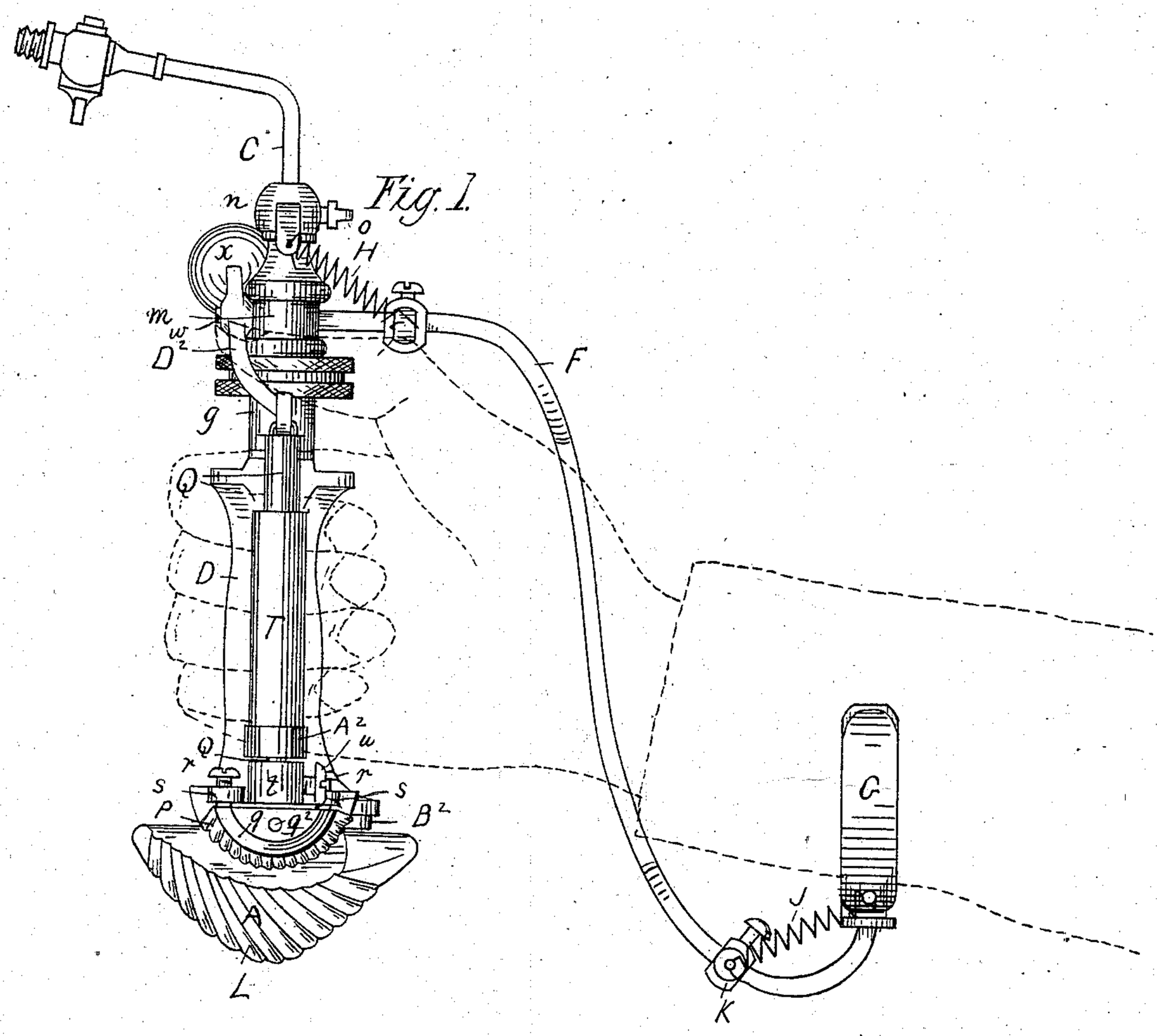

Fig. 1.

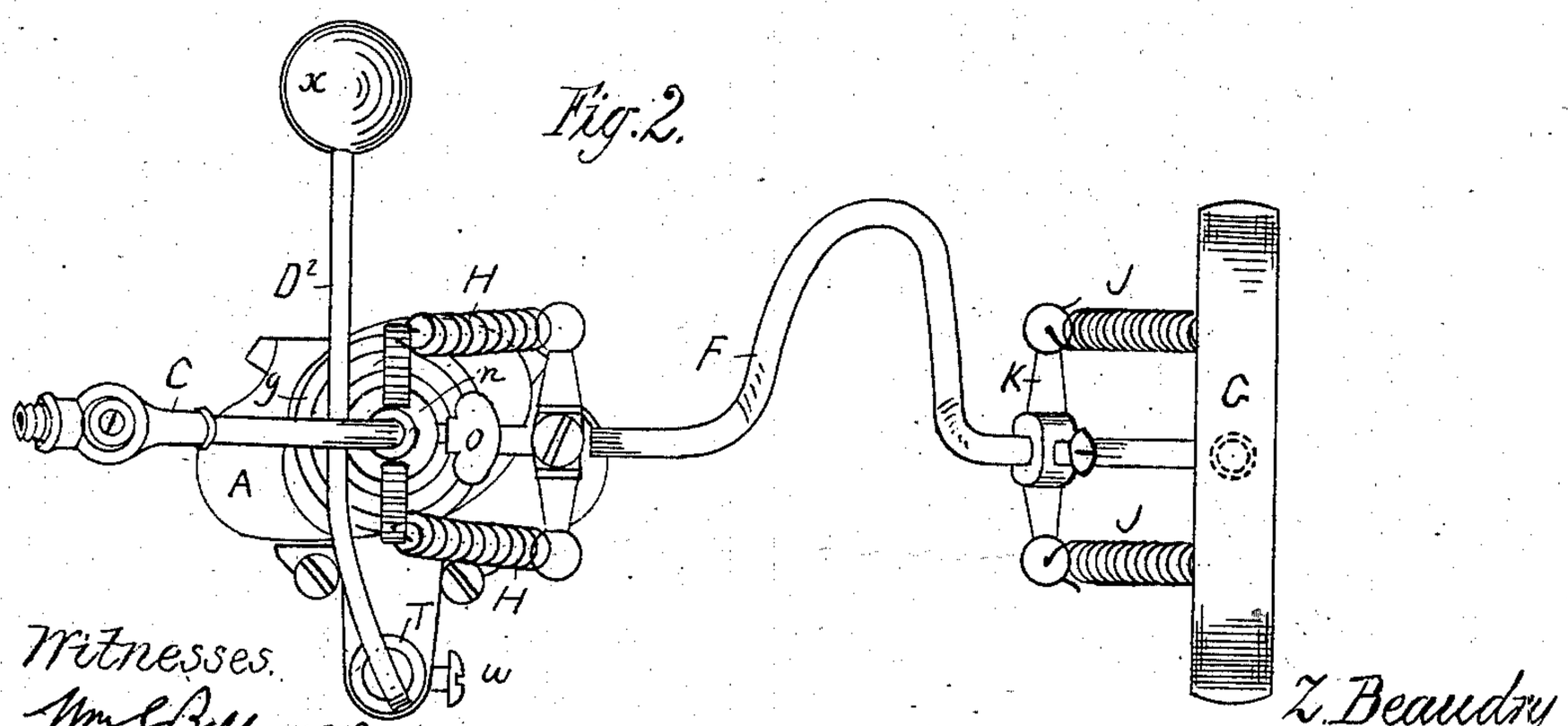

Fig. 2.

Witnesses.
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(No Model.) 2 Sheets—Sheet 2.

Z. BEAUDRY.

HEEL BURNISHER FOR BOOTS AND SHOES.

No. 284,167. Patented Sept. 4, 1883.

Fig. 5.

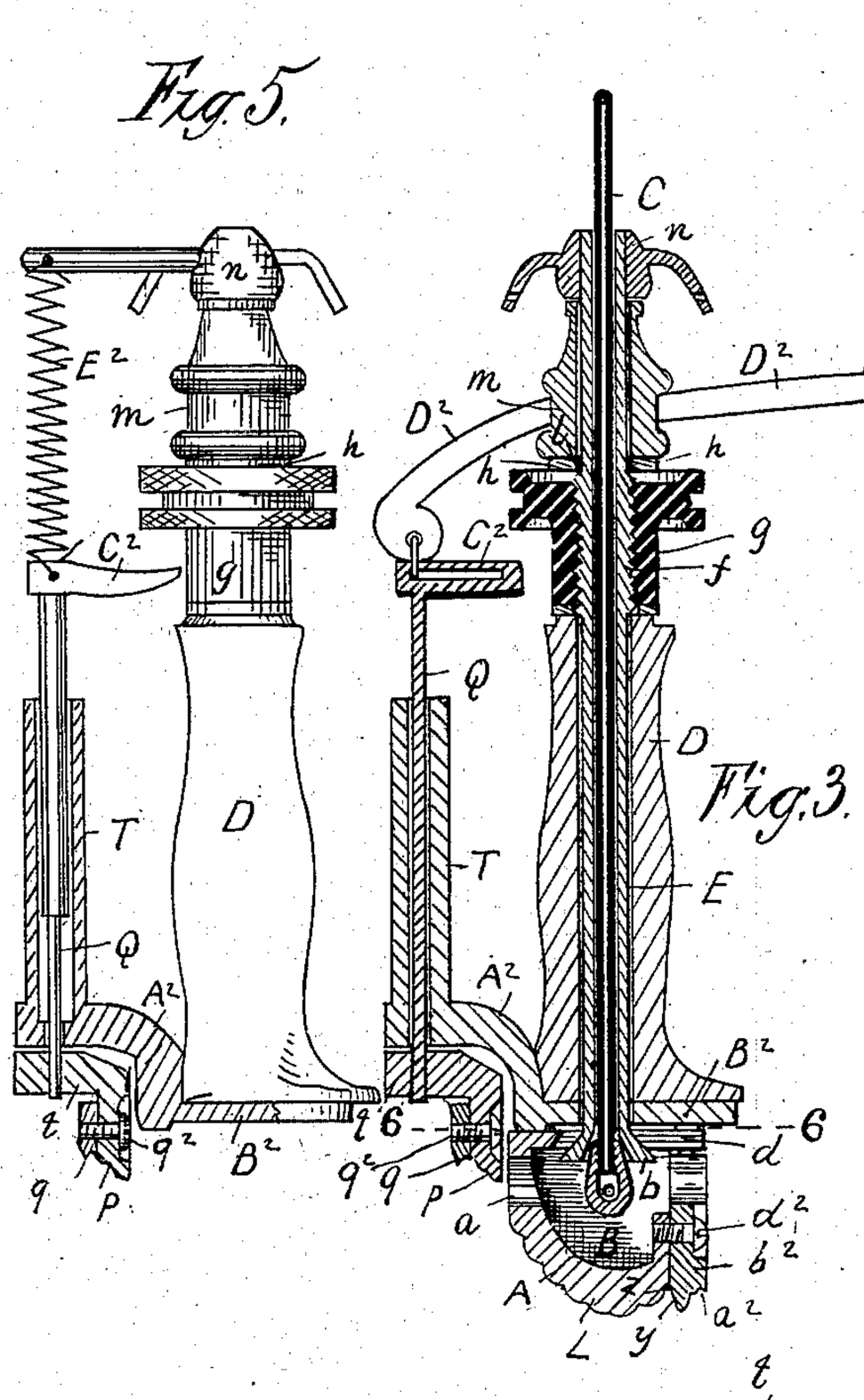

Fig. 3.

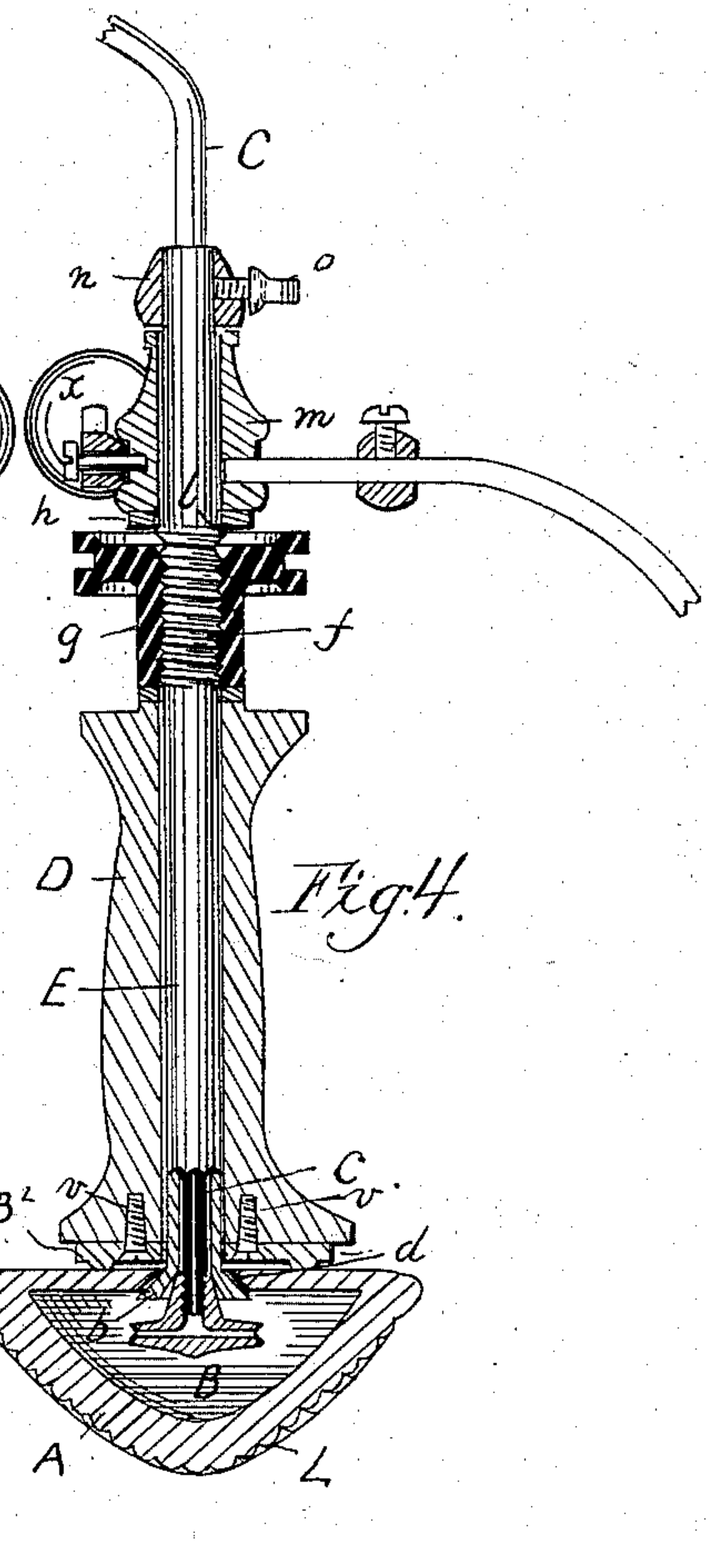

Fig. 4.

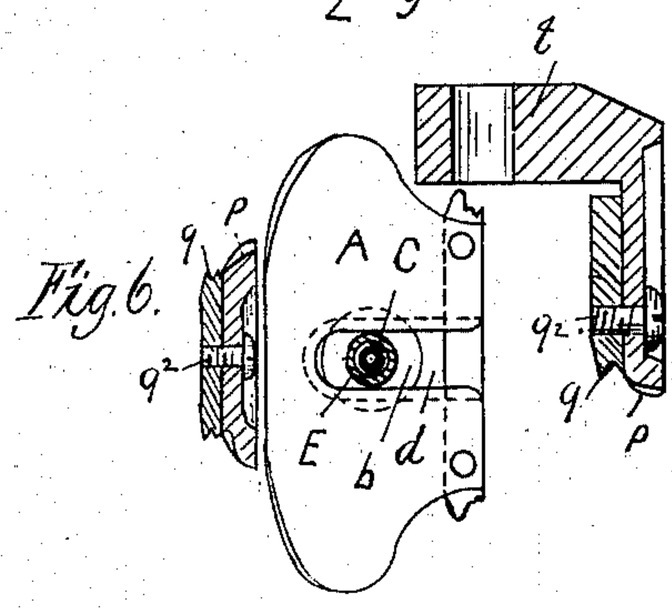

Fig. 6.

Fig. 7.

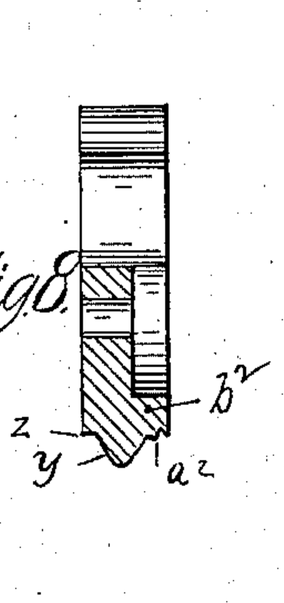

Fig. 8.

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Inventor,
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UNITED STATES PATENT OFFICE.

ZOTIQUE BEAUDRY, OF LYNN, ASSIGNOR TO THE UNIVERSAL HEEL BURNISHING MACHINE COMPANY, OF BOSTON, MASSACHUSETTS.

HEEL-BURNISHER FOR BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 284,167, dated September 4, 1883.

Application filed June 27, 1882. (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 Heel-Burnishers for Boots and Shoes, of which the following is a full, clear, and exact description.

This invention relates to a burnisher adapted for hand use, and more particularly to the burnisher shown and described in the two Letters Patent of the United States issued to me, respectively dated March 1 and May 3, 1881, Nos. 238,206 and 240,947.

This invention consists in the combination, with a burnishing-head and an attached handle for manipulating the same, of a brace-rod connected by a swivel-joint with the upper end of the handle and projecting therefrom in a downward and outward direction, and a swiveled arm-rest attached to the lower end of the brace-rod and arranged to form a brace for the under side of the arm of the hand which grasps and manipulates the handle of the burnishing-head.

The invention also consists of certain other features of construction and combination, which will be fully hereinafter described in detail, and set forth in the claims.

In the accompanying plates of drawings my improvements in burnishers are illustrated. In Plate 1, Figure 1 is a side view, showing the brace-rod constructed and adapted to bear against the under side of the arm of the operator (shown in dotted lines in the drawings) between the elbow and hand. Fig. 2 is a plan view. In Plate 2, Figs. 3 and 4 are vertical sections, respectively, in planes at right angles to each other and through the handle and burnishing-head of the tool. Fig. 5 is in part side view and vertical section of the handle portion and its attachments of the burnishing-tool. Fig. 6 is an enlarged horizontal section on line 6 6, Fig. 3. Figs. 7 and 8 are enlarged vertical detail sections of parts of the tool as shown in Fig. 3, as will hereinafter appear.

In the drawings, A represents a burnisher-head. This burnisher-head is chambered, as at B, perforated, as at *a a*, and provided with a gas-pipe, C, which passes through the length of the handle D, entering said chamber B, and projecting at the upper end of the handle, all so that with the projecting end of the pipe connected with a gas-supply the burnisher-head can be heated by burning gas therein. The connection between gas-pipe C and the gas-supply is to be made with a flexible and elastic pipe or tubing in order that the burnisher can be handled and moved about freely as desired. The handle D is of suitable shape for being conveniently grasped in the hand of the operator, and it is suitably bored out from end to end to receive a tubular rod, E, lining the bore from end to end of the handle, and through this rod the gas-pipe C passes, as has been described. The lower end of the tubular rod E has a conical-shaped head, *b*, and over this head the burnisher-head A is placed by its slot *d*, and the upper end of said tubular rod projects from the handle, and for a part of the length of such projection it is screw-threaded, as at *f*.

g is a screw-nut, with a milled head screwing upon the screw-threaded portion *f* of the tubular rod E. The screw-nut *g*, turned in one direction, brings the burnisher-head and handle endwise into close and rigid contact with each other, and binds the handle between such burnisher-head and the screw-nut and there so holds them, and turned in the other direction the burnisher-head and handle are released and the burnisher-head is made free, so that then by sliding the burnisher-head over the head *b* of the tubular rod E to the open end of the slot *d* the burnisher-head can be detached from the handle.

h is a collar on tubular rod E a sufficient distance above the upper end of screw-nut *g* for the screw-nut to be worked as desired. This collar is supported in place by a shoulder, *l*, on the rod, and in turn it supports another collar, *m*, which swivels upon the rod and has attached to it a brace-rod, F. This brace-rod, Figs. 1 and 2, is shaped to extend from the tool when grasped by the hand of the operator to the under side of the operator's arm, and to rest by its portion G against the same, such portion being suitably shaped therefor. This brace-rod preferably is connected by spiral springs H H—one upon each side—to a collar, *n*, fixed by a set-screw, *o*, upon the tubular rod above the swiveling collar *m* of the brace-rod F; and, again, the arm-rest G preferably is

swiveled upon the brace-rod, and is connected at each side of the brace-rod by spiral springs J J to an arm, K, fixed upon the brace-rod, all substantially as fully shown and described in the Letters Patent before referred to, No. 240,917, and therefore needing no more particular description herein.

The burnishing-tool herein described is provided with an edge, *p q*, in two parts, both of which along their length have the same general shape as the burnisher-face L. One part, *p*, of this two-part or double edge and the burnishing-face are corrugated across their width, as shown, and as common in heel-burnishers, and the other part, *q*, is smooth. This double edge *p q* is for "beading," as it is termed, and otherwise finishing the heel at and near the upper. Its two parts are made separate from each other, and the one part, *q*, is swiveled, as at q^2, upon the other part, *p*, which has set-screws *r r* screwing through its ear-pieces *s s* against the upper edge of the part *q*, all so that the part *q* can be adjusted to conform to the part *p*, and then fixed against movement or displacement. The part *p*, by its right-angular or set-off portion *t*, fits the lower end of a vertical rod, Q, and is fastened thereto by a set-screw, *u*. This vertical rod plays through a vertical tubular socket, T, of an arm, A^2, which is in one piece with a plate, B^2, secured by screws *v v* to the lower end of the burnisher-handle. The upper portion of the rod Q projects from the upper end of the socket T, and at its extreme projecting end it is provided with a thumb-piece, C^2, located between the socket and the under side of the milled head provided at the upper end of the screw-nut *g*, before referred to.

D^2 is a lever, which at one end is connected to and bears against the projecting end of the rod Q, and turns upon a stationary fulcrum, *w*, of the collar *m*, and at its other end, *x*, is weighted, all so as to keep the double beading-edges back and away from the working-face of the burnishing-head A. By pressing upon the thumb-piece C^2 with the thumb of the hand which grasps the handle, the double beading-edge *p q*, above described, can be made to project beyond the burnishing-face, and thus placed in position for work. This movement to project the double beading-edge from the burnisher-face is against the weight of the lever D^2, so that on releasing the pressure through the thumb-piece upon such weighted lever, obviously such double beading-edge will be automatically retracted and placed inside of and away from the burnishing-face, and thus out of working position, because of the then action of the weighted lever upon the rod.

The burnishing-tool herein described and shown by preference is to be suspended by spiral springs or other suitable elastic and flexible connections from a suitable support, and when used its handle is grasped by the hand, with the thumb of such hand placed over the thumb-piece C^2 in position to press upon it when so desired, and with the arm of the same hand between the elbow and the hand—that is, the fore part of the arm at rest within and upon the arm-rest G. The tool thus being held by the operator, the flanged edge or guard *y* of the burnisher-head is placed against the treading-face of the heel, and the burnishing-face L presented to and rolled and rocked or otherwise moved against the outer edge of the boot or shoe heel, while at the same time the outer edge of the heel is rolled about the burnisher-face, but in an opposite direction to the roll of the burnisher-face about it. By this roll of the burnishing-face and of the outer edge of the boot or shoe heel, the outer edge of the heel is burnished as desired, and polished with but few movements of the burnisher and but little time. After the outer edge of the heel is burnished, the double edge *p q* is then brought into play by pressing downwardly upon the thumb-piece, so as to produce from it the corrugations and smoothing off of the heel at or near its connection with the upper of the boot or shoe, and this is accomplished when the double edge is so brought into play by rolling or otherwise passing the double edge about the heel and the heel about the double edge.

The arm-rest G, with its brace-rod F, connecting it to the burnisher-head, obviously enables the operator to hold the tool with greater firmness and steadiness to its work, and as the arm-rest is swiveled to the brace-rod F and the brace-rod to the burnisher-head, plainly the brace-rod and burnisher-head can be moved in all directions necessary, thus giving the utmost freedom and ease to the manipulations of the tool, while at the same time the brace-rod is given a support and brace directly from the operator's arm, in addition to the support and brace from the hand of the operator which is grasping the burnisher-handle.

It is obvious that an arm-rest connected by a brace-rod, F, to a hand heel-burnisher, as herein described, is as applicable to other hand-burnishers as to the one herein particularly shown and described.

The burnishing-head shown in the drawings has on one side of the flanged edge or guard *y*, hereinbefore referred to, and which is against the treading-face of the heel as the tool is used, an edge, *z*, and on the other side an edge, a^2. Both of these edges, and also the guard *y*, are of the general outline, from end to end, of the burnisher-head in the same direction, and they are all of one piece, b^2, of metal or other suitable material, rigidly secured in position by a set-screw, d^2. The inner edge, *z*, is for beading or grooving the edge of the heel near its treading-face to give it a better finish. The outer edge, a^2, is for the same purpose as the double beading-edge *p q*, hereinbefore described, and to be so used the burnisher-head, as is obvious, must be swung around to place said edge a^2 in proper position therefor, and in this use of said edge the guard *y* rests against the treading-face of the heel.

Fig. 5 illustrates, in addition to other features, the application of a spring, E^2, for with-

drawing the double beading-edge b^2 from its working position. This spring is arranged outside of the guiding-socket T, in lieu of inside, as in my Letters Patent before referred to, No. 240,947.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A burnisher for heels of boots and shoes, composed of a burnisher-head, A, having slot *d*, in combination with a handle, D, a rod, E, having at one end a head, *b*, and at the other screw-threaded, and a screw-nut, *g*, all substantially as described, for the purpose specified.

2. The combination, with a burnishing-head, A, and an attached handle, D, for manipulating the same, of the brace-rod F, connected by a swivel with the upper end of the handle and projecting in a downward and outward direction, and a swiveled arm-rest, G, attached to the lower end of the brace-rod, and arranged, as herein set forth, to form a rest for the under side of the arm of the hand which grasps and manipulates the handle of the burnishing-head, substantially as described.

3. The combination, with a heel-burnisher, of a double beading-edge, *p q*, made in separate parts, the one part, *q*, attached to the other, *p*, by a swivel-pin, q^2, and held by set-screws *r* of the other part, *p*, and both secured to a vertical rod, Q, arranged to play through a tubular socket, T, all substantially as described.

4. The combination, with a heel-burnisher, of a beading-edge, *p q*, secured to a vertical rod, Q, arranged to play through a tubular socket, T, in combination with a weighted lever, D^2, all substantially as described, for the purpose specified.

5. In combination with a heel-burnisher, of a double beading-edge, *p q*, one part of which has a set-off, *t*, secured with set-screw *u* to the carrying-rod, Q, 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,
WM. S. BELLOWS.