

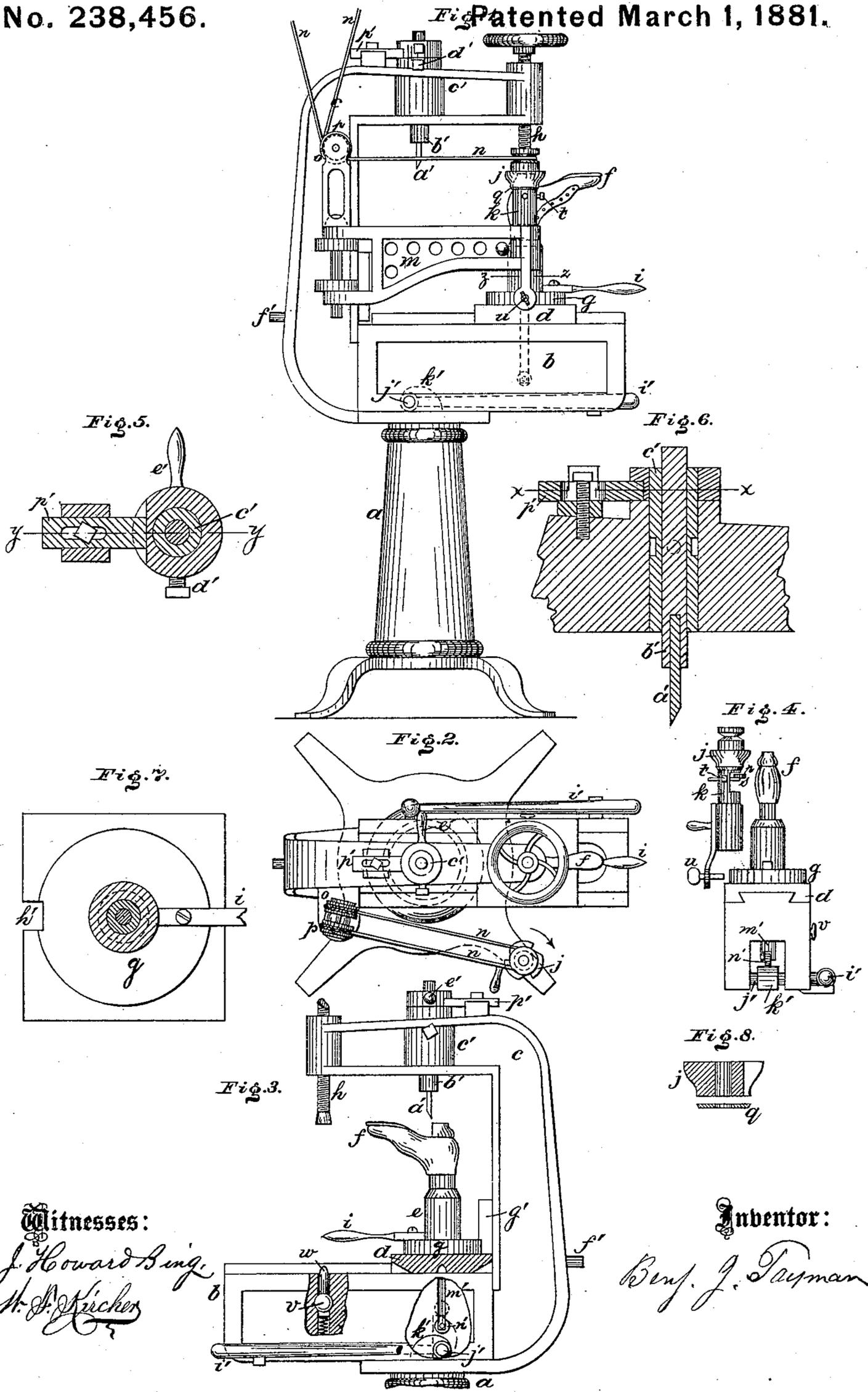
(Model.)

B. J. TAYMAN.

Machine for Shaving and Breasting the Heels of Boots and Shoes.

No. 238,456.

Patented March 1, 1881.



Witnesses:
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UNITED STATES PATENT OFFICE.

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MACHINE FOR SHAVING AND BREASTING THE HEELS OF BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 238,456, dated March 1, 1881.

Application filed December 1, 1880. (Model.)

To all whom it may concern:

Be it known that I, BENJAMIN J. TAYMAN, of Philadelphia, Pennsylvania, have invented a Combined Machine for Shaving and Breast-
5 ing the Heels of Boots and Shoes, of which invention the following is a specification.

In the annexed drawings, Figure 1 is a side elevation, and Fig. 2 a plan, of the complete machine. Fig. 3 is a side elevation, partly
10 sectional, of a portion of the machine, partly broken away. Fig. 4 is a front elevation of a portion; Fig. 5, a section on the line *xx*, Fig. 6; Fig. 6, a section on the line *yy*, Fig. 5; Fig. 7, a section on the line *zz*, Fig. 1; Fig. 8,
15 a section of the cutter *j* and shield *q*. Figs. 5, 6, 7, and 8 are on an enlarged scale.

Similar letters designate similar parts in the several figures.

a, Fig. 1, is a column supporting the hollow
20 bed-plate *b* and overhanging arm *c*, together constituting the frame of the machine.

d, Figs. 1, 3, and 4, is a dovetailed slide, which carries the last-holder *e*. Fig. 3 shows the boot or shoe *f*, and the former *g* is shown
25 in Fig. 4.

h is an adjustable pivot for holding the heel while it is subjected to the action of the cutter *j*.

i, Figs. 1 and 3, is a handle for turning the last-holder when the heel is in contact with the
30 cutter *j*. The cutter *j* revolves on a spindle, *k*, which is mounted on the crane *m*. The cutter *j* derives its motion from the belt *n*, which passes under the friction-pulleys *o* and *p*, Fig. 2, and to a driving-pulley. (Not shown.)

35 A loose shield, *q*, (shown on an enlarged scale in Fig. 8,) is located on the spindle *k* below the cutter *j*, and is made a little larger in diameter than the lower part of the cutter *j*, as shown, to protect the counter of the boot
40 or shoe from injury while the cutter *j* is shaving the heel. This shield *q* rolls in the rand-seam in a direction opposite to the direction of motion of cutter *j*.

r is a roller rotating on the spindle *s*, which
45 is adjustable and held in position by means of the set-screw *t*, Figs. 1 and 4. This roller is used to regulate the depth of cut when the counters are free from raised seams; but when the surface of the counter is uneven the roller
50 *r* is drawn in out of the way and the set-screw *u*, Fig. 4, is adjusted so that its end traverses the edge of the former *g*, and thus regulates

the depth of cut of the cutter *j*. The roller *r* is preferably made of rubber or other elastic flexible material to avoid any liability to mark
55 or injure the upper.

v, Fig. 3, is the projecting head of a spring-catch, *w*, which enters a hole in the bottom of the slide *d*, in which hole the catch *w* rests when the last-holder is directly below the ad-
60 justable pivot *h*. When the catch *w* is pressed down it releases the slide *d*, allowing it to be moved back under the breasting-knife *a'*, Figs. 1 and 3, which knife is attached to a shank, *b'*, which shank passes through a movable sleeve,
65 *c'*, which is confined by a set-screw, *d'*, Fig. 5.

e', Fig. 5, is a handle attached to the sleeve *c'* for turning this sleeve and knife to the angle required for right and left boots and shoes
70 without turning the boot or shoe.

f', Fig. 3, is an adjustable rod working through a hole in the frame *c* against the gib
75 *g'*, which enters the recess *h'*, Fig. 7, in the rear end of the dovetailed slide *d*, and thus holds the heel in a proper position to be breast-
ed, and when adjusted for a shoe of any certain size answers for all others of like size.

i', Figs. 1, 2, and 3, is a hand-lever attached rigidly to the shaft *j'*, Figs. 1 and 3, which
80 passes through the bed-plate *b*, and which carries a cam, *k'*, (best shown in Fig. 4,) located within the hollow bed-plate *b*. The stem *m'*, Figs. 3 and 4, of the last-holder *e* carries a friction-roller, *n'*, which rests on the cam *k'*.
85 When the lever *i'* is thrown up the heel of the boot or shoe is brought into contact with the edge of the breasting-knife *a'*.

p', Figs. 2 and 5, is an adjustable sliding stop, the front end of which is in contact with a flat
90 space formed on the exterior of the movable sleeve *c'*. When the stop *p'* is square with said flat space, as shown in Fig. 5, it is in the position required for breasting straight work; and when said stop *p'* is set back the sleeve can be turned
95 to the right or left, more or less, as required, for breasting the heels of right or left boots and shoes.

I am aware that there is no novelty in arranging heel-breasting machinery so as to cut
100 straight heels, rights, or lefts, and I therefore make no claim to such machinery, broadly.

I claim—

1. The crane *m*, rotary cutter *j*, pulleys *o* and *p*, mounted on said crane, belt *n*, and the roller

r, in combination with the last-holder *e*, provided with the handle *i*, for shaving the heels of boots and shoes when the surfaces of their counters are even, substantially as set forth.

5 2. The crane *m*, rotary cutter *j*, pulleys *o* and *p*, mounted on said crane, belt *n*, and last-holder *e*, provided with the handle *i*, in combination with the set-screws *u* and former *g*, for
10 shaving the heels of boots and shoes when the surfaces of their counters are uneven, substantially as set forth.

3. The adjustable pivot *h*, the last-holder *e*, provided with the handle *i*, the slide *d*, adapted to move on a suitable way, *b*, and the spring-

catch *w*, in combination, for controlling the 15 boot or shoe while its heel is being shaved, substantially as set forth.

4. The combination of the sleeve *c'*, the breasting-knife *a'*, and its shank *b'*, the lever *i'*, cam *k'*, roller *n'*, and stem *m'* of the last- 20 holder, constituting a device for breasting the heels of straight or right or left boots and shoes, substantially as set forth.

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Witnesses:

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