

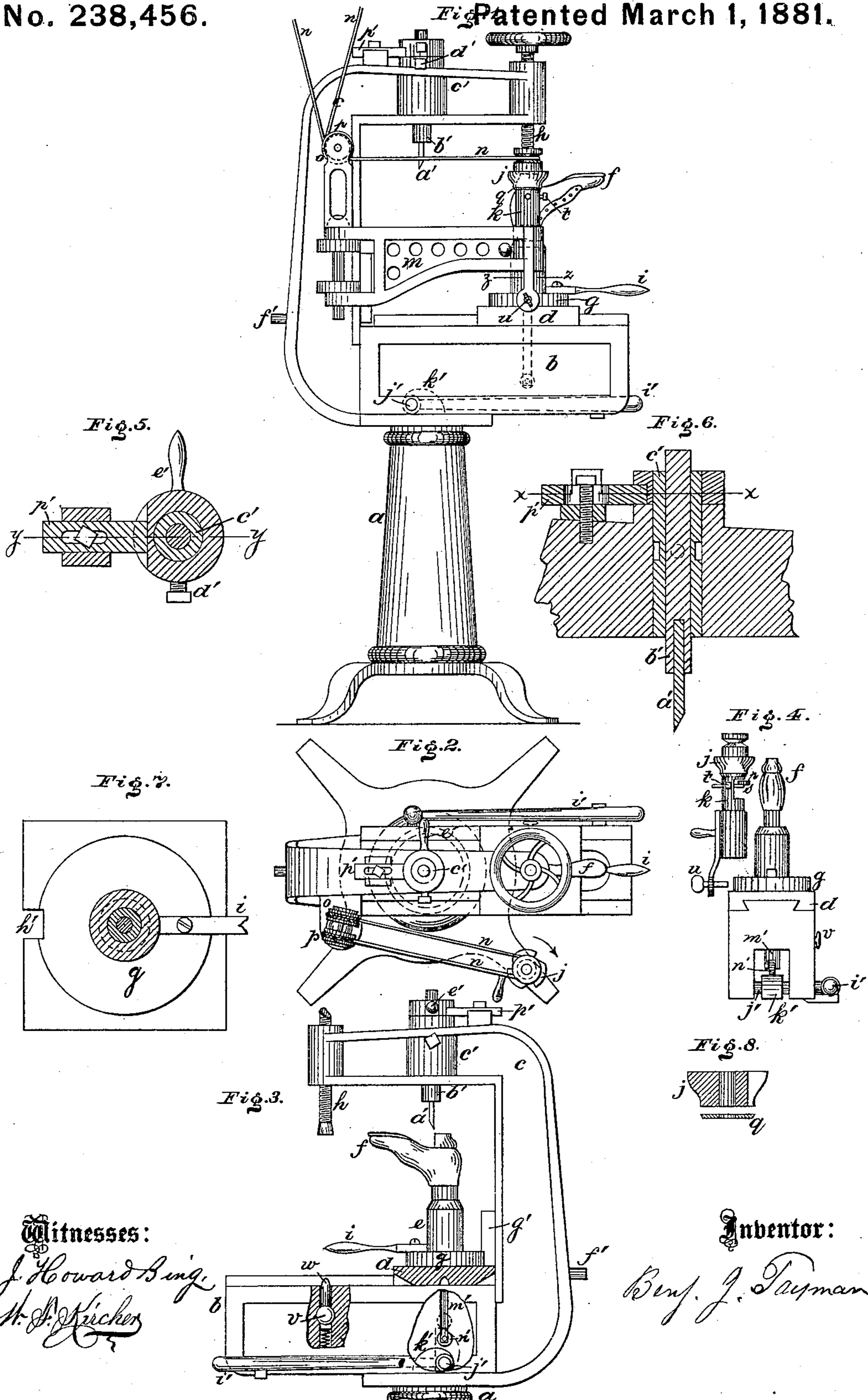
(Model.)

B. J. TAYMAN.

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

**No. 238,456.**

**Patented March 1, 1881.**



**Witnesses:**

J. Howard Bing.  
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# UNITED STATES PATENT OFFICE.

BENJAMIN J. TAYMAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
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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  
25 the boot or shoe *f*, and the former *g* is shown 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  
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 without turning the boot or shoe. 70

*f'*, Fig. 3, is an adjustable rod working through a hole in the frame *c* against the gib *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- 75 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 passes through the bed-plate *b*, and which car- 80 ries 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'*. When the lever *i'* is thrown up the heel of the 85 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 space formed on the exterior of the movable 90 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 to the right or left, more or less, as required, 95 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 straight heels, rights, or lefts, and I therefore 100 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 shaving the heels of boots and shoes when the  
10 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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