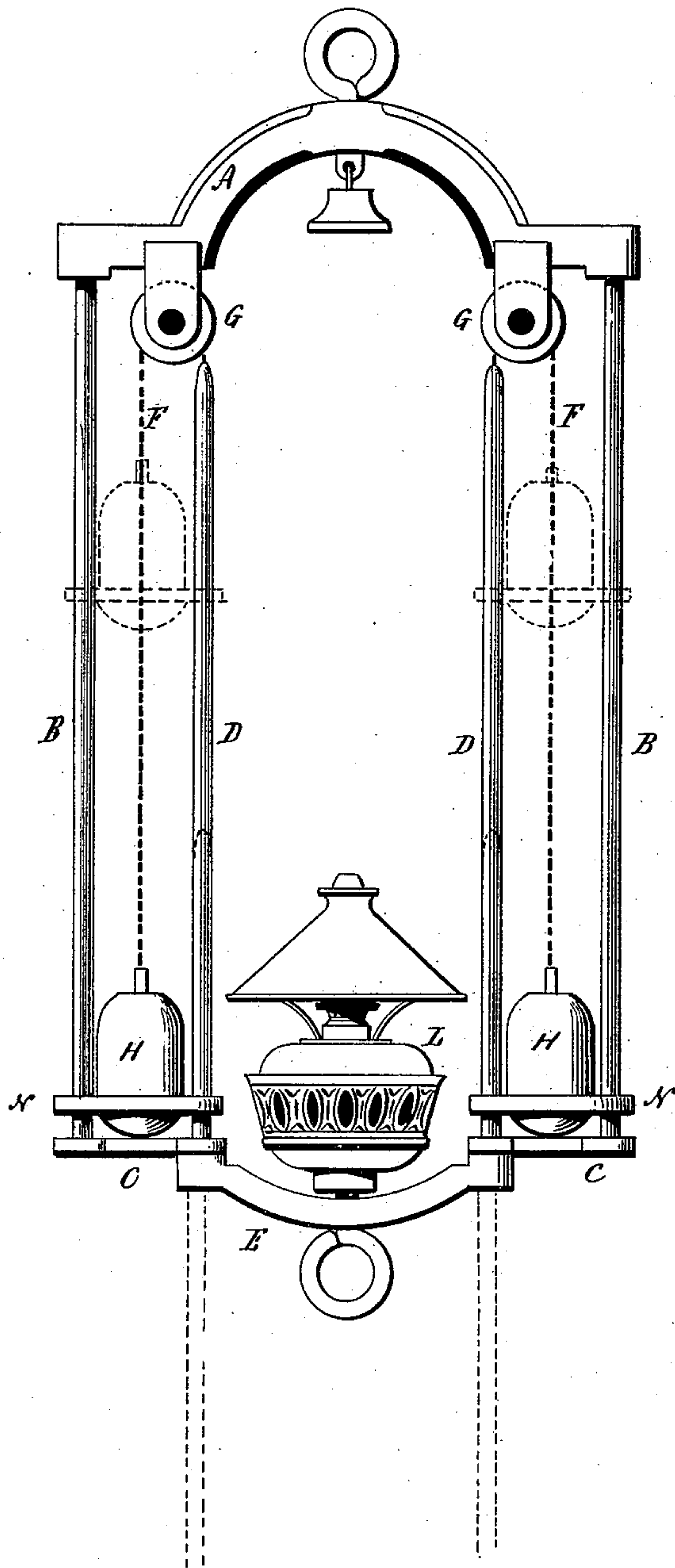


J. A. EVARTS.
Extension Lamp Fixture.

No. 230,258.

Patented July 20, 1880.



Witnesses.

John H. Murray
John C. Earle

John A. Evarts
Inventor
By atty.
John C. Earle

UNITED STATES PATENT OFFICE.

HIRAM G. FARR, OF BRANDON, VERMONT, ASSIGNOR TO HIMSELF AND
HENRY C. COPELAND, OF SAME PLACE.

MACHINE FOR FORMING FLANGES ON COUNTER-STIFFENERS FOR BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 230,259, dated July 20, 1880.

Application filed June 11, 1880. (Model.)

To all whom it may concern:

Be it known that I, HIRAM GUSTAVUS FARR, of Brandon, in the county of Rutland and State of Vermont, have invented a new and useful Improvement in Machines for Forming Flanges on Counters for Boots and Shoes, of which the following is a specification.

My invention consists in a novel construction, arrangement, and combination of a concave mold, a convex mold for engagement with the same, and certain details of construction and arrangement of parts, as hereinafter described.

In the accompanying drawings, Figure 1 is a central vertical section of my invention. Fig. 2 is a top view of the concave portion, partly in section. Fig. 3 is a vertical section of the apparatus with the blank in position to be formed. Fig. 4 is a detail view of the counter.

Similar letters of reference indicate corresponding parts.

A represents the concave mold, the form of which in horizontal section resembles three sides of a hollow square. The top of the mold is flaring or beveled outward, and the bottom is rounded to correspond with the form of the heel portion of a boot or shoe.

Through a hole in the bottom of the mold A works a plunger, B, the top of which is concave, and terminates in a flange, *b*, overhanging the plunger. Outside of and below the bottom of the mold is a collar, *c*, fast on the plunger B.

In the hole in the bottom of the mold is a rib or feather, *d*, which engages with a groove, *f*, in the plunger, to prevent it from turning.

Surrounding the plunger B, outside of the mold A, is a spring, E, one end of which bears against the collar *c*, before referred to, and the other end against a frame, G, secured to the bottom of the mold, through which frame the plunger B works. The tendency of the spring E is to keep the plunger elevated to the position shown in Fig. 1.

At the top of the mold A, on the side opposite the open side of the square, is a gage consisting of a plate, H, secured to the mold by screws, or in any suitable manner, for regulating the width of the flange which is to be formed on the counter. On the other two sides are gages consisting of similar plates, J J, each of which is secured to the mold by a screw, *i*, passing through a slot, *s*, in the plate

and into the mold, by which means they may be adjusted nearer toward or farther from the central gage, H, according to the width of the counter.

K represents the convex mold, which corresponds in form with the interior of the concave mold, and is sufficiently smaller to admit between the two surfaces the blank from which the counter is formed.

The mold K may be hollow, and provided with two pipes, M M², for the admission and escape of steam, in order to heat the mold when desired.

The mold A is placed, preferably, in an upright position, as shown in Fig. 1.

The blank is placed across the top of the mold with the top of the plunger directly under the center of the blank. The convex mold K is then depressed so as to bear upon the upper surface of the blank, directly over the center, and hold it firmly between the mold K and the top of the plunger. As the downward motion of the convex mold continues the blank is carried down into the concave mold until the top of the plunger B reaches the bottom of the mold and forms a part thereof. The pressure between the molds forms the flange R on the counter P, as shown in Fig. 4. As the mold K rises the plunger B follows it up (being actuated thereto by the spring E) and brings with it the counter, which may then be removed and finished in any suitable manner.

The convex mold may be raised and lowered by a crank, eccentric, or any other suitable device.

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

1. The combination of the concave mold A, plunger B, spring E, and frame G, substantially as and for the purpose herein described.

2. The gages H and J J, in combination with the concave mold A, as shown and described, for the purpose specified.

3. The convex mold K, constructed substantially as described, in combination with the mold A and plunger B, substantially as and for the purpose specified.

HIRAM GUSTAVUS FARR.

Witnesses:

G. H. YOUNG,
F. E. BRIGGS.

