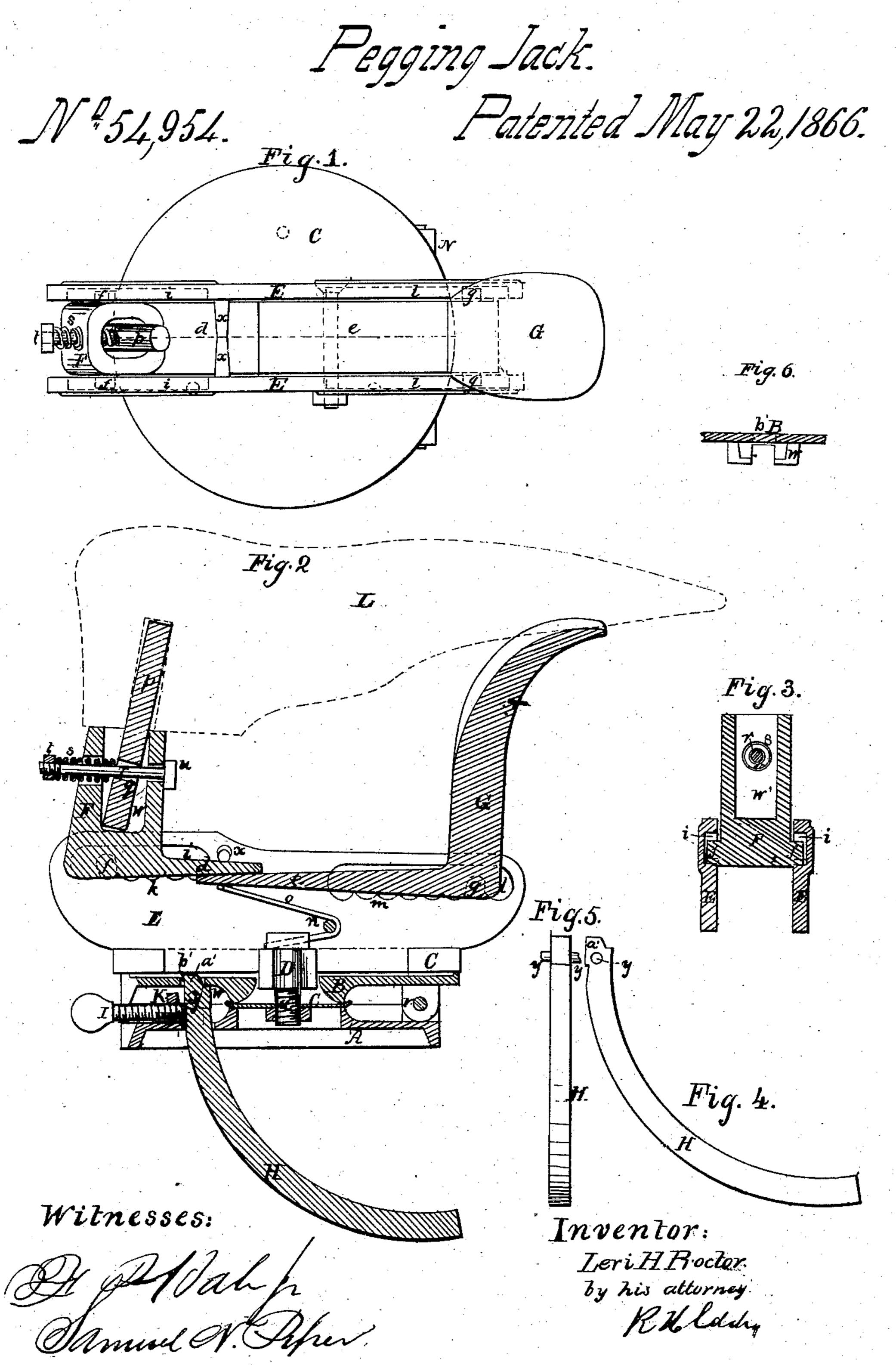
## L. H. Poolog,



## United States Patent Office.

LEVI H. PROCTOR, OF EAST SAUGUS, MASSACHUSETTS.

## IMPROVED SHOE-JACK.

Specification forming part of Letters Patent No. 54,954, dated May 22, 1866.

To all whom it may concern:

Be it known that I, LEVI H. PROCTOR, of East Saugus, in the county of Essex and State of Massachusetts, have invented an Improved Shoe-Jack, and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a longitudinal section, and Fig. 3 a transverse section, of it, the latter section being taken through two of the opposite rack-grooves and their co-operative teeth extending from the heel-rest.

My said shoe-jack is readily adjustable to lasts of different sizes.

In the drawings, A is the circular bed-plate,

which, when the machine is in use, is to be confined to a bench or post by means of screws going down through the plate and being screwed into the said bench or post. On this bed-plate another plate, B, is arranged, the two being

connected by a hinge, v.

A curved bar, H, having its head formed in manner as represented in side view in Fig. 4 of entering and engaging with a socketed projection, w, formed as shown in Fig. 6, and extending from the plate B, goes through an opening in the plate A, and serves, with a clamp-screw, I, (screwed through a projection, K, extending from the plate A,) to fix the plate B at any desirable inclination with the plate A.

The plate C is connected with the plate B by means of a screw-bolt or center pin, D, which goes through the two plates, and a washer, c, and receives a screw-nut on a screw, a, formed on its lower end. Thus the plate C, with the parts sustained by it, is capable of being freely

revolved on the plate B.

Two guide-plates, E E, extend up from the plate C and are arranged parallel to each other. The heel-rest F and the toe-rest G of the shoejack are placed in the space between the plates E E. Each of the said plates has two rackgrooves, i l, formed in it, those of one plate being directly opposite those of the other. The lower edge of each of these grooves is a toothed rack, k or m, while the upper edge of such groove is a straight edge. Each groove receives a tooth, f or g, projecting from the heel or the toe rest. The depth of the tooth is not so great as the distance between the rack under it and the top of the groove of such rack.

Furthermore, the heel-rest has an arm, d, extending from it and upon an arm, e, projecting from the toe-rest G, the same being as represented in Fig. 2. A spring, o, placed between the arm e and the plate C, and held in place by a pin, n, extending from one to the other of the plates E E, operates to press the arm e up against the arm d, and the latter against a stud, x, projecting from each plate E, such part x being arranged as exhibited in Fig. 2. By the action of the spring the teeth fg will be forced up against the upper edges of the grooves il, and out of engagement with the racks km, so as to enable the heel and toe rests to be easily moved either toward or apart from one another to adapt them to support a shoe or last of any size. Any downward pressure, or a blow on the last or shoe, will force the teeth into engagement with the racks and prevent any disarrangement of the toe and heel rest with respect to the last.

The heel-rest has a socket, w, made down in it to receive a pin, p, which has an opening, q, made laterally through it for reception of a and in edge view in Fig. 5, so as to be capable | bolt, r, which goes through the heel-rest and the pin p, and carries a helical spring, s, to bear against the pin p, and a nut, t, screwed on the bolt. The head u of the bolt rests against

the front side of the heel-rest.

The pin p is to enter the last, which is represented by dotted lines at L as on the heel and toe rests, the spring s serving to force the last down on the toe-rest, and also to enable the last to be moved on or off the toe-rest, as circumstances may require.

By means of the nut and screw of the bolt r the tension of the spring may be varied as occasion may render necessary or desirable.

The object of having the bar H readily detachable from the plate is to enable the bar to be dispensed with, or used, as circumstances may require. The bar has two ears or studs, y y, extending from it, as shown in Figs. 4 and 5. These ears or studs rest in the lower part of the socketed projection w, while the part a'bears against the edge of a hole, b', made in the plate B and directly over the socket of the projection, which is open at its rear to admit the head of the bar H.

I claim as my invention—

1. The combination and arrangement of the arms de, the spring o, the grooves il, the racks k m, and the sets of teeth f g with the heel and toe rests F G, the plate C, and its plates E E, the whole being substantially as and to operate as described.

2. The arrangement and application of the pin p, the bolt r, and spring s and nut t with the heel-rest F.

3. The application of the curved bar H to the plate B by means of the socketed projec-

tion w, the hole b', and the ears y y, arranged as described, whereby the two may be connected or disconnected, as circumstances may require.

LEVI H. PROCTOR.

Witnesses:

R. H. Eddy, F. P. Hale, Jr.