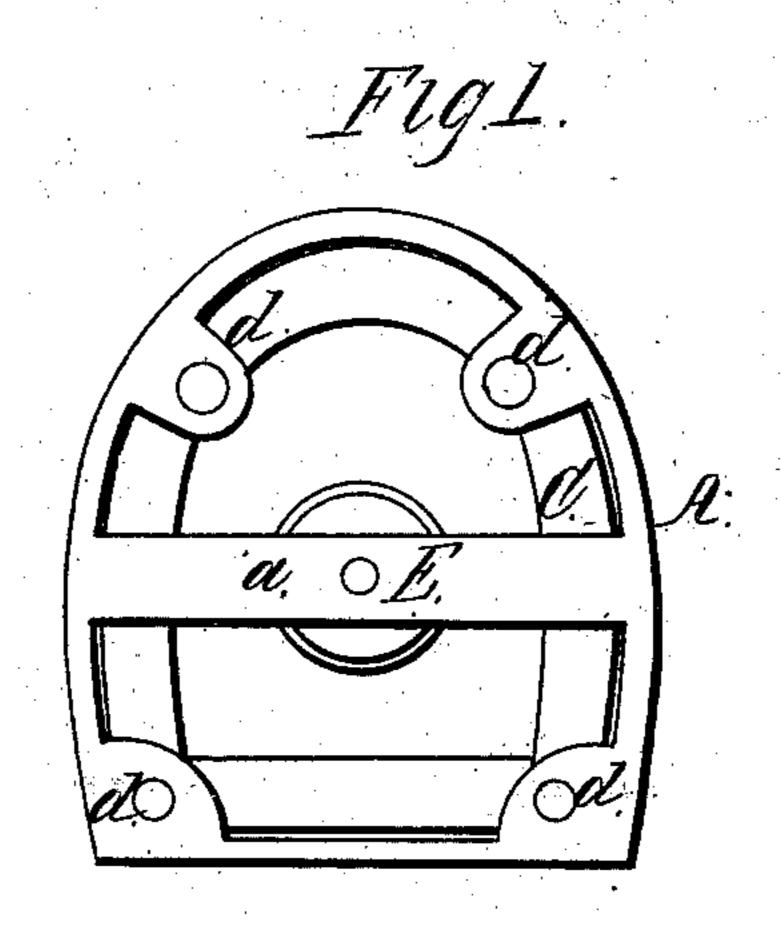
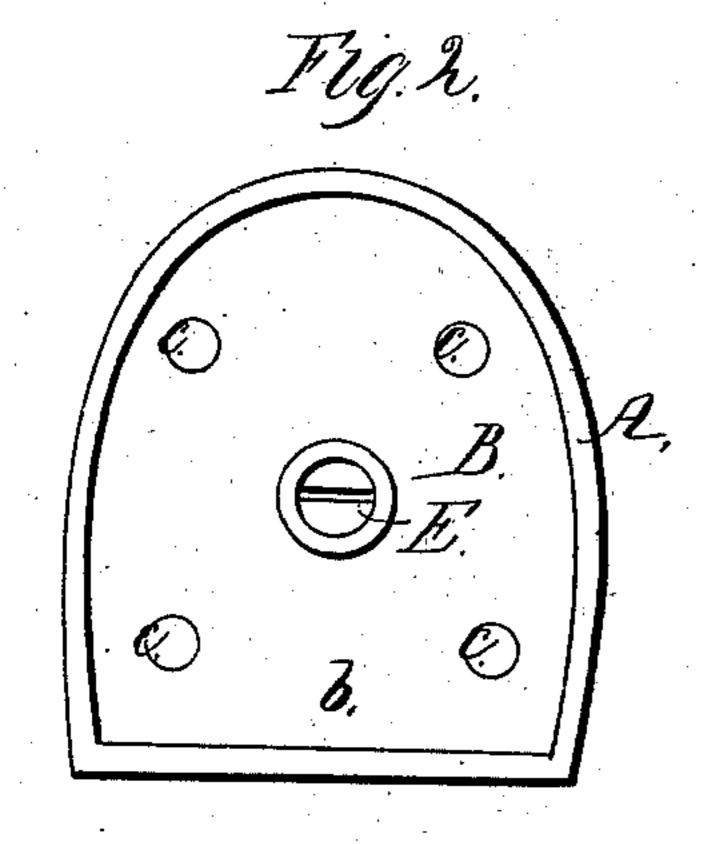
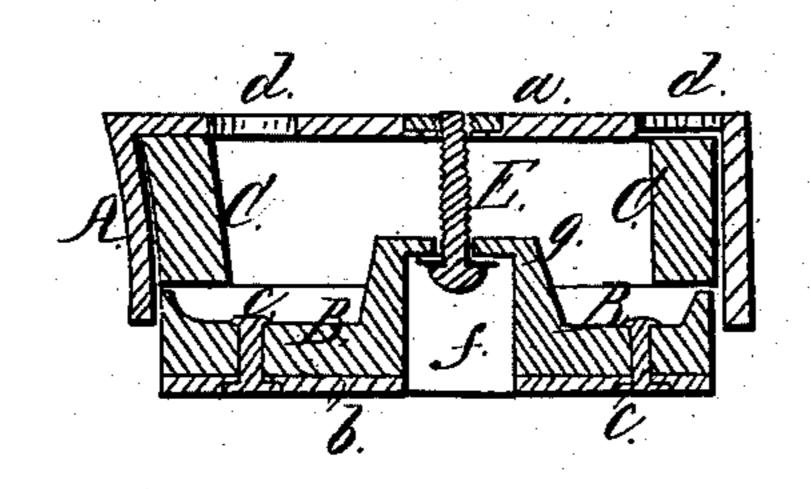
Robinson & Marshall, Shoe Heel, Patented Aug. 7, 1866.



Flg. 3.





Witnesses; De Browne. Rado fruit Charles Robenson, Jul. Marchall, Bry Chui catty.

United States Patent Office.

IMPROVED BOOT-HEEL.

Specification forming part of Letters Patent No. 56,992, dated August 7, 1866.

To all whom it may concern:

Be it known that we, CHARLES ROBINSON and J. C. Marshall, of Springfield, in the county of Hampden and State of Massachusetts, have invented an Improved Elastic Heel for Boots and Shoes; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a top or inside view of the heel; Fig. 2, a bottom or outside view thereof; Fig. 3, a central vertical section thereof in a plane indicated by the line x x, Figs. 1 and 2.

Like letters designate corresponding parts

in all of the figures.

First, we cast a thin but strong shell of brass or iron, in the form and of proper sizes to fit different sizes and styles of boots and shoes. This is to be japanned or otherwise finished on the outside to look like leather. It is entirely open at the bottom, and at the top it has flanges dd, by which it is firmly screwed or riveted to the soles of the boots or shoes. It also has a cross-bar, a, at the top, by which the movable bottom of the heel is attached and retained in place.

Inside of the periphery of the shell we place a thick strip, C, of india-rubber, substantially as represented, not reaching down to the edge

of the shell.

The movable or yielding bottom or piston B fits closely inside of the shell, so that it may slide up and down therein like a piston in its cylinder, and its edges rest against the lower edge of the rubber. It has a sunk portion or

cavity, f, in the center, and through the bottom g thereof a screw, E, passes and screws up into the cross-bar a of the shell. By this screw not only is the bottom held in place, but it is adjusted up into the shell as far as desired, so as to give any degree of elasticity desired.

We cover the bottom with a thickness, b_* of leather, to be attached to it by rivets or screws cc. This leather covering gives softness to the tread, and can be renewed as often as desired.

These heels are very durable, and can be applied to any boots or shoes. They always retain their good shape, not wearing away. They are very elastic, and make walking easy and pleasant, and they may be made nearly or quite as light as solid leather heels.

What we claim as our invention, and desire

to secure by Letters Patent, is—

The combination of the india-rubber strip C with the shell A and movable bottom B, arranged so that the edges of the said bottom press against and are supported by the strip, and is covered with or composed in part of leather, substantially as and for the purpose herein specified.

The above specification of our improved elastic heel for boots and shoes signed by us

this 28th day of March, 1866.

CHARLES ROBINSON. J. C. MARSHALL.

Witnesses:

J.E. McIntire, JOSEPH ARMSTRONG.