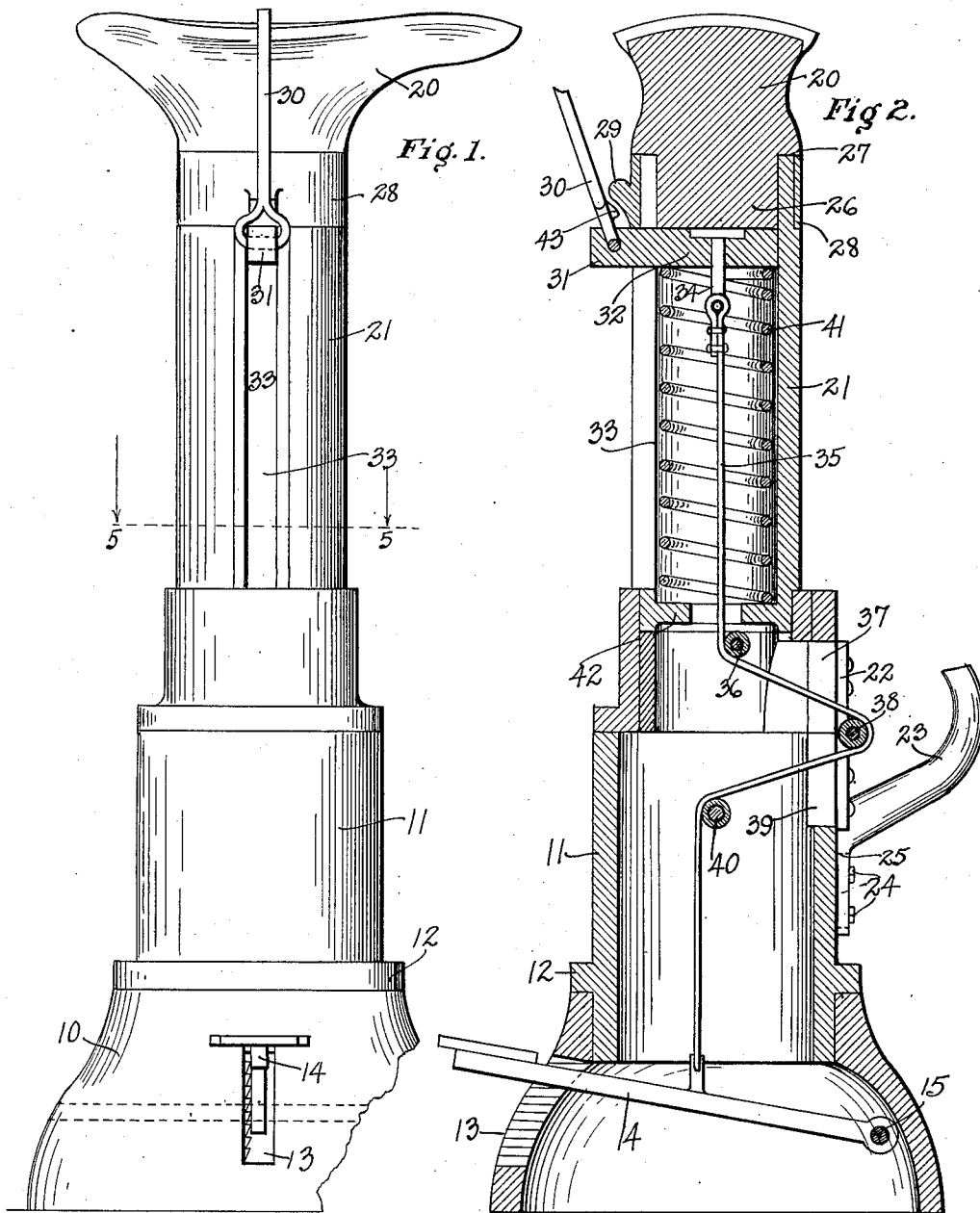


G. W. HARRISON.
SHOE JACK.
APPLICATION FILED DEC. 28, 1911.

1,037,619.

Patented Sept. 3, 1912.

2 SHEETS—SHEET 1.



WITNESSES:

A. H. Edgerton.

O. M. McLaughlin.

INVENTOR.

George W. Harrison.

BY

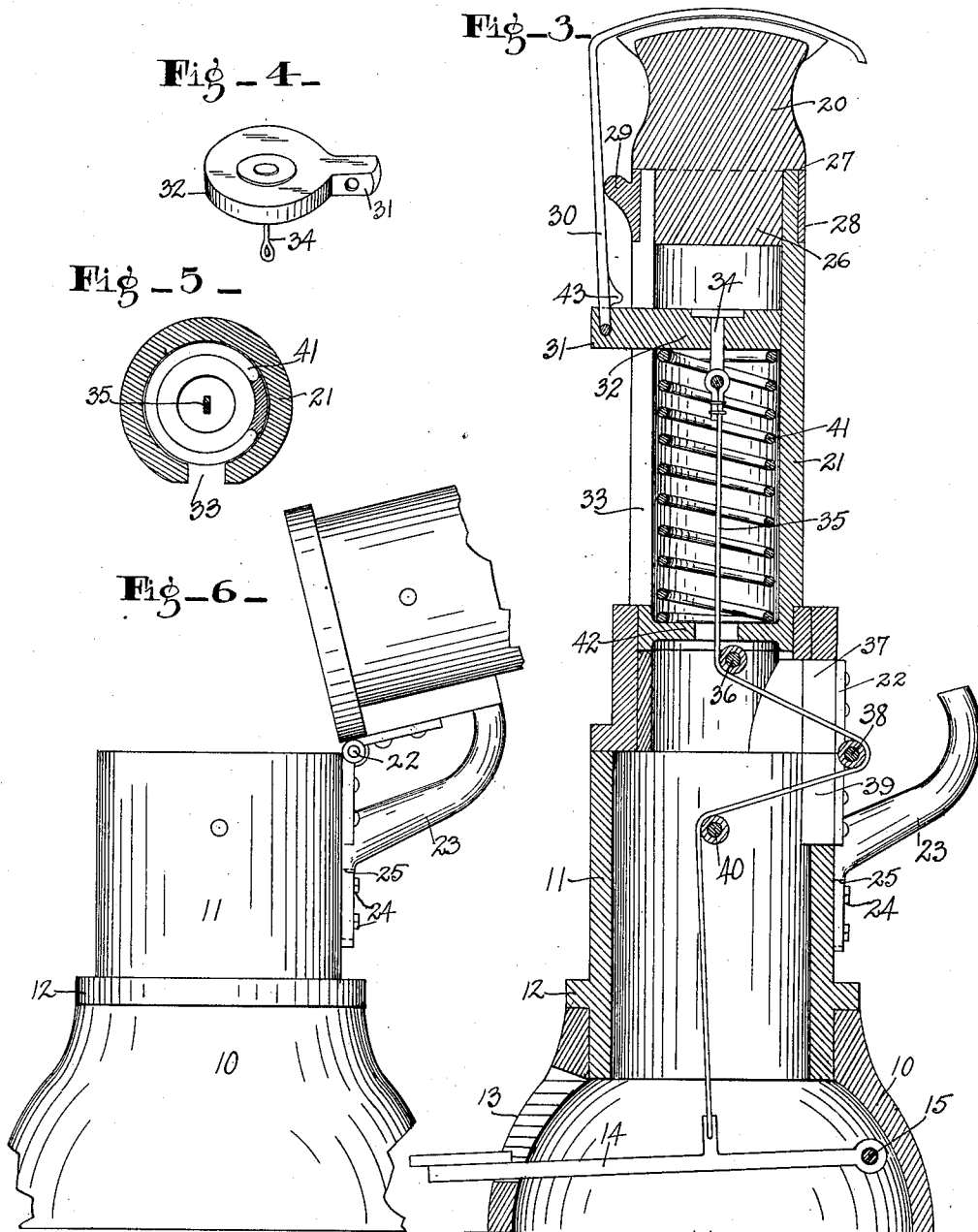
V. H. Cookwood
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UNITED STATES PATENT OFFICE.

GEORGE W. HARRISON, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO
FREDERICK WARNER, OF INDIANAPOLIS, INDIANA.

SHOE-JACK.

1,037,619.

Specification of Letters Patent.

Patented Sept. 3, 1912.

Application filed December 28, 1911. Serial No. 668,335.

To all whom it may concern:

Be it known that I, GEORGE W. HARRISON, of Indianapolis, county of Marion, and State of Indiana, have invented a certain useful Shoe-Jack; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings.

The object of this invention is to improve the construction of shoe jacks so as to facilitate their operation and use.

The nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a side elevation of the jack in its upright position. Fig. 2 is a central vertical section through what is shown in Fig. 1, showing the device in its idle position and with the shoe-holding arm partly broken away. Fig. 3 is the same as Fig. 2, showing the parts in their operative position. Fig. 4 is a perspective view of the means for mounting the shoe-clamping arm. Fig. 5 is a transverse section through the device on the line 5-5 of Fig. 1. Fig. 6 is a side elevation of the middle portion of the device with the upper part of the column tilted and the upper part of the tilted portion broken away as well as part of the base.

There is shown herein a base 10 with an annular opening in the upper end and into which the lower member 11 of the tubular stand or last support projects loosely. Said portion 11 has an annular flange or shoulder 12, which rests upon the base, and the arrangement is such that the last support can be turned or oscillated on its base. The base also has a vertical opening or slot 13 through which the pedal lever 14 extends, and said pedal lever is pivoted at one end on the pin 15 in the base.

The last 20 is supported by an upper tubular supporting-member 21, which is hinged at its lower end by the hinge 22 to the upper end of the lower member 11 of the last support, so that the upper end of the jack may be tilted or turned on its hinge until it is stopped by the stop-arm 23. Said stop-arm is adjustably secured to the lower tubular member 11 of the last-support, so it can be adjusted vertically and thus the angular position of the upper part of the jack, when it is tilted, can be predetermined. This vertical adjustment of the stop 23, as

herein shown, consists merely of set-screws or bolts 24 extending through a vertical slot 25 in the lower part of the stop.

The last 20 has a cylindrical lower end or shank 26 which fits into the tubular upper end of the portion 21 of the last-support and is provided with shoulders 27 which rest upon the upper end of said tube 21. There is also a band 28 surrounding the upper end of the tubular support 21 and on one side it has a beveled projection or lug 29.

There is a shoe-clamping arm 30 which is pivoted at its lower end to an arm 31 of a plate 32, which is vertically movable or slidable in the upper tubular member of the last-support. Said plate 32 is cylindrical excepting that at one side it has the arm 31 projecting from it through a vertical slot 33 in the member 21 of the last-support. An eye-bolt 34 is secured to and extends down from the plate 32 and to it a cable 35 is secured. This cable extends down through the tubular support 21, passing about a roller 36 mounted in the lower part of said support 21 and then extending outwardly through a vertical slot 37 in the rear side of the lower end of the support 21 and about a roller 38 which is in alinement with the joint between the sections of the hinge 22, and from that the cable 35 extends through a vertical opening or slot 39 in the rear side of the upper end of the lower tubular support 11 and over a roller 40 and down to a connection with the pedal lever 14 between its ends. The plate 32 is supported by the spring 41 lying in the tubular support 21 and resting upon an annular inwardly extending flange 42 from the lower portion of said tubular member 21.

The upper end of the arm 30 is curved so as to be movable and extend over the last, as shown in Fig. 3, and, therefore, over a shoe placed upon the last, so that when said arm 30 is drawn down the hooked upper end thereof will hold and bind the shoe upon the last. Said hooked arm is drawn down and held down by the pedal 14, cable 35 and plate 32. By extending the cable 35 outside of the tubular supporting members 11 and 21 and passing it over a roller in alinement with the middle of the hinge 22, the action of the pedal 14 and other means for drawing downward the hooked arm 30 is not interfered with by the hinge or by the turning of the upper half

of the jack, and, therefore, can be utilized whether the same be upright or tilted. The lower part of the arm 30 has a beveled lug 43 in position to engage the beveled lug 29 on the band 28, when the pedal is released, and the spring 41 forces the plate 32 and hooked arm 30 upwardly, after the shoe has been treated, and thus automatically throws the hooked arm off the shoe and last. It is thus seen that said last is easily operated. When the pedal is released, the shoe-clamping arm is thrown off the shoe automatically, and after the shoe has been placed on the last, said hooked arm is moved by hand in position to engage the shoe, and then the pedal is depressed, whereby the hooked arm will hold the shoe on the last. Also, the upper part of the last-support can be tilted so as to bring the shoe in a desired position for treatment, and this tilting can take place without interfering with the operation of the shoe-clamping hooked arm, for that can be operated by the pedal whether the last-support is upright or tilted.

I claim as my invention:

1. The combination with a last, of a support therefor, a shoe-clamping means, a spring support operably connected thereto, means for depressing the same for clamping the shoe on the last, and means for causing the disengagement of said shoe-clamping means from the shoe when said clamping means is released and actuated by said spring support.

2. The combination with a last, of a support therefor, a plate vertically movable below said support, a hooked arm pivoted at its lower end to said plate with its upper end adapted to be projected over the last, a spring for supporting said plate in an elevated position, means for depressing said plate for holding said hooked arm on the last, inclined lugs on said support and said hooked arm adapted to engage each other as the hooked arm rises after said plate is released and force the hooked arm away from the last.

3. The combination with a last, of a tubular support slotted vertically at one side, a plate vertically movable in said support with a projection extending out through said slot, a hooked arm pivoted to said projection with the upper end adapted to extend over the last, a spring in said tubular

support for forcing said plate upward, means for depressing said plate, a band around the upper end of said support with a beveled lug thereon near the hooked arm, and a lug on the lower end of said arm adapted to engage said first-mentioned lug when the spring acts to force said plate upwardly and thereby throw the hooked arm away from the last.

4. The combination with the last, of a tubular support therefor, a shoe-clamping means, a spring support operably connected thereto, a lever near the lower end of said tubular support, a cable extending down through said spring support and the lower end of said tubular support and connected with said lever between its ends, whereby said shoe-clamping means may be depressed for clamping the shoe on the last.

5. The combination with a last, of a support therefor consisting of two members one above the other and the two hinged together at their adjacent ends so that the upper member and last can be tilted, shoe-clamping means movable in the upper last-holding member, a spring for forcing said shoe-clamping member upward, and means operable through said last-supporting members for depressing said shoe-clamping member.

6. The combination with a last, of a support including two tubular members hinged together at their adjacent ends and provided near said hinge with openings therethrough so that the upper member and last can be tilted, shoe-clamping means vertically slidable in the upper member, a yielding means for supporting said shoe-clamping means in its elevated position, rollers in the adjacent ends of said supports, a roller at the middle of said hinge, a pedal in the lower part of the device, and a cable extending from said shoe-clamping means over said rollers and through said openings and connected with said pedal, whereby the shoe-clamping means can be held down or operated while the last is tilted or upright.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

GEORGE W. HARRISON.

Witnesses:

G. H. BOINK,
E. H. MAYO.