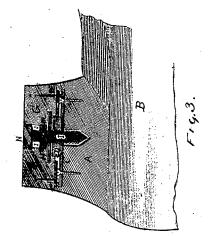
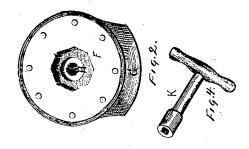
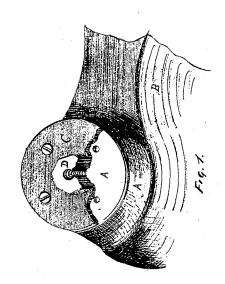
Harris & Pinney, Boot & Shoe Heel.

No. 106814.

Tatented Aug. 30. 1870.







Witnesses; No Fract. B. Farrul H.F. Harie - G. P. Pinner. By Farmel, Celesworth & Co. Attorneys.

## United States Patent Office.

## HENRY F. HARRIS AND GAYLORD P. PINNEY, OF CHICAGO, ILLINOIS.

Letters Patent No. 106,814, dated August 30, 1870.

## IMPROVEMENT IN BOOT AND SHOE-HEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, HENRY F. HARRIS and GAY-LORD P. PINNEY, of Chicago, in the county of Cook and State of Illinois, have invented a new and improved Boot and Shoe-Heel; and we do hereby declare the following to be a full and exact description thereof, which will enable others skilled in the art to which our invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specifiation.

Figure 1 is a perspective view of the fixed part of a boot or shoe-heel, showing one of the metal plates by which the two parts of the heel are connected to-

gether.

Figure 2 is a perspective view of the removable

part of the heel, also showing a metal plate.

Figure 3 is a vertical section of a boot-heel, showing the application of our improvements.

Figure 4 is a perspective view of the key for locking and unlocking the heel.

Similar letters of reference indicate corresponding

parts in the several figures of the drawing.

The heels of boots and shoes, owing to their construction, almost invariably wear unevenly, thereby frequently destroying their symmetry, and also that of the shoe, before either are worn out.

To overcome this defect, heels have been employed pivoted to the shoe in such a manner as to be capable of adjustment, for the purpose of changing the wear-

ing surfaces.

The objection found to this construction of heel is, that it cannot be held firmly in place at any desired point of its rotation, and is, consequently, liable to become loose and drop off, or, when changed, to move back to its first position. The effect of the adjustability is, therefore, entirely lost.

Our invention has for its object to provide a revolving boot and shoe-heel capable of being locked tirmly in position at any point of its adjustment; and

to this end.

The invention consists in the construction and arrangement of parts by which this result is obtained, as will be hereinafter more fully described.

In the accompanying drawing—
A is the fixed portion of a boot and shoe-heel, made circular in shape, and affixed to the shoe, B, in the usual manner.

The portion A is made about half the height of the entire heel, and is provided, upon the bottom, with a circular metal plate, C, firmly affixed thereto by means of screws, as shown.

This plate may be equal in diameter to the portion A, or made somewhat smaller, and let into said por-

tion, as shown in fig. 3.

D is an angular boss or nut, formed upon the plate, and projecting downward from the center of the same to fit within a corresponding angular opening formed in the center of the circular metal plate F, firmly secured in any convenient manner to the inner surface of the rotary portion G of the heel.

This latter portion of the heel is also made with circular exterior, to correspond with the part A.

The plate F is also, in this example of our invention, somewhat smaller, diametrically, than the part G, and is let into the same, as shown.

H is a metallic washer, placed in the part G under the plate F during the formation of the heel.

The two parts of the heel are secured together in

the following manner:

The part G is placed upon the part A, with the boss D of the latter entering the central opening in the former, and a headed screw, F, is inserted through a central opening. J, formed in the part G, passing through the washer H, and the boss or nut D, as shown in fig. 3.

The screw is set firmly down, to hold the parts together by means of a key, k, shown in fig. 4, which fits over the squared end of the screw for this pur-

When the screw is in place, its head, m, bears against the washer, as shown, and thus forms a firm

connection of the parts.

N is a small disk, of leather, inserted in the opening formed in the part G of the heel for the passage of the screw. It is supported upon the end of the latter, and serves to close the opening against the introduction of dirt, &c.

By constructing the boss with angular sides, and the recess in the plate F with corresponding angles, the revolving part G of the heel is prevented from turning when locked in place by the screw.

We design to form the boss and recess octagonal in shape, to admit of the revolving heel being changed and locked firmly in eight different positions.

It will, of course, be understood that the screw is loosened by the key after the disk N is removed, to permit the various changes of the part G.

By our invention a revolving boot and shoe-heel is produced, which is adjustable to compensate for unequal wear, and, at the same time, secured firmly in place at each point of the adjustment.

Having thus described our invention,

What we claim as new, and desire to secure by

Letters Patent, is-

In combination with the plate C, having the angular screw-boss D, and the plate F, having the angular opening, the fixed washer H and flanged screw I. all constructed and arranged to operate within the fixed and removable portions A G of the heel, as herein shown and described, for the purpose specified.

H. F. HARRIS. G. P. PINNEY.

Witnesses:

E. A. ELLSWORTH,

G. H. Frost.