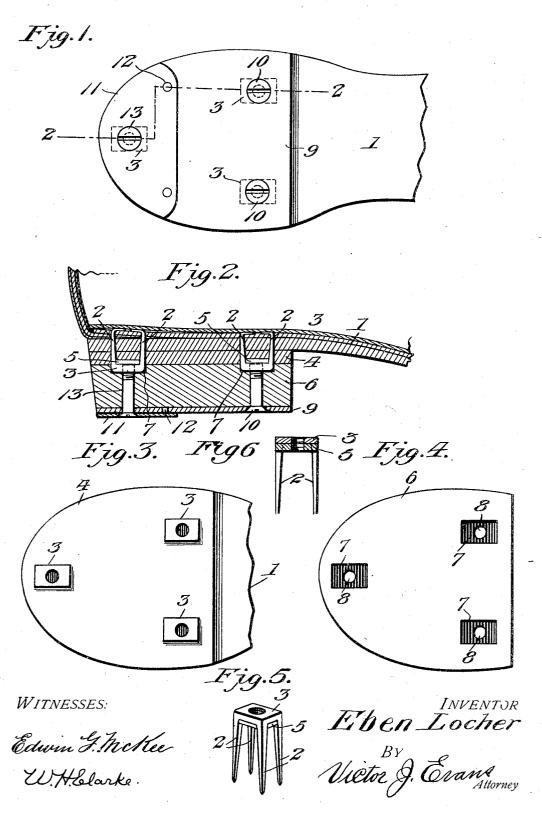
E. LOCHER. SHOE HEEL. APPLICATION FILED JULY 1, 1904.



## United States Patent Office.

## EBEN LOCHER, OF LOCHER, VIRGINIA.

## SHOE-HEEL.

SPECIFICATION forming part of Letters Patent No. 793,669, dated July 4, 1905.

Application filed July 1, 1904. Serial No. 214,953.

To all whom it may concern:

Be it known that I, EBEN LOCHER, a citizen of the United States, residing at Locher, in the county of Rockbridge and State of Virginia, 5 have invented new and useful Improvements in Shoe-Heels, of which the following is a specification.

This invention relates to shoe-heels.

The objects of the invention are to improve and simplify the construction of such heels.

With these and other objects in view the invention resides in the novel combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment of the invention.

In the accompanying drawings, forming part of this specification, Figure 1 is an under plan view of a heel constructed in accordance with the invention. Fig. 2 is a vertical irregu20 lar section on the line 2 2, Fig. 1. Fig. 3 is a view similar to Fig. 1 with the supplemental heel and the heel-plates removed. Fig. 4 is a plan view of the supplemental heel. Fig. 5 is a detail perspective view of a pronged nut 25 used for attaching the supplemental heel. Fig. 6 is a sectional view of the pronged nut and filling-piece.

Like reference - numerals indicate corresponding parts throughout the several views.

The reference-numeral 1 indicates the heel portion of a shoe. Extending through the several layers of the heel portion 1 and clenched upon the upper surface thereof are the prongs 2 of nuts 3 3 3, the body portion of each of which nuts extends below the lower surface of the heel 4, as shown in Fig. 2. Fitted between the prongs of each nut 3 is a filling-piece 5, in which is formed a screw-threaded socket. Each of the pronged nuts, preferably, is constructed of brass or other suitable material, and the filling-pieces 5 are composed of any cheaper metal capable of receiving screw-threads in the socket thereof.

A supplemental heel 6, formed in its upper surface with apertures or recesses 7 7 7 to receive the pronged nuts 3, is fitted upon the lower surface of the heel 4, said supplemental heel 6 being provided with bolt-holes 8, as shown in Fig. 4. The supplemental heel 6, preferably, is constructed of wood, as this ma-

terial has been found to possess the desirable qualities of inexpensiveness, strength, lightness, and durability. Fitted upon the lower surface of the supplemental heel 6 is plate 9, which is formed with suitable countersunk 55 perforations. The plate 9 is constructed, preferably, of steel or metal suitable for the purpose.

Extending through the plate 9 and supplemental heel 6 and engaging the nuts 3 are 60 screw-bolts 10 10, each of which is formed with a notch to facilitate its removal with a screw-driver. The notch in each of the bolts 10 is preferably twice as deep as usual in order that wear upon the head of the bolt will 65 not render it impossible to employ a screw-

driver in loosening the bolt.

Upon the end of the rear portion of the plate 9 is fitted a supplemental heel-plate 11, which is provided with upwardly-extending 70 lugs 12, that fit into suitable perforations in the plate 9, thus preventing displacement or turning movement of the supplemental plate 11 upon said plate 9. The plate 11, which preferably is constructed of steel or other 75 suitable metal, is held in position upon the plate 9 by means of a screw-bolt 13, which extends through said plate 11, plate 9, supplemental heel 6, and engages one of the pronged nuts 3, the screw-threaded end of 80 said bolt 13 extending through the pronged nut 3 and engaging the screw-threaded socket in the filling-piece 5, this being the case also with the bolts 10 10.

From the foregoing description it will be 85 seen that the improved heel of this invention is adapted to be removed readily and replaced by a similar heel, the only operation necessary being to loosen the screw-bolts 10 and 13. Furthermore, the plate 11 or the plates 90 11 and 9 may be removed and replaced by others whenever they become worn.

The construction described is simple, inexpensive, and thoroughly practical. In its novel combination and arrangement of parts 95 and in its details it presents an improvement over prior devices of a similar character.

Having thus described the invention, what

is claimed is—

1. The combination of a shoe having 100

pronged nuts clenched in its heel, a supplemental heel fitted upon the first-mentioned heel, a plate upon the supplemental heel, screw-bolts extending through the plate and 5 supplemental heel and engaging the nuts, a supplemental heel-plate upon the first-mentioned heel-plate, and a fastening device extending through the two heel-plates and supplemental heel and engaging one of the pronged nuts.

2. The combination of a shoe having pronged nuts clenched in its heel, the heads of the nuts extending below the lower surface of the heel, a filling-piece disposed between to the prongs of each nut and formed with a screw-threaded socket, a supplemental heel having recesses to receive the pronged nuts and fitted upon the lower surface of the heel,

a heel-plate fitted upon the supplemental heel, screw-bolts extending through the forward 20 portion of the heel-plate and supplemental heel, and engaging the pronged nuts and the socketed filling-pieces thereof, a supplemental heel-plate upon the rear portion of the first-mentioned heel-plate, lugs upon the supplemental heel-plate extending through the first-mentioned heel-plate, and a screw-bolt extending through the two heel-plates and supplemental heel and engaging one of the pronged nuts and the socketed filling-piece therein.

In testimony whereof I affix my signature in

presence of two witnesses.

EBEN LOCHER.

Witnesses:

John J. Hall, H. O. Locher.