

C. SCHWERDTFEGER.  
 HEELS FOR BOOTS AND SHOES.

No. 181,109.

Patented Aug. 15, 1876.

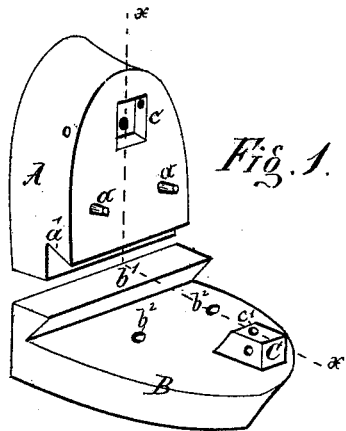


Fig. 1.

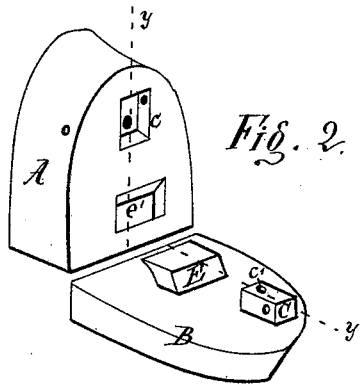


Fig. 2.

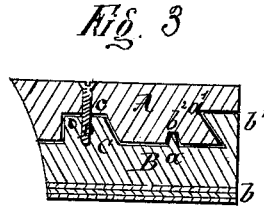


Fig. 3.

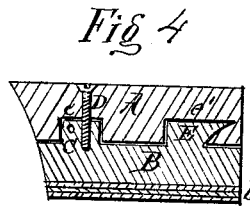


Fig. 4.

Witnesses.  
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 atty

# UNITED STATES PATENT OFFICE.

CHARLES SCHWERDTFEGGER, OF PALMYRA, MISSOURI.

## IMPROVEMENT IN HEELS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **181,109**, dated August 15, 1876; application filed June 6, 1876.

*To all whom it may concern:*

Be it known that I, CHARLES SCHWERDTFEGGER, of Palmyra, in the county of Marion and State of Missouri, have invented certain new and useful Improvements in Heels for Boots and Shoes, of which the following is a specification:

My invention relates to improvements in heels for boots and shoes for which Letters Patent were granted to me under date of April 2, 1876, No. 176,488; and consists, essentially, in the peculiar construction of the two parts of said heel, to adapt them to be more readily connected together or detached when desired or required, and also to more effectually obliterate or hide from view the joint of said sections. It further consists in the employment of certain materials by means of which a more ornamental heel is produced, while at the same time its cost is greatly reduced.

In the accompanying drawings, Figures 1 and 2 are perspective views of the two sections of a heel constructed according to my invention; and Figs. 3 and 4 are sections through lines *x y y* of Figs. 1 and 2, respectively.

In these drawings similar letters of reference are employed to indicate corresponding parts in all the figures wherever they may occur.

The heel is composed of two parts or sections, A and B, which sections form part of a permanent heel. The upper permanent section A, as well as the lower permanent section B, is made of some hard material, by preference a material having a natural permanent polish or gloss when cast or molded, or adapted to receive such polish, such as rubber or horn.

In substituting rubber or horn for wood or leather, I am enabled to have the two sections made in any quantities by the process of casting or molding, at a greatly-reduced cost from that of said sections when fashioned or made by hand, or in the lathe or other machine, when leather or wood, in combination with a metallic or other plate, are employed. The two sections may, however, be made of metal or ivory, or similar material, when preferred; but, owing to the cost of the latter and the

weight of the former material when made solid, I prefer to employ the substances already mentioned as being as durable, more readily manufactured, and requiring little or no finishing or polishing. The lower section, B, is made of such a thickness that a layer or a series of layers of leather, *b*, may be connected thereto to make it of the requisite height. This layer or layers of leather are fastened to the lower section B in any suitable manner, by preference by means of a series of screws, so that one or more of them may be readily removed when worn out, and replaced by new ones or a new one. By employing a layer or a series of layers of leather in combination with the lower part B, the wear of said part is effectually prevented, and the sound or noise created when walking upon a floor by the contact of the hard material of which the sections A B are made with said floor is also effectually prevented.

The two sections A B of the heel are connected together by means of a dovetail joint, as shown in Figs. 1 and 3, the section B being provided with a dovetailed projection, *b*<sup>1</sup>, which fits into a correspondingly-shaped recess, *a*<sup>1</sup>, formed in the upper section A. The lower section is further provided with a stud or shank, C, which fits into a suitable recess, *c*, formed in the upper section A. The shank C has a screw-threaded perforation, *c*<sup>1</sup>, to receive the screw D, by means of which the two sections A B are connected or fastened together and to the boot or shoe, additional screws being employed to further secure the heel to the body of said boot or shoe, as fully explained in above-mentioned Letters Patent.

To prevent lateral motion or displacement the upper section A is provided with two or more downwardly-projecting pins or studs, *a*, which enter suitable holes or recesses *b*<sup>2</sup>, formed in the lower part B, when the two sections of the heel are secured in position.

Instead of the dovetailed connection above described, the two parts A B may be locked or hooked together by means of a projection or enlarged shank, E, formed on the lower section B, said shank being beveled from top downward, or hook-shaped, as shown at *e*, Figs. 2 and 4, said shank E fitting into a correspondingly-shaped recess, *e*<sup>1</sup>, formed in the

upper portion A. In this case the fastening-shank C and its recess are formed on or near the rear edge of the lower and upper sections B A, respectively. By this construction the lateral sway or motion of the two sections is also effectually prevented.

In heels of large size I also employ the transverse pin G, passing through the upper portion A, and through the shank C, as fully described in the specification forming part of the hereinbefore-mentioned Letters Patent.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A heel for boots and shoes formed in two parts, said parts being connected together at their squared ends by means of a dovetail joint, and at their circumference by means of a series of screws, substantially as described, for the purpose set forth.

2. The combination of the parts A B of a two-part heel, connected together at their squared ends by means of a dovetail joint, and at their circumference by means of a series of screws, and the shank C and screw D, substantially as described, for the purpose specified.

3. The combination of the part B, having a beveled or hook-shaped shank, E, and the shank C, with the part A, having recesses *e'* and *e*, and the screw D, substantially as described, for the purpose specified.

4. The combination of the part A, having downwardly-projecting pins or studs *a*, with the part B, having suitable holes or recesses to receive said studs or pins *a*, substantially as described, for the purpose specified.

5. A heel consisting of two permanent sections, made of rubber, horn, or similar material, said sections being connected together at their square ends by means of a dovetail joint, and at their circumference by means of a series of screws, in combination with one or more layers of leather, and a boot or shoe, to which said heel is removably connected, in the manner and for the purpose substantially as set forth.

In witness that I claim the foregoing I have hereunto set my hand.

CHARLES SCHWERDTFEGER.

Witnesses:

CHRST. MITCHELL,  
GEO. W. LANE.