(No Model.)

G. SCHMIDT.

HEEL.

No. 410,030. Patented Aug. 27, 1889.

Fig. 1.

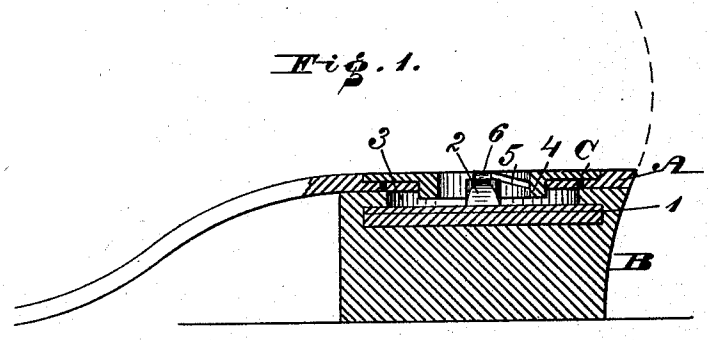


Fig. 2.

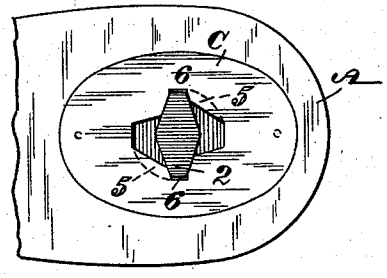


Fig. 3.

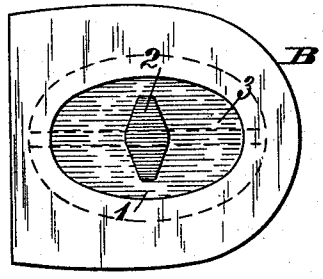
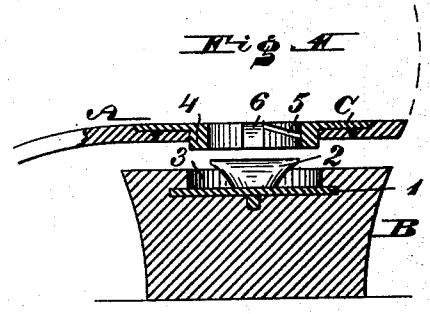


Fig. 4.



Witnesses
Theo. Rollé.
A. P. Jennings.

Inventor
Gottlieb Schmidt,
By his Attorneys
Wiedersheim & Fuller

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

GOTTLIEB SCHMIDT, OF PHILADELPHIA, PENNSYLVANIA.

HEEL.

SPECIFICATION forming part of Letters Patent No. 410,030, dated August 27, 1889.

Application filed March 9, 1889. Serial No. 302,689. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB SCHMIDT, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Boot or Shoe Heels, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to devices for securing the heel of a boot or shoe in position; and it consists of the combination and arrangement of parts, as herein set forth and claimed.

Figure 1 represents a vertical section of a boot or shoe heel embodying my invention. Figs. 2 and 3 represent top or plan views thereof. Fig. 4 represents a vertical section, the parts being separated and the heel shown at a right angle to that in Fig. 1.

Similar letters and numerals of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the sole of a boot or shoe, and B designates a heel, which is formed of soft rubber, and having embedded in the upper portion thereof a plate 1, from which rises the head or lug 2, it being noticed that a space 3 exists between said head and the adjacent portion of the top of the heel.

C designates a plate which is secured to the heel portion of the sole of the boot or shoe, the same having at its center a depending tubular portion or boss 4, which is adapted to enter the space 3 and inclose the head 2. The inner wall of the boss 4 is formed with inclined or spiral shoulders 5, at the upper termination of which are recesses 6, it being noticed that the head 2 and interior of the boss 4 are oblong, or, in other words, their length is greater than their width, as will be most clearly seen in Fig. 2.

The operation is as follows: The heel is presented to the sole as in Fig. 4, the same being at a right angle to that shown in Fig. 3, whereby the head enters the boss. The heel is now rotated, the under side of the ends of the head then riding on the spirals 5, so that the heel is firmly drawn against the sole and the upper part of the heel is compressed. When the ends of the head reach the recesses 6, they drop thereinto, and the compressed part of the heel acts as a spring, so that the head remains seated in said recesses, thus firmly locking or connecting the heel with the sole.

It will be seen that I provide a heel which is elastic, strong, easy to the limbs, avoiding jars and fatigue, noiseless and inexpensive, prevents slipping, obviates the spring-heel of a boot or shoe, and dispenses with nails or other fastenings which project into the boot or shoe, and has good and uniform wearing qualities.

In order to disconnect the heel from the sole, the former is pressed against the latter until the ends of the head clear the recesses 6, when the heel may be rotated, the head then riding down the inclines or spirals, when reaching the base of the same it is fully disconnected from the boss and may be entirely separated from the plate.

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

1. The combination of a heel with a plate secured in a recess therein, the said plate having a head or lug, and the sole of a shoe having on its heel portion a plate with depending boss the inner wall of which is provided with spiral shoulders, substantially as described.

2. A heel having a plate secured in a recess therein, said plate having a lug or head thereon, in combination with a plate adapted to be secured to the sole of a shoe, said plate having a depending boss with inclined inner shoulders and adapted to receive said head, substantially as described.

3. A fastening for a heel, consisting of a plate embedded in a recess in the heel and having a head thereon, a plate adapted to be secured to the sole, and having a depending boss adapted to be engaged by said head and provided with inner inclined shoulders having terminal recesses at their upper end, said parts being combined substantially as described.

GOTTLIEB SCHMIDT.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. JENNINGS.