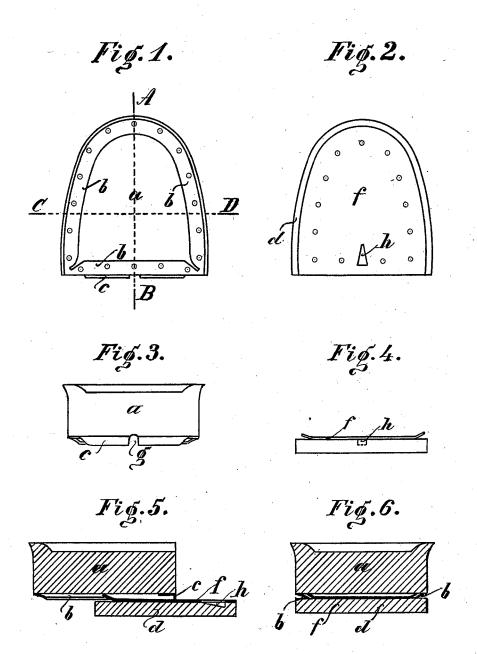
## C. L. SCHRADER.

No. 522,234.

Patented July 3, 1894.



Witnesses:

Mrs. Schuly. Theodore Becker. Inventor, barl buding Ichrader by his attorneys Reeder & Bresen

## UNITED STATES PATENT OFFICE.

CARL LUDWIG SCHRADER, OF HAMBURG, GERMANY.

## HEEL.

SPECIFICATION forming part of Letters Patent No. 522,234, dated July 3, 1894.

Application filed February 15, 1894. Serial No. 500,209. (No model.)

To all whom it may concern:

Be it known that I, CARL LUDWIG SCHRA-DER, a subject of the King of Prussia, residing at Hamburg, Germany, have invented new 5 and useful Improvements in Divided Heels for Boots or Shoes, of which the following is a specification.

The divided heels for boots and shoes hitherto employed and consisting of an upper sec-10 tion permanently forming a portion of the boot or shoe and of a removable lower section inserted therein, possess the disadvantage that the means, such as screws, pins, and nails employed for the purpose of preventing 15 the accidental separation of the two sections are liable to become so worn that the separa-

tion of the two sections when desired is generally impossible.

Now this invention has reference to a fas-20 tening device adapted to act automatically for securing together the two sections of the heel when the lower section is pushed into position on the upper section, the said device affording absolute security against acciden-25 tal unfastening but nevertheless allowing an easy and quick separation of the sections when required.

In the accompanying drawings, Figure 1 is an under side view showing the upper section 30 of a boot heel with one portion of the improved fastening device applied to it. Fig. 2 is a plan or top view of the lower section of the heel with the other portion of the fastening device applied to it. Figs. 3 and 4 are 35 front elevations of the upper and the lower sections respectively. Figs. 5 and 6 are sections on the lines A—B and C—D respect-

ively of Fig. 1 the lower section of the heel

being partially inserted.

My improved fastening device comprises a metallic spring b and a metallic plate  $\tilde{f}$ . The spring b is bent to correspond to the form of the heel and is secured to the lower surface of the upper section a of the heel by any suit-45 able means. The inner edge of the curved portion of this spring is bent downwardly to a small extent (see Fig. 6) and the straight front part of the spring b is bent downwardly

at right angles or thereabout to form a spring-nose c. The metallic plate f is fas- 50 tened to the upper side of the lower section d of the heel and has its outer edge bent upwardly (see Fig. 4). The arrangement is such that in order to fasten the two sections a and d together, the upwardly bent edge of the 55 plate f is introduced between the section a and the downwardly bent edge of the spring b and then the section d is pushed home, until the straight front edge of the section d passes behind and is secured by the nose c. 50

In order that it may be possible to separate the two sections a and d, small notches g and h are made into the nose c and the plate f respectively in order that the section d can, by means of a hooked instrument, be moved to 65 clear the nose c after which it can be easily

drawn out.

The improved fastening is absolutely secure, since the lateral displacement of the part d is prevented by the spring b and the 70 plate f, which are compressed by the weight of the person standing thereon and act as a feather and groove, while longitudinal displacement of the section d is prevented by the spring-nose c. What I claim is—

1. The combination of an upper heel section having a curved spring b, which is bent downwardly at the front to form nose c, with a lower heel section having the upwardly bent 80 plate f, that is adapted to engage said spring,

substantially as specified.

2. The combination of an upper heel section having the curved spring b, which is bent downwardly at the front to form a notched 85 nose c, with a lower heel section having upwardly bent plate f, notched at h, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of 90

two subscribing witnesses.

## CARL LUDWIG SCHRADER.

Witnesses: MAX FOUQUET. HEINRICH EGGERS.