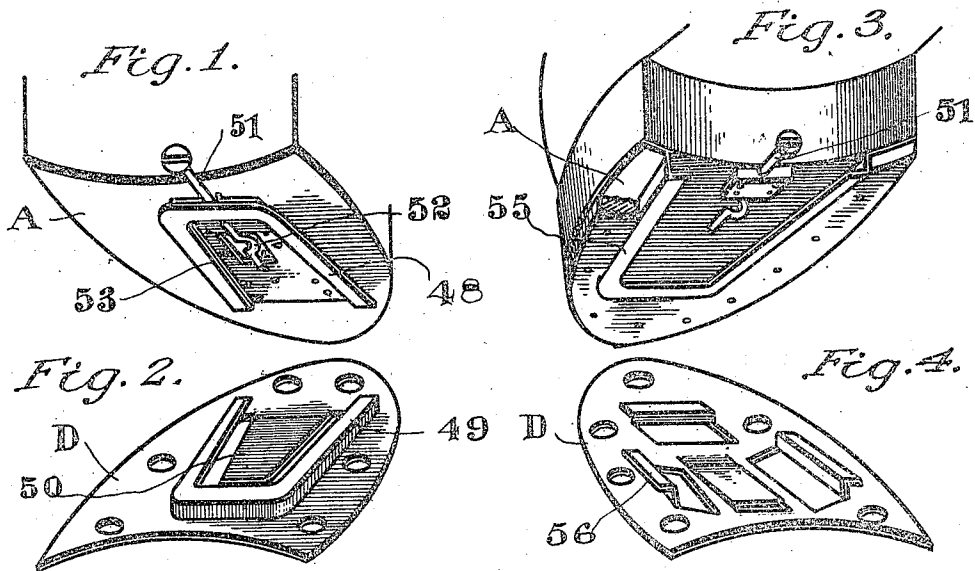


C. W. LAVERS.  
DETACHABLE HEEL.  
APPLICATION FILED SEPT. 16, 1911.

1,160,117.

Patented Nov. 9, 1915.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CHARLES WILLIAM LAVERS, OF HALIFAX, NOVA SCOTIA, CANADA, ASSIGNOR OF ONE-HALF TO FREDERICK P. RONNAN, OF HALIFAX, CANADA.

## DETACHABLE HEEL.

1,160,117.

Specification of Letters Patent.

Patented Nov. 9, 1915.

Application filed September 16, 1911. Serial No. 649,690.

*To all whom it may concern:*

Be it known that I, CHARLES WILLIAM LAVERS, of 52 John street, city of Halifax, Province of Nova Scotia, Dominion of Canada, have invented certain new and useful Improvements in Detachable Heels, of which the following is a specification.

This invention relates to improvements in detachable heels, and the objects of the invention are to provide an inexpensive form of attaching device by which the rubber, leather or other kind of removable heels may be attached and detached and held in attached position.

Another object is to provide an instrumentality of the class specified, which from an operative standpoint will in usage possess a high degree of efficiency and effectiveness and which, structurally considered, will be of the greatest possible simplicity, being composed of but a few parts, all adapted for being made at a minimum of cost and individually so formed as to be capable of being readily assembled in a neat and compact arrangement for accomplishing the purpose intended.

Other objects and advantages will be in part obvious and in part pointed out hereinafter, and with these and other ends in view, this invention accordingly consists in the features of construction, combination of parts and arrangement of elements herein-after more explicitly set forth as an exemplification of the underlying principles involved in the invention.

In order that this invention may be more fully understood and to be comprehensible to others skilled in the art, drawings illustrating a convenient means of carrying out the same are pointed out as a part of this specification, and while the controlling principles of the invention may be otherwise applied by modifications falling within the scope of the claim, the hereinafter disclosed embodiment is that which will ordinarily be preferable to employ in practice. In such drawings it is to be noted that like numerals refer to corresponding parts throughout all the figures.

In the drawings: Figure 1 is a perspective view showing the heel of the boot diagrammatically with the attaching plate rigidly supported thereby. Fig. 2 is a similar view showing the co-acting attaching plate

adapted to be secured to the detachable heel, (not shown). Fig. 3 is a view similar to Fig. 1, showing a slightly modified form of the invention. Fig. 4 is a view showing the attaching plate to be secured to a detachable heel and adapted to co-act with the attaching plate shown in Fig. 3.

Referring to the form of the invention illustrated in Figs. 1 and 2, A represents the attaching plate adapted to be rigidly supported from the permanent heel *a*, diagrammatically shown in Fig. 1 being conveniently formed of a thin sheet of metal having a U-shaped flange 48 stamped out from the plate and having out-turned edges. The plate D is provided with a U-shaped flange 49 similarly formed to that 48 in plate A but with the exception that its edges are intumed as plainly shown. The plate D is adapted to be secured to a detachable heel (not shown) and through the medium of the plate D, the detachable heel may be removably fixed to the permanent heel by sliding it on from the front, the flanges 48 and 49 interlocking. The plate D is also formed with a spring tongue 50 adapted to engage the end portion of the flange 48 to prevent retrograde movement. To detach the heel, the spring tongue 50 is designed to be forced downwardly by means of a rotatable key 51 suitably journaled in the plate A having a U-shaped bend 52 adapted to be downwardly turned to engage the tongue. The plate A is provided with an aperture 53 which normally accommodates the U-shaped bend.

The form shown in Figs. 3 and 4 is similar to that of Figs. 1 and 2, and differs principally in the arrangement of the interlocking flanges 55 and 56; the flanges on the plate A being turned downwardly and inwardly and those on the plate being turned upwardly and outwardly. The key 51 is mounted directly on the bottom of the heel.

The spring tongue and the locking key shown in Figs. 3 and 4 are adapted to interlock in a similar manner to Figs. 1 and 2. In this form of the invention a turning key 51 is mounted in the heel having a projection 52 adapted to engage in a certain position with the end of the spring tongue 50.

What I claim as my invention is:—

A heel construction comprising a permanent heel plate secured to the heel and a detachable heel plate, the latter plate having

a U-shaped recess, a locking member in said recess and a cooperating locking member on the permanent heel plate, means adapted to prevent lateral movement between the plates but permitting longitudinal movement, and  
5 a horizontal rotatable member on the permanent heel plate so arranged that the rotation thereof depresses the locking member to

permit longitudinal movement of the heel plates.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

CHARLES WILLIAM LAVERS.

Witnesses:

G. E. FAULKNER,  
W. HILL.