L. IANNELLE.

DETACHABLE SHOE HEEL.

APPLICATION FILED AUG. 31, 1920.

1,393,784. Patented Oct. 18, 1921.

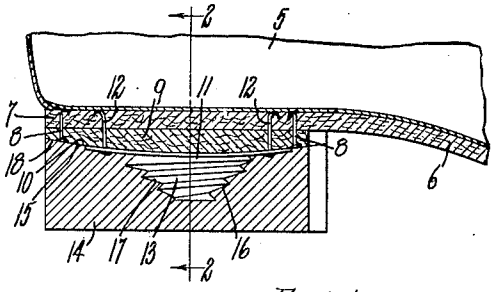


Fig. 1.

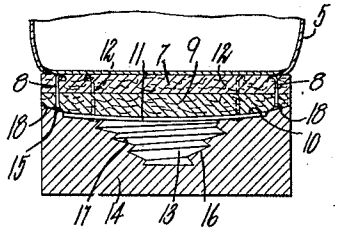


Fig. 2.

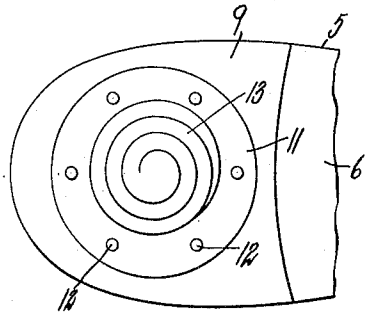


Fig. 3.

Inventor:
Louis Iannelle.
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UNITED STATES PATENT OFFICE.

LOUIS IANNELLE, OF BOSTON, MASSACHUSETTS.

DETACHABLE SHOE-HEEL.

1,393,784. Specification of Letters Patent. Patented Oct. 18, 1921.

Application filed August 31, 1920. Serial No. 407,168.

To all whom it may concern:

Be it known that I, LOUIS IANNELLE, a subject of the King of Italy, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Detachable Shoe-Heels, of which the following is a specification.

This inventon relates to a detachable shoe heel.

It is the object of the invention to so construct a heel for boots and shoes that a portion of said heel, preferably constructed of rubber, may be easily and quickly detached from the permanent portion of said heel in order that said detachable portion may be replaced when worn without the use of nails and tools.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings:

Figure 1 represents a longitudinal section through the heel portion of a shoe, a heel embodying my invention being illustrated attached thereto.

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1.

Fig. 3 is an underneath plan view of my improved heel, the detachable lift being removed therefrom.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 represents a portion of the upper of a shoe, 6 the sole and 7 the heel seat. Secured to the heel seat 7 in any suitable manner as, for example, by nails 8 is a lift 9 preferably constructed of leather. The lift 9 is provided with a curved lower surface 10. To the surface 10 a metal member 11 is secured by nails 12. The member 11 is approximately conical in form and is provided with a spirally arranged screw thread 13 extending therearound, the said screw thread increasing in diameter from the lower end of said member upward.

A lift 14, preferably constructed of resilient material as, for example, rubber or a material embodying the properties of rubber, is secured to the lift 9, the upper surface of the lift 14 being curved at 15 to fit the curved surface 10 of the lift 9. The lift 14 is provided with a recess 16 in the upper surface thereof, the said recess being approximately conical in form and having a spirally arranged screw thread 17 extending therearound which is adapted to fit and interlock with the screw thread 13 upon the member 11. The pitch of the screw thread is such that one-half a turn of the lift 14 upon the member 11 is sufficient to securely interlock said lift 14 with said member and draw the curved surface 15 tightly into contact with the surface 10.

In attaching the detachable lift 14 to the permanent lift 9 the lift 14 is held with the front edge thereof facing toward the rear of the shoe and then brought into engagement with the metal member 11, each thread of the lift 14 engaging the corresponding thread of the metal member 11. The lift 14 is then given one-half a turn which is sufficient to tightly interlock each succeeding thread and draw the curved surface 15 of the detachable lift 14 into engagement with the curved surface 10 of the permanent lift 9. During this operation the upper edge 18 of the detachable lift will yield downwardly as it contacts with the under surface of the permanent lift until the detachable lift 14 is in position and the periphery thereof alines with the periphery of the permanent lift 9. At this time the edge portion 18 will spring upwardly and thereafter act to prevent the unfastening of the detachable lift.

The great advantage derived in constructing the metal member 11 approximately conical in form and providing screw threads therearound is that it allows all of the screw threads to interlock with only one-half of a turn of the detachable lift, and at the same time the presence of the metal member 11 does not detract from the resiliency of the heel and allows for all the wear required around the lower edge of the lift 14.

It is evident that the permanent lift 9 may be eliminated if it is so desired and the heel attached directly to the heel seat without departing from the spirit of this invention. At this time the metal member 11 is nailed directly to the heel seat, the detachable heel being attached thereto in the manner previously described. The detachable heel in such cases aside from being slightly increased in thickness is identical with the detachable lift 14 previously described.

I claim:—

1. A shoe having, in combination, a conical shaped metal member attached at the heel portion thereof having a screw thread

extending therearound increasing in diameter from the lower end thereof upward and a detachable heel adapted to interlock with the screw thread of said metal member and spring into holding engagement with said shoe.

2. A shoe having, in combination, a conical shaped metal member attached at the heel portion thereof having a plurality of screw threads extending therearound increasing in diameter from the lower end of said metal member upward and a detachable heel having a plurality of screw threads adapted to interlock with the screw threads of said metal member, all of the threads of said detachable heel tightly engaging all of the threads of said metal member with one half a rotation of said detachable heel upon said metal member.

3. A shoe heel having, in combination, a permanent lift, a conical shaped metal member attached to said permanent lift and having a plurality of screw threads extending therearound increasing in diameter from the lower end of said metal member upward and a detachable lift adapted to interlock with the screw threads of said metal member, the upper surface of said detachable lift being adapted to spring into holding engagement with the under surface of said permanent lift during the rotation of said detachable lift upon said metal member.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LOUIS IANNELLE.

Witnesses:
FRANKLIN E. LOW,
CATHERINE M. JOYCE.