Oct. 26, 1926. 1,604,826

J. HORNICEK

REMOVABLE HEEL

Filed March 5, 1925

Fig. 1

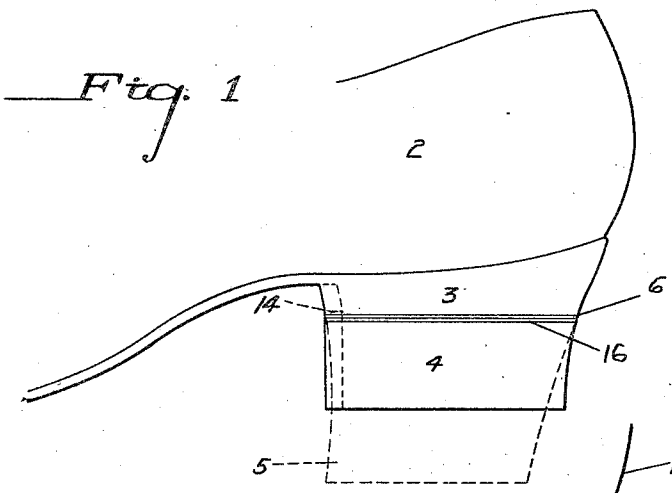


Fig. 2

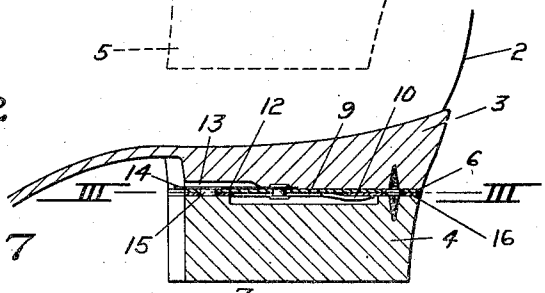


Fig. 7

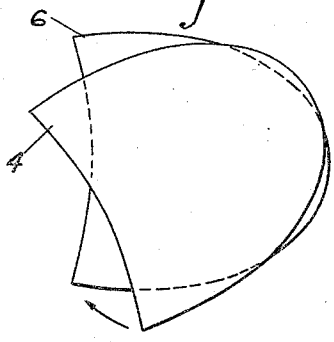


Fig. 3

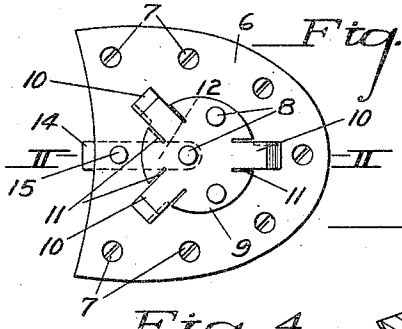


Fig. 5

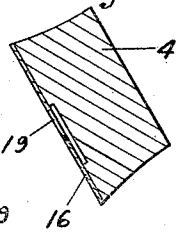


Fig. 4

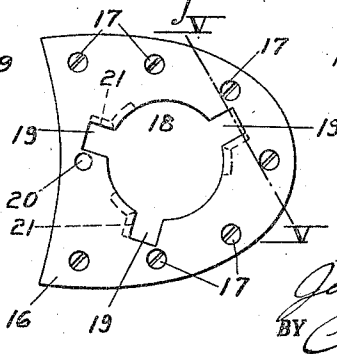
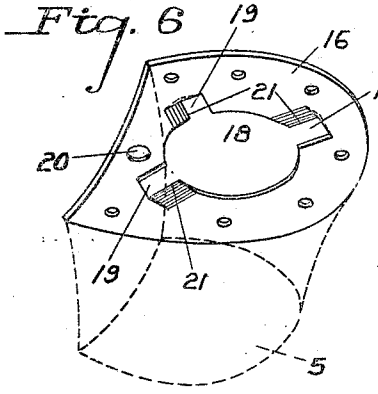


Fig. 6



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UNITED STATES PATENT OFFICE.

JERRY HORNICEK, OF CORAOPOLIS, PENNSYLVANIA.

REMOVABLE HEEL.

Application filed March 5, 1925. Serial No. 13,129.

My invention consists of an improvement in removable or interchangeable heels for shoes. It is particularly adapted for use with ladies' shoes, for the purpose of providing a variable height of heel on the same shoe, by substitution of one for the other. The invention consists in an abnormally short base heel on the shoe having a spring plate adapted to be rotatively engaged by a bayonet joint locking plate on the removable heel, with a locking device, and coacting interlocking mechanism, as more fully hereinafter described.

In the drawings, showing one preferred embodiment of the invention,

Fig. 1 is a partial view of a shoe in side elevation, showing the removable heel attached;

Fig. 2 is a central vertical section on the line II—II of Fig. 3;

Fig. 3 is an under plan view of the base heel locking plate;

Fig. 4 is an upper plan view of the confronting face of the removable heel locking plate;

Fig 5 is a detail sectional view on the line V—V of Fig. 4;

Fig 6 is a perspective detail view of the removable heel locking plate from its under side.

Fig. 7 shows the relative position of the upper and lower heel parts immediately before they are rotated to be secured to each other.

In the drawings, 2 is the shoe having a comparatively shallow base heel 3, to which is to be attached the removable heel 4 of the height shown, or of any other substitute height, as indicated in dotted lines at 5.

Base heel 3 is provided with a flat thin plate 6 of brass, copper, or other suitable metal, held on by the screws 7, to which is secured by rivets 8 the generally circular locking plate 9. Locking plate 9 is provided with a plurality of equally spaced radially extending thin resilient tongues 10, slightly bowed outwardly from the surface of plate 6, leaving a slight space for entrance of the edges of the removable heel locking plate. The terminals of tongues 10, however, are bent upwardly to contact with plate 6, so as to bind with considerable force when they are forced downwardly by entrance of the edges of the other locking plate. Tongues 10 are also preferably slitted inwardly a short distance, as at 11, to increase their spring action.

Secured by one of the rivets 8 is a spring latch 12 extending forwardly between plate 6 and the base heel 3 with slight clearance 13 at front and extending beyond the front of the heel by a short finger terminal 14. A locking lug or stud 15 is secured to spring 12 and extends through a hole in the plate 6 and slightly beyond, for locking engagement with the plate of the changeable heel 4. Said plate 16 is adapted to fit against plate 6, as in Fig. 1, and is also secured to heel 4 by screws 17. It is provided with a circular opening 18 for clearance of locking plate 9, and with lateral cut out spaces 19 for clearance of tongues 10 when placed thereon in registering position, as in Fig. 7.

Plate 16 has a socket hole 20 adapted to register with stud 15, as in Fig. 2, when the two heels are in registering position. One side edge 21 of the plate 16 forming a portion of the opening 19 is tapered down to a knife edge disposed in the direction of rotation.

As the changeable heel is rotated, each such edge will force its way under the resilient tongue 10, bringing the thickness of those portions of the plate between the tongues and plate 6. When the two plates and heel members are brought into register, stud 15 will enter socket 20, springing thereinto and firmly locking the parts against accidental removal. Upon pressing terminal 14, the heel 4 may be removed and another one applied, of the same height if the first is worn out, or of a different height if it is desired to vary the height of the heel.

What I claim is:

1. In a detachable heel, a base plate fixed to the shoe having an outwardly located circular guiding plate provided with a series of radially extending resilient tongues secured to and lying closely adjacent the base plate, a separable heel having a corresponding plate secured thereto provided with corresponding radial spaces, the edge of the heel plate at one side of each of said spaces being tapered for engagement underneath one of said tongues.

2. In a detachable heel, a base plate fixed to the shortened heel of a shoe having a locking stud and a projecting spring therefor, a thin flat disk secured to the plate having radially extending locking tongues spaced outwardly from and bent angularly

inward towards the base plate, and a removable heel provided with a similar thin flat plate cut out to provide a circular opening with radially extended openings to fit over the disk for rotative guiding engagement therewith and over said locking tongues, and provided at one side of each radial opening with tapering edges adapted to engage under the several locking tongues, said removable heel plate having a socket for the locking stud.

In testimony whereof I hereunto affix my signature.

JERRY HORNICEK.