

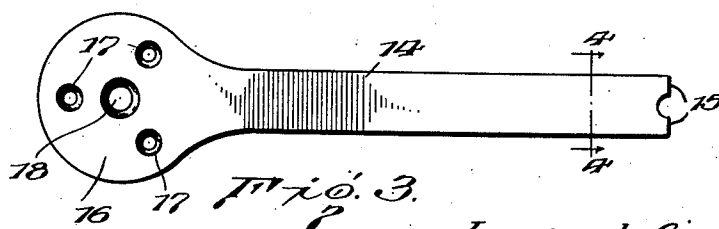
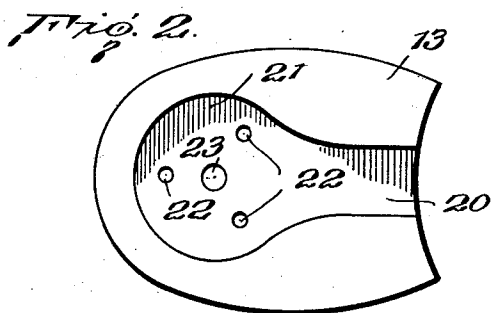
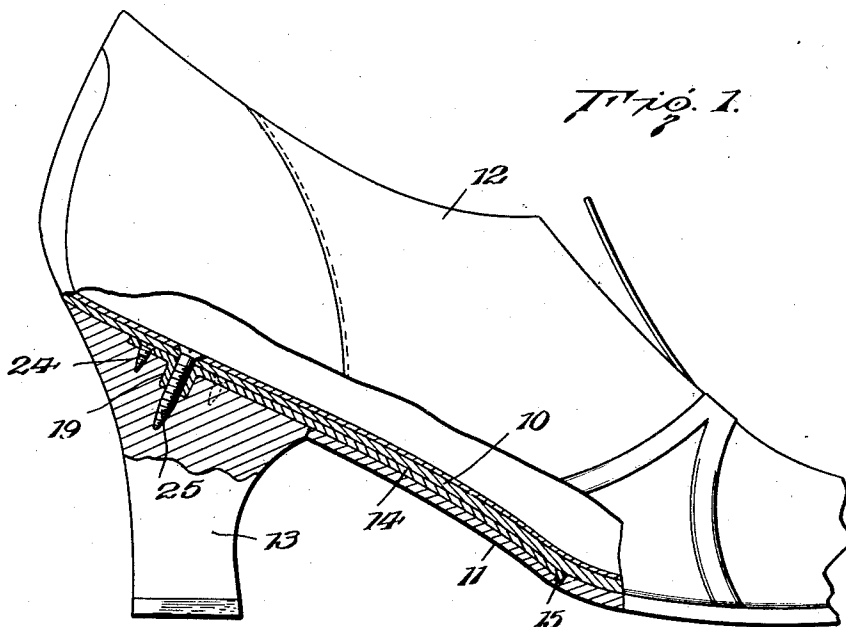
Dec. 23, 1930.

L. CIPOLLINA

1,785,808

HEEL ATTACHING DEVICE

Filed Aug. 10, 1929



Inventor

Leonardo Cipollina,

334 *Tolson & Tolson*
Attorneys

UNITED STATES PATENT OFFICE

LEONARDO CIPOLLINA, OF GULFPORT, MISSISSIPPI

HEEL-ATTACHING DEVICE

Application filed August 10, 1929. Serial No. 385,007.

This invention relates to means for securing the heels of shoes in position against detachment. Objects of the invention are: the provision of means for attaching a heel to a shoe sole; the provision of a novel structural element insertable between the soles of a shoe for attaching a heel in service position and providing a means for stiffening the insole; the provision of a novel heel and heel attaching structural arrangement for shoes; and generally the provision of a novel arch supporting means and anchorage for heels of shoes.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a shoe as equipped with this invention.

Figure 2 is a top plan view of a heel as prepared to receive the attaching device of the invention.

Figure 3 is a top plan view of the attaching device.

Figure 4 is a section taken on the line 4-4 of Figure 3.

The device is shown as applied between the inner sole 10 and the outer sole 11 of a shoe 12 having a heel 13 of the French type. Considerable difficulty is experienced in maintaining high heels properly attached to shoes. It is in order to overcome the objectionable feature of accidental tearing away of a heel from the shoe that this invention has been developed.

The attaching means comprises a flexible steel shank 14 adapted to lie along the arch of a shoe between the inner and outer soles thereof and which carries at its forward end downturned lips 15 which have a biting engagement into the leather of the sole and provide an anchorage which retains the forward portion of the shank against movement longitudinally of the shoe.

The rear or heel end of the shank 14 is formed with an enlarged circular head 16 formed with countersunk screw holes 17 surrounding a larger countersunk screw hole 18 disposed at the center of the head. At the center screw hole 18 the underface of the head 16 is provided with an annular flange 19 as best illustrated in Figure 1.

In practice the top face of a heel 13 is suitably

cut away or recessed to provide a groove 20 shaped to receive a portion of the shank 14, which groove is continued into an enlarged recess 21 formed in the shape of the head 16 which head seats in this recess. Screw holes 22 and 23 are formed to align beneath the countersunk screw holes 17 and 18 respectively of the head 16.

In securing a heel by means of this attaching device the proper number of attaching screws 24 are engaged with the body of the heel through the holes 17 of the shank head 16 and the inner sole 10 of the shoe is then laid over the upper face of the shank and its head 16. A large screw 25 is then engaged with the heel through the countersunk hole 18 of the head 16 and through the flange 19 at the under-face of the head. As this bolt extends for considerable distance into the material of the heel it is evident that it provides a rigid means for attaching the heel in position.

By reason of the grooved formation of the heel at its upper face and the engagement of the shank 14 and the head 16 in this groove as well as the engagement of the flange 19 in the body of the heel, there is provided in addition to the attaching means comprising the various screws, a rigid stop member operating to resist lateral movement of the heel relative to the body of the shoe. The general shape of the shank 14 serves to strengthen and support the shoe at the arch thereof and the extension of the shank between the soles of the shoe gives an additional anchorage to resist any tendency toward detaching strain which may be imparted to the heel.

It is to be understood that the invention as described is a preferred form but does not constitute the only embodiment of the underlying principles. The invention may be carried out in various modifications of structural detail.

I claim:

1. In combination, a shoe, a heel, a metal shank having a portion thereof embedded in the sole of the shoe and extending beneath the heel portion thereof, and enlargement formed on said shank, said heel having a recess formed to receive said enlargement and a

communicating groove to receive the shank, and attaching elements engaged through said enlargement with the material of the heel body.

- 5 2. The combination with a shoe of a heel having a shallow groove formed in the upper face thereof opening at one end to the forward heel edge and opening at its opposite end into an enlarged recess also formed in
10 the heel face, a retaining member including a shank adapted to lie in said groove and anchored in the shoe sole assembly, said member having an enlarged head shaped to seat in said heel recess, and threaded attaching
15 means passed through the shoe sole and enlarged head for embedding in the body of the heel.

LEONARDO CIPOLLINA.

20

25

30

35

40

45

50

55

60