

J. E. SHELL.
DETACHABLE RUBBER HEEL.
APPLICATION FILED APR. 29, 1912.

1,054,245.

Patented Feb. 25, 1913.

FIG. 1.

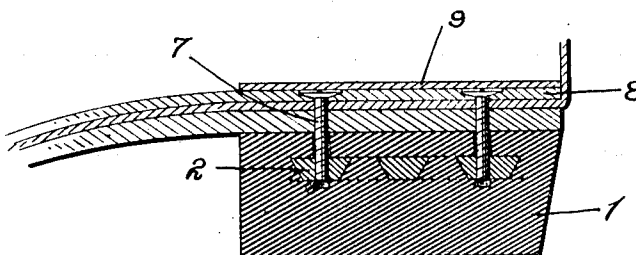


FIG. 2.

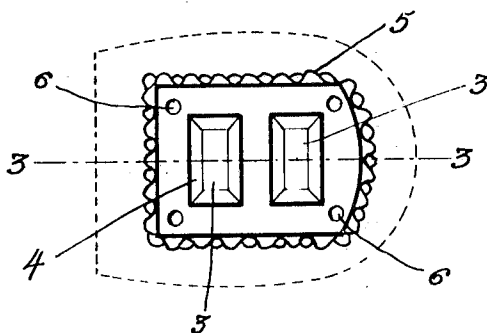
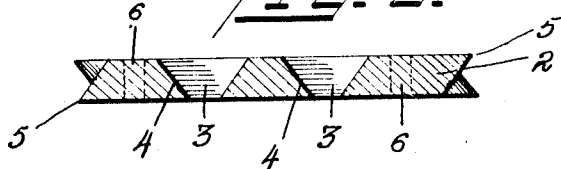


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JUNIUS E. SHELL, OF LENOIR, NORTH CAROLINA.

DETACHABLE RUBBER HEEL.

1,054,245.

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Application filed April 29, 1912. Serial No. 693,983.

To all whom it may concern:

Be it known that I, JUNIUS E. SHELL, a citizen of the United States of America, residing at Lenoir, in the county of Caldwell and State of North Carolina, have invented certain new and useful Improvements in Detachable Rubber Heels, of which the following is a specification.

This invention relates to detachable rubber heels and one of the principal objects of the invention is to provide a rubber heel which may be readily attached to any shoe.

Another object of my invention is to provide a rubber heel which may be readily attached to a heel by means of screws and which will not become accidentally detached.

These and other objects may be attained by means of the construction illustrated and shown in the accompanying drawings, in which:—

Figure 1 is a longitudinal section through the heel of a shoe showing my rubber heel attached; Fig. 2 is a bottom plan view of a metal plate showing the outline of the heel in dotted lines; and Fig. 3 is a longitudinal section taken through the heel plate on the line 3—3 of Fig. 2.

Referring to the drawing, as shown in Fig. 1, the rubber heel is attached to a shoe constructed in the ordinary manner. The rubber heel 1 has molded into it a short distance from the upper surface a metal plate 2. This plate has transverse slots 3 therein and these slots are beveled as indicated at 4, the narrowest portion of the slots being at the top of the plate and the widest portion being at the bottom. The outer edges of the plate are provided with two rows of staggered projections 5, the projections in the lower row alternating with the projections in the upper row, the top surface of the upper projections being flush with the top surface of the plate and the lower surfaces of the projections in the lower row being flush with the lower surface of the plate, said projections in the upper and lower rows having their inner surfaces slightly convex and slanting toward the central line of the edges of the plate.

It is seen by this construction, that the plate is solidly and securely embedded in the rubber heel and will not readily become detached therefrom. As indicated in Fig. 2, the heel plate is provided with four perforations 6 which are screw threaded to re-

ceive flat headed screws 7, and the rubber heel itself is provided with circular recesses extending from the upper surface of the heel to the perforations in the plate, these recesses alining with the perforations in the plate and being slightly larger than those perforations.

In practice, the screws 7 are countersunk in the inner sole 8 of the shoe, the inner sole being covered at the heel by the usual inner pad 9. When it is desired to remove the heel because of wear or for any other purpose, the inner pad 9 is first removed and then the screws 7 are unscrewed from the plate 2 and the heel is removed. A new heel may be put in its place by simply inserting the screws 7 in the perforations in the rubber heel and then screwing the screws 7 into the perforations provided for them in the heel plate 2.

My invention is of simple construction, can be manufactured at a low cost and is very efficient for its purpose.

I claim:

1. A detachable rubber heel provided with a metal plate, said plate being embedded in the heel a short distance from the upper surface thereof, said plate provided with slots therein, said slots having their surfaces beveled, said plate provided on its outer edges with two rows of staggered projections, the projections in the lower row alternating with the projections in the upper row, said plate provided with threaded perforations to receive screws provided in the heel portion of the shoe, said screws being adapted to engage the perforations in the plate for holding the heel in place.

2. A rubber heel having a metal plate embedded therein said metal plate provided with transverse grooves, said plate having its outer edges provided with staggered projections, and means for attaching the rubber heel to the heel portion of the shoe.

3. A detachable rubber heel for shoes or boots, said heel having a metal plate embedded therein at a slight distance from the upper edge thereof, said plate provided with transverse grooves therein, said grooves having their surfaces beveled, the upper edges of the grooves being closer together than the lower edges thereof, said plate having its outer edge provided with two rows of staggered projections, the projections in the lower row alternating with the projections in the upper row, said projections in

both rows having their inner surfaces slightly convex and slanting toward the central line of the edges of the plate, said plate provided with threaded perforations
5 therein, said rubber heel provided with recesses alining with said perforations, said recesses extending from the upper surface of the rubber heel to the metal plate to permit the insertion of flat headed screws passing through the inner sole of the shoe or
10 boot, said screws being alined with the re-

cesses in the rubber heel and the perforations in the metal plate and being adapted to be threaded into the said perforations in the plate to hold the rubber heel in place. 15

In testimony whereof I affix my signature in presence of two witnesses.

JUNIUS E. SHELL.

Witnesses:

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C. C. SHELL.