

R. ARMOUR.
RESILIENT HEEL TREAD.
APPLICATION FILED SEPT. 5, 1919.

1,344,972.

Patented June 29, 1920.

Fig. 1.

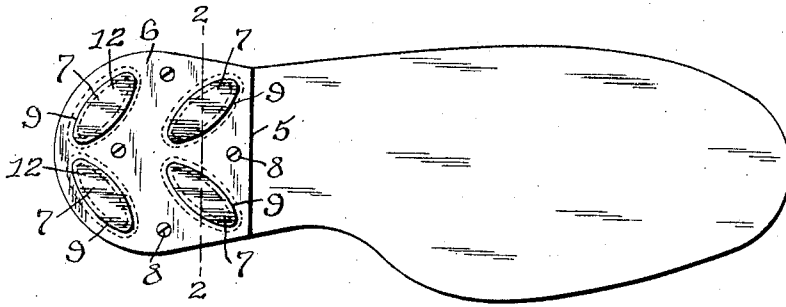


Fig. 2.

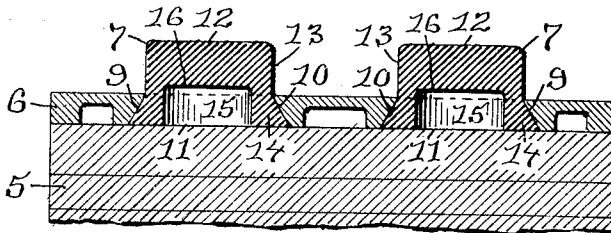


Fig. 3.

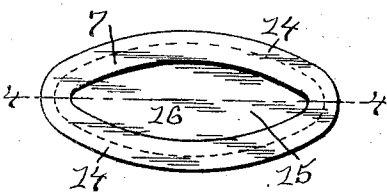
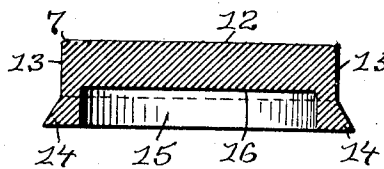


Fig. 4.



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RESILIENT HEEL-TREAD.

1,344,972.

Specification of Letters Patent. Patented June 29, 1920.

Application filed September 5, 1919. Serial No. 321,942.

To all whom it may concern:

Be it known that I, ROBERT ARMOUR, a native of British India, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Resilient Heel-Treads, of which the following is a specification.

My invention has reference to an improvement in shoes and the like and more particularly to an improvement in resilient heel treads, for the heels of boots, shoes and similar articles of foot wear.

In the usual construction of resilient heel treads for boots, shoes and the like, the heel treads are either made entirely of comparatively soft rubber or the like, which is expensive, or a heel plate holding soft rubber plugs is used. In the last mentioned form the rubber plugs are not resilient enough, they are not of the right shape to give the best result and they are so constructed that the usual wearer of such plugs cannot readily change them around for uneven wear or replace them when worn out, without the use of special tools for such purpose.

The object of my invention is to improve the construction of resilient heel treads, whereby the heel treads are more resilient when in use, the soft rubber plugs more easily changed around for uneven wear on the plugs, the plugs are improved in form and placed more advantageously on the heel for resiliency and wear and when worn out may be easily and quickly removed and a new plug replaced, by hand.

A further object of my invention is to reduce the cost of such resilient heel treads, principally by reducing the waste in the soft rubber plugs, when worn out.

Another object of my invention is to increase the resiliency of such rubber plugs by extending a cavity in the plug beyond the surface of the plate.

My invention consists in the peculiar and novel construction of a resilient heel tread comprising a heel plate, soft rubber oval plugs each having a cavity which extends out beyond the face of the heel plate, means for detachably securing the plugs in the plate, means for securing the plate to the heel of a shoe or the like, said resilient heel tread having details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a view looking at the sole of

a shoe showing the heel provided with my improved resilient heel tread.

Fig. 2 is an enlarged sectional view through my improved resilient heel tread and part of the heel, taken on line 2. 2 of Fig. 1.

Fig. 3 is an enlarged underside view of the oval soft rubber plug, and

Fig. 4 is an enlarged longitudinal sectional view through the plug, taken on line 4. 4 of Fig. 3.

In the drawing 5 indicates the heel of a shoe, 6 a heel plate 7. 7 soft rubber plugs and 8. 8 screws which secure the plate 6 to the heel 5.

The heel plate 6, which may be of metal or other material, has oval openings 9. 9 with undercut sides 10. 10 which with the bottom of the heel 5 forms oval recesses 11. 11 for the plugs 7. 7. These recesses 11. 11 are placed in the plate two adjacent and parallel with the back of the heel and one extending in at an angle from each forward corner of the heel, in the best possible positions for resiliency. The soft rubber oval plugs 7. 7 each have a flat tread 12, straight sides 13. 13, a continuous angular lip 14 which fits under the undercut sides 10. 10 of the openings 9. 9 and detachably secures the plugs in place, and an oval cavity 15, the bottom 16 of which extends beyond the outer face of the heel plate 6, as shown in Fig. 2.

It is a well known fact that there is no resiliency in soft rubber when confined. When in use the cavities 15. 15 in the plugs extending beyond the face of the heel plate gives all the resiliency possible, the soft rubber lips 14. 14 will give easily in changing, removing or replacing the plugs, and when the plugs are worn down to the cavities in the plugs, the ring of soft rubber thus left in the recesses in the plate, may be easily removed, with the least possible amount of waste in the rubber plugs.

It is evident that the arrangement of the rubber plugs in the heel plate could be changed and details of construction could be varied within the scope of the appended claim.

Having thus described my invention, I claim as new:—

A resilient heel tread comprising a heel plate 6 having two undercut oval openings 9. 9, adjacent to and parallel with the back of the heel plate, an undercut oval opening

9 extending at an angle from each forward corner of the heel plate, soft rubber oval plugs 7. 7 in each undercut oval opening in the heel plate, each oval plug 7 having
5 a flat head 12, straight sides 13, 13, a continuous angular lip 14 which fits under the undercut sides of the openings 9, 9 and detachably secure the plugs in place and an
10 oval cavity 15, the bottom 16 of which extends out beyond the outer face of the heel

plate 6, whereby the rubber plugs are placed in the best position for resiliency, they are easily reversible and when worn down to the heel plate, oval rings of rubber only are left, which may be easily removed 15 by the fingers, from the cavities in the heel plate.

In testimony whereof I have signed my name to this specification.

ROBERT ARMOUR.