June 1, 1926. 1,587,442

R. M. TEETSAL

HEEL

Filed Sept. 8, 1925

Fig. 1.

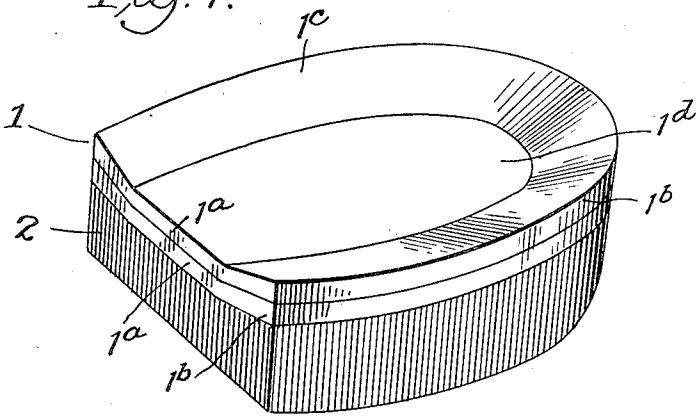


Fig. 2.

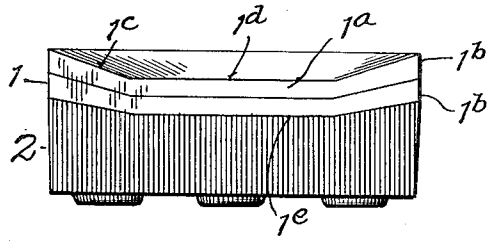


Fig. 3.

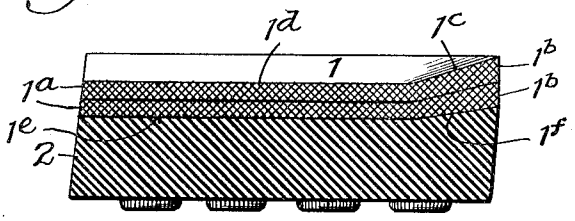
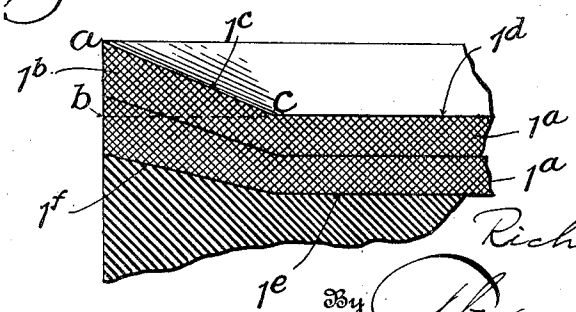


Fig. 4.



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UNITED STATES PATENT OFFICE.

RICHARD M. TEETSAL, OF ENDICOTT, NEW YORK, ASSIGNOR TO ENDICOTT JOHNSON CORPORATION, OF ENDICOTT, NEW YORK, A CORPORATION OF NEW YORK.

HEEL.

Application filed September 8, 1925. Serial No. 54,968.

My invention is a novel heel which may be attached to the heel seat in the process of making a boot or shoe without the use of a rand such as is commonly required in the manufacture of boots and shoes.

The object of the invention is to provide a novel heel, inexpensive to manufacture, and comprising a leather top part, and a lower part, preferably of rubber. The top part is thicker adjacent its outer sides than in the major or central portion thereof; and the upper surface of the top part which comes into contact with the "heel seat" of the boot or shoe has an integral horse-shoe shaped rand member and a substantially flat central field. The top part thus formed will fit the heel seat of a boot or shoe and can be applied thereto without the use of the usual rand, thereby greatly economizing material and labor.

I will explain the invention with reference to the accompanying drawings to enable others to adopt and use the same, and summarize in the claims the novel features of construction and novel combination of parts for which protection is desired.

In the drawings:

Fig. 1 is a perspective view of a complete heel made in accordance with my invention, ready for attachment to the heel seat of a shoe.

Fig. 2 is a transverse vertical section through the heel.

Fig. 3 is a longitudinal vertical section through the heel.

Fig. 4 is an enlarged detail view of the top part of the heel.

My novel heel comprises a top portion 1 of suitable material, preferably leather, and a lower part 2, preferably of rubber, said parts being preferably formed separately and then united to make a complete heel.

The top part is preferably composed of one or more lifts or layers of leather, two lifts 1^a being shown.

If the top portion of heel has more than one lift, the lifts are preferably cemented or glued together with suitable glue to inseparably unite them. The assembled lifts are then placed in suitable dies and subjected to great pressure in a suitable press until the top part is given the desired peculiar shape shown in the drawings.

The dies are so formed that the pressure applied will compress the inner portion of the top part more that the portions adjacent the sides and rear thereof; and this results in producing on the upper surface of the top part an approximately horse-shoe shaped rand portion 1^b extending around the sides and rear of the top portion; the upper surface of this rand portion 1^b being upwardly and outwardly inclined as shown at 1^c. The portion of the upper part partly enclosed by said rand portion is preferably more densely compressed and is substantially flat on its upper surface, as indicated at 1^d. The under surface of the top part opposite the surface 1^d is also substantially flat as at 1^e, but the lower surface of the top part opposite the rand portion 1^b is upwardly inclined as at 1^f. The portion of the top part between the surfaces 1^c 1^f is thicker than the portion of the top part between the surfaces 1^d 1^e and at the outer side the top is thicker vertically than at any other portion.

The top part gradually tapers both at top and bottom from the outer edge of the heel to the outer edges of the surface 1^d 1^e respectively. The rand portion 1^b of the top part is indicated and bounded by the lines *a*—*b*—*c* in Fig. 4, said rand portion being made of the same material as the lifts and integral therewith in the process of shaping the heel by pressure.

By making the top part of the heel as described the necessity of using attached rands, such as are customarily required, is avoided.

At the present time heels, such as are ordinarily used by shoe manufacturers, are each provided with a "rand" attached to the upper surface of the heel so as to form what is called a "heel seat". To fasten such a rand to the upper surface of a leather heel a large number of small nails are necessary. Such rands must be made of expensive leather; and great skill is required to make or mould them so that they will lie flat and not wrinkle after they are applied to the heels; and the workmen who shape and attach these rands to heels are among the highest paid employees in shoe factories, because of the skill required for such work.

My heel is produced with an integral rand and eliminates the expense of making, shaping and fastening the usual rands to the heels; further my heel can not only be made from ordinary sole leather, but from

pieces of sole leather since none of the leather lifts in my heel must necessarily be made in one piece.

The lower surface of the top part 1 is adapted to fit the concavity 2^a in the upper surface of the lower resilient part 2 of the heel. The lower part 2 conforms in contour to the shape of the complete heel, as shown and the concavity 2^a is formed in the lower part 2 when the same is moulded. Such parts 2 can be produced by moulding them in suitable moulds as quickly as the ordinary rubber heels or lifts having parallel upper and lower surfaces can be produced. The lower rubber or resilient part 2 is also preferably unseparably cemented to the top part.

Preferably the breast or front end of the complete heel is inclined slightly upwardly and backwardly as shown in Fig. 3, thereby obviating the necessity of placing the shoes on a "breasting machine" after the heel is applied to the shoe.

The parts 1 and 2 together form a complete heel, which may be readily attached to a boot or shoe seat in the ordinary manner, but without the use of a rand. The complete heel is preferably shaped before it is attached to the shoe.

Obviously my heels may be made of various dimensions and forms to suit different sizes and styles of boots and shoes on which they are to be used.

I claim:

1. A non-resilient heel top part adapted to fit the heel seat of a shoe, and having the major portion of its upper surface flat but provided adjacent the side and rear edges of the top with an integral rand portion, the said rand portion extending above and being of greater thickness than the portion of said top substantially enclosed by said rand portion; the bottom of said top part being upwardly and outwardly beveled adjacent its side and rear edges.

2. In a heel, a non-resilient top part adapted to fit the heel seat of a shoe, and having the major portion of its upper surface substantially flat but surrounded adjacent its side and rear edges with an upwardly inclined approximately horse-shoe-shaped integral rand portion, the bottom of said top part having its bottom upwardly and outwardly beveled adjacent its side and rear edges, the flat portion of the top part enclosed by said rand portion being of practically uniform thickness and of greater density than the beveled rand portions of said top part.

3. A non-resilient heel top adapted to fit the heel seat of a shoe, and having the greater portion of its upper surface flat, but provided adjacent its side and rear edges with an approximately horse-shoe-shaped integral rand portion, said rand portion extending above and being of greater thickness than the flat portion of the heel, and being thicker at its outer side than at its junction with said flat portion.

In testimony that I claim the foregoing as my own, I affix my signature.

RICHARD M. TEETSAL.