

No. 891,513.

PATENTED JUNE 23, 1908.

C. L. WHITING.

HEEL.

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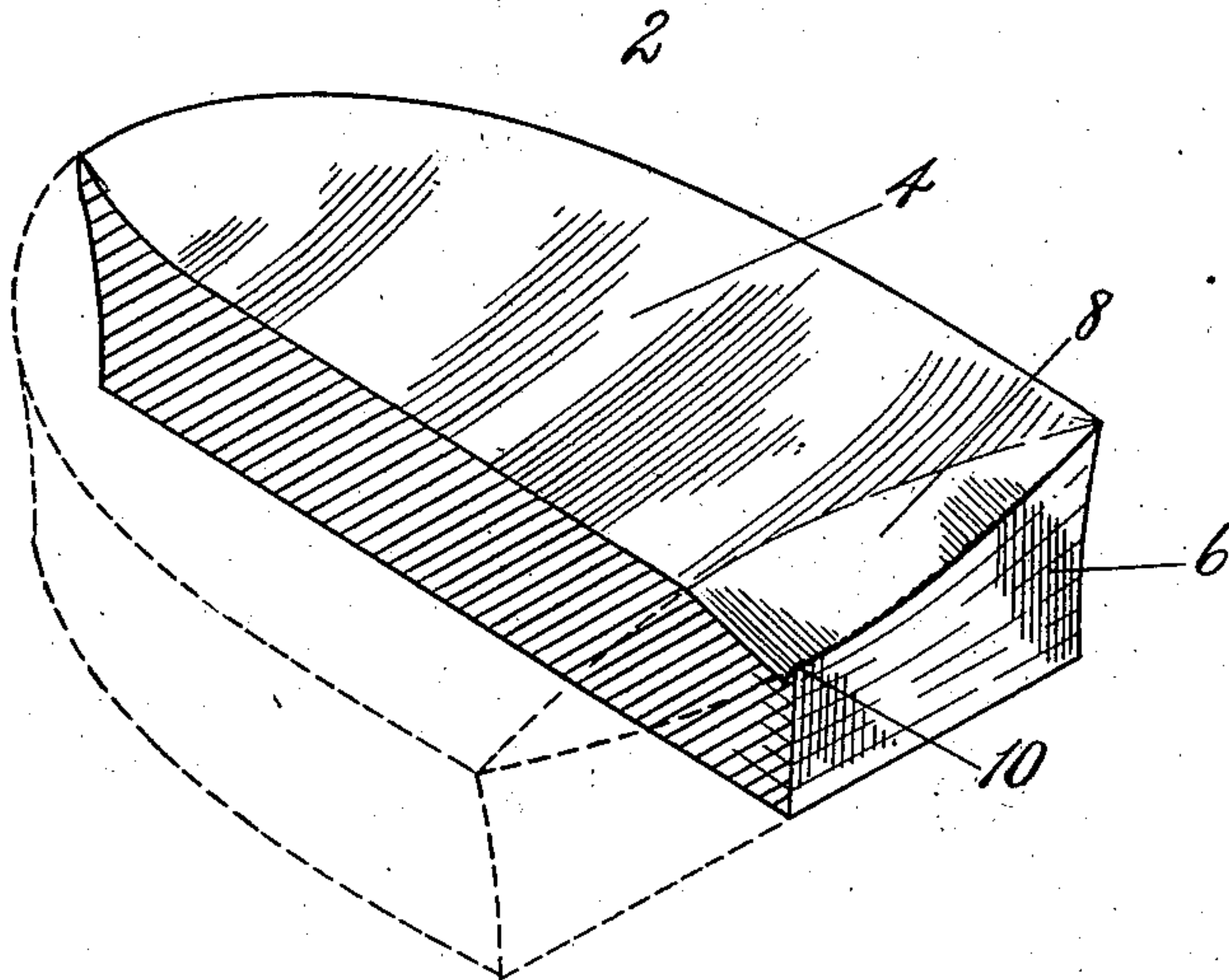


Fig. 1.

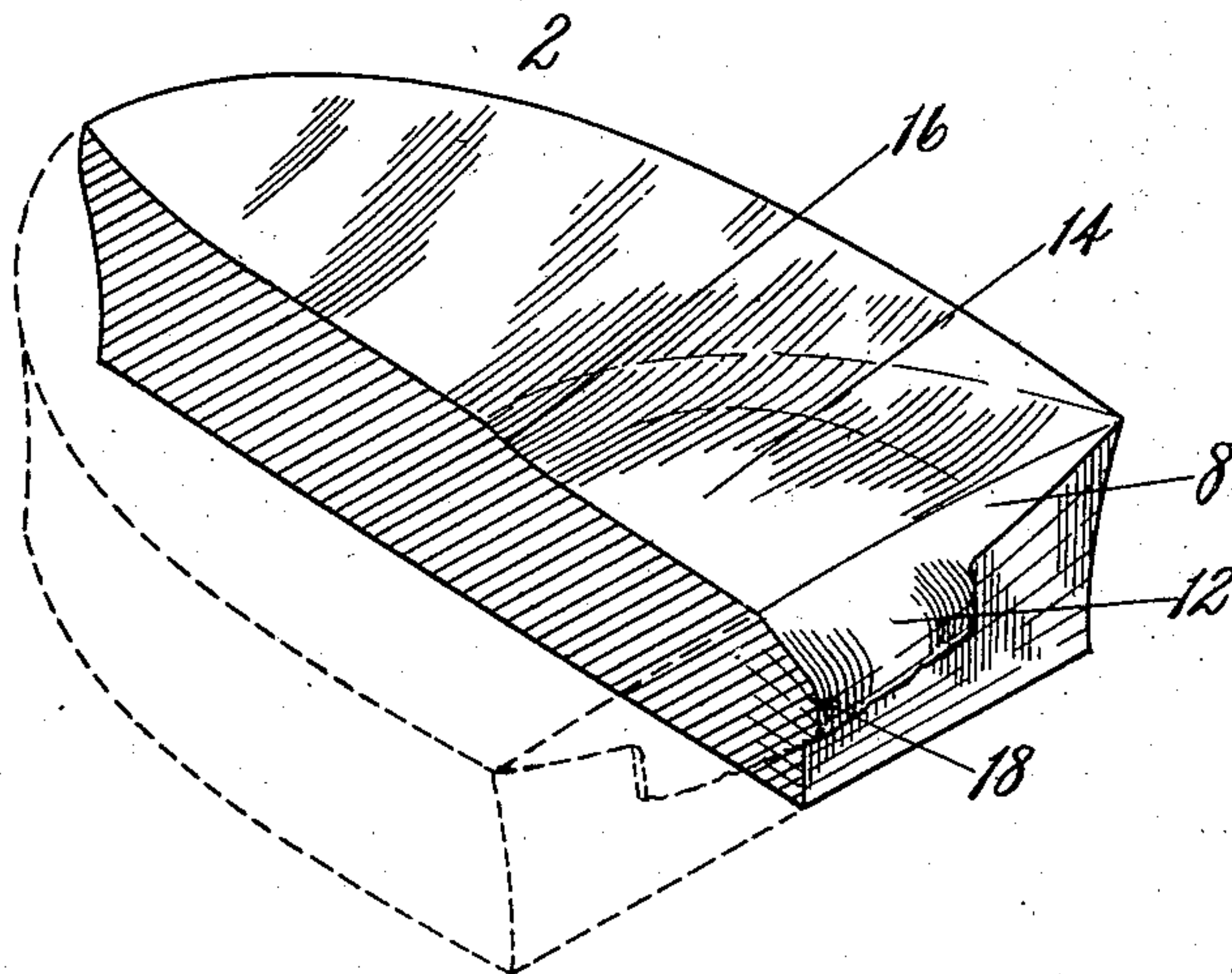


Fig. 2.

WITNESSES.

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HEEL.

No. 891,513.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, COMFORT L. WHITING, a citizen of the United States, residing at Brockton, in the county of Plymouth and Commonwealth of Massachusetts, have invented certain Improvements in Heels, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to heels for boots and shoes.

The object of the invention is to provide a heel in which the part that is to be removed by the breasting operation will not cut into the shank portion of the sole when the heel is being attached and thus make an indentation that will show plainly after the heel has been breasted.

Another object of the invention is to provide a heel which is compressed uniformly throughout its body, which is perfectly level on its tread face, and in which the seat is provided with a depression to receive the portion of the outer sole which is forced outwardly by the shank or stiffener which is placed between the inner and outer soles.

As is well known, a heel is made up of layers of leather or other suitable material cut to the desired shape and size and secured together. The heel formed by these layers of leather is compressed in all of its dimensions to force the layers closely together, and simultaneously with this compressing operation the seat of the heel is molded to fit the heel-seat end of the sole of the shoe.

The heel is fastened to the shoe by nails, and during this attaching operation the heel is forced against the sole by such pressure that the heel becomes embedded in the sole. The heel is usually beveled at the corner or edge formed by the junction of the seat and the breast, so that in the operation of attaching the heel the shank portion of the sole will not be indented by the portion of the heel that is to be removed during the breasting operation. The method heretofore employed for beveling this corner or edge of the heel to prevent the shank portion of the sole from being marred or indented has not accomplished the desired result on account of a roughened projection, which is always formed, in the operation of compressing the heel, on

the lower edge of the beveled portion, that is, the edge at the junction of the breast and the beveled part of the heel, which roughened projection is forced into the sole when the heel is being attached and makes an indentation in the sole which shows plainly after the heel has been breasted. To overcome this marring or indenting of the shank portion of the sole by the roughened projection on the lower edge of the beveled part of the heel I have provided a heel in which the edge formed by the junction of the breast and seat is beveled, and the lower edge of this beveled portion where it joins with the breast is rounded.

In the drawings, Figure 1 is a perspective view, partly in section, of a portion of a compressed heel showing the roughened projection which is formed on the lower edge of the beveled portion of the heel during the compressing operation; and Fig. 2 is a perspective view, partly in section, of a portion of my improved compressed heel, showing the beveled portion having a rounded lower edge.

Referring to Fig. 1 of the drawings, 2 designates a compressed heel, 4 the seat of the heel, and 6 the breast of the heel. The corner formed by the junction of the seat and breast is beveled at 8, and 10 designates the roughened projection which forms on the lower edge of the beveled portion during the operation of compressing the heel. As hereinbefore pointed out, this roughened projection will cut into the shank portion of the sole when the heel is being attached to the shoe, and when the heel is subsequently breasted the indentation in the sole will show plainly. This detracts greatly from the appearance of the shoe, as it is impossible to remove the indentation by scouring or sand-papering, and as the shank is the portion of the sole on which a trademark or stamp is often placed, and is, therefore, a part of the shoe that is usually examined by a purchaser, it is desirable to have the shank portion smooth and free from all imperfections.

In the heel shown in Fig. 2, which represents the preferred form of my invention, the corner or edge formed by the junction of the breast and seat is beveled at 8 and the lower edge of the beveled portion is rounded at 12. When such a heel is attached to a shoe there is no possibility of the shank por-

tion of the sole being marred, as the lower edge of the beveled part of the heel is perfectly smooth and free from any roughened projection. The lower edge of the beveled
 5 portion is shown as rounded only at the center, as it is at this point that the roughened projection is most prominent, but if so desired the whole edge may be rounded.

The seat of the heel is provided with a depression which is flat at 14 and is inclined at
 10 16, this depression being formed in the seat to receive the portion of the outer sole which is forced outwardly by the shank or stiffener which is placed between the inner and outer
 15 soles, and on the breast of the heel is formed a bulge 18 which comprises the leather that has been displaced to form the depression in the seat of the heel.

By forming the bulge 18 on the breast of
 20 the heel a uniform compression of the heel throughout its body is insured, and the liability of a bulge forming on the tread-face of the heel is obviated. The bulge 18 is formed on the heel by providing the breast plate of
 25 the compressing dies with an opening into which the displaced leather may flow when the heel is being compressed, so as to relieve the pressure on the heel at the point where the depression is formed in the seat. If no
 30 outlet were provided for this displaced leather the heel would be compressed to such a degree where the depression was formed that soon after it had been removed from the dies a bulge would form on the tread face of

the heel, and other portions of the heel would 35 not be compressed sufficiently to force the lifts of the heel closely together.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:— 40

1. As a new article of manufacture, a heel having a bevel at the junction of the seat and breast, and a rounded surface at the extreme breast edge merging with said bevel.

2. As a new article of manufacture, a heel 45 having a beveled portion at the junction of the seat and the breast, a part of the lower edge of said beveled portion intermediate the sides of the heel being rounded.

3. As a new article of manufacture, a heel 50 in which the seat is provided with a depressed portion for receiving a bulging part of the outer sole, said portion being substantially flat at its center and inclined at 16, substantially as described. 55

4. As a new article of manufacture, a heel in which the seat has a depressed portion and the breast has a bulge formed by the leather which was forced out of the seat to form the depression therein, substantially as described. 60

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

COMFORT L. WHITING.

Witnesses:

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 ARTHUR L. RUSSELL.