H. VARWIG.

METALLIC HEEL.

APPLICATION FILED FEB. 27, 1917.

1,246,505. Patented Nov. 13, 1917.

Fig. 1.

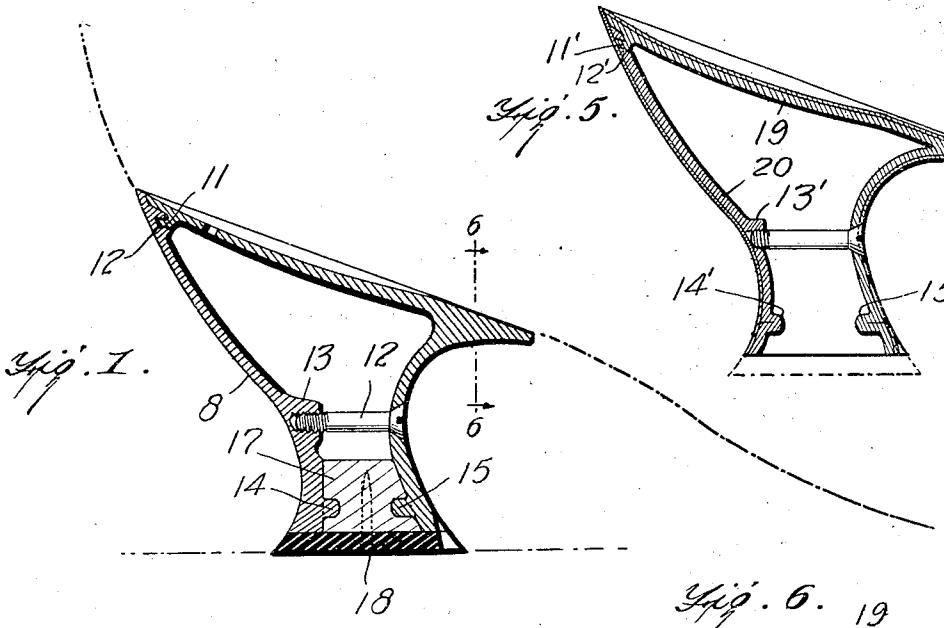


Fig. 5.

Fig. 6.



Fig. 2.

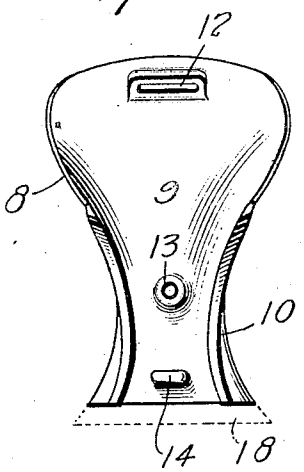


Fig. 3.

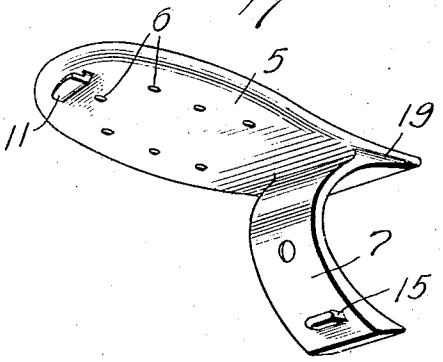
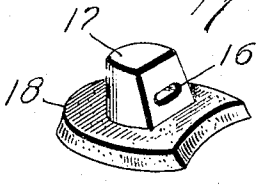


Fig. 4.



WITNESSES

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METALLIC HEEL.

1,246,505. Specification of Letters Patent. Patented Nov. 13, 1917.

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To all whom it may concern:

Be it known that I, HARRY VARWIG, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Metallic Heels, of which the following is a specification.

One of the principal objects of my invention is to provide a metallic heel of improved design and construction, which carries a replaceable leather facing or tip, the construction of the heel being such that the facing may be readily and expeditiously renewed.

Another object of the invention resides in the provision of improved means for securing the plug or tip to which the facing is secured, in place within the heel.

A still further object of the invention is to provide an improved method of securing the portions of the shell forming the heel together.

Still another object of my invention is to provide an improved metallic heel characterized by advantages of simplicity, durability, efficiency in operation, and economy in manufacture.

With these and other objects in view which will become apparent as the description proceeds, the invention resides in the construction, combination, and arrangement of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawing in which like characters of reference indicate like parts throughout the several figures, of which—

Figure 1 represents a view in section taken longitudinally through a metallic heel constructed according to my invention;

Fig. 2 represents a view in elevation of the body portion of the metallic heel removed;

Fig. 3 represents a view in perspective of the portion of the heel secured to the shoe, constituting the base plate and breast plate of the heel;

Fig. 4 represents a view in perspective of the removable tip and facing carried thereby;

Fig. 5 represents a view similar to Fig. 1 of the molded type of heel, and

Fig. 6 represents a view in section on the line 6—6 of Fig. 1.

Referring more particularly to the drawing, the heel includes a base plate 5, substantially oval shaped, and of a slightly concavo-convex formation, and this plate is adapted to be secured to the heel portion of the sole of a shoe by riveting or sewing, or some other suitable manner, perforations 6 being provided in the plate for receiving the fastening means.

Formed integrally with the base plate 5, and curving downwardly and forwardly therefrom, is the breast plate 7 which forms the front wall of the heel.

The body portion 8 of the heel which is shell-like in formation, includes the rear wall 9 and side walls 10, and is open at its upper and lower ends as clearly shown in Fig. 2.

The body of the heel is adapted to be fitted against the base and breast plates to form the completed heel, as indicated in Fig. 1. The rear portion of base plate 5 is provided with a depending rearwardly projecting lug 11, adapted to engage in a recess or slot 12 formed on the inside of the rear wall 9 adjacent the upper edge of the latter, for securely locking the upper portion of the body to the base plate, when the body is in position.

The breast plate 7 is provided at about its center with an opening for receiving a headed screw 2, the threaded portion of which is turned into a threaded opening in a lug or enlargement 13 formed on the inner wall of the body portion, for positively securing the portions of the heel together. When it is desired to remove the body member of the heel, the screw is turned out of engagement with the lug 13, and the body portion lifted off.

The body of the heel and the breast plate are provided adjacent their lower ends with lugs 14 and 15 respectively, which lugs project toward each other and are adapted to engage in recesses or notches 16 formed in a tip or plug 17, to which tip the leather facing 18 is nailed or otherwise suitably secured. The tip 17 may be made of wood

or other fibrous or compressed material of such nature as to suitably secure the leather facing 18. This facing, as clearly indicated in Fig. 1, covers the lower portion or side of the heel, and while presenting an attractive finish to the heel, acts as a suitable cushion while walking.

When the facing 18 becomes worn and it is desired to replace the same, it may be pulled off of the block or tip 17, without removing the latter, and a new facing nailed or otherwise secured in place. If, however, it becomes necessary or desirable, to remove the block or tip, the screw 2 may be readily withdrawn to allow disengagement of the body portion, whereupon the block may be removed and a new one inserted in its place.

The lugs 15 serve not only to prevent withdrawal of the block accidentally from the heel, but also to prevent the block from riding, or being forced upwardly into the heel out of its true position.

When the heel is assembled, the front edges of side walls 10 lie flush with the front or outer face of the breast plate, and the upper edges of the side walls, at their forward ends, lie against the flange portions 19 formed by the extension of the base plate 5 laterally beyond the lateral edges of the breast plate 7, as indicated in Fig. 3.

The foregoing description refers particularly to the type of heel in which the parts are cast in manufacture. Another method of forming the heel is by the molding process. A heel constructed by molding the parts is indicated in Fig. 5. By this method relatively thin sheets of metal are used, and the different metallic parts of the heel are shaped by dies into the desired form. The base plate and the breast plate of the heel are molded in one piece, as already set out.

A metal strip 19 is welded on the inner surfaces of the base and breast plates, extending longitudinally thereof, and another metal strip 20 is welded longitudinally on the inner surface of the body portion of the heel. The upper portion of the strip 20 is provided with an opening or slot 12′ for receiving a lug 11′ formed adjacent the rear end of the strip 19. Thus the posterior part of the heel body becomes locked to the base plate when the heel is assembled in completed position. The lower portions of strips 19 and 20 are provided with projections or lugs 14′ and 15′ respective, for fitting into the indentations or recess in the tip or block for securing the latter in place. A suitable threaded bolt or screw is also used in this form for securing the parts together, the threaded portion of the screw being turned into a threaded opening formed in an enlargement of the strip 20, as at 13′.

Although I have described the preferred embodiments of my heel, I may desire to make such changes in the construction, combination, and arrangement of parts thereof, as do not depart from the spirit of the invention and the scope of the appended claims.

The tips 17 and facing 18, may if desired, be made integral with each other by molding or otherwise forming them of rubber or some other desirable material, so that the tip and facing or tread piece would form one piece.

I claim:

1. A heel comprising a base plate adapted to be secured to the sole of a shoe, a breast plate formed integrally with and provided with an opening, and depending from the base plate adjacent the forward end of the latter, a body portion including a rear wall having an opening and side walls, said body portion being open at its upper and lower ends, the side walls of the body adapted, when the heel is in assembled position, to embrace the breast plate between them, a lug depending from the said base plate adjacent its rear end and adapted to engage in a recess provided in the rear wall of the body for locking the base plate and body together when the heel is in assembled position, a screw extending through the opening in the breast plate and being adapted to be threaded into said opening in the rear wall of the body for detachably securing the breast and base plates and body together, a block held between the breast plate and body at the lower portion of the latter, and a facing secured to the block and forming the lower terminal of the heel.

2. A heel comprising a base plate adapted to be secured to the sole of a shoe, a breast plate formed integrally with and depending from the base plate at the forward end of the latter, a hollow body portion, interengaging means between the base plate and body portion, means detachably securing the breast plate and body portion together, opposed lugs formed on the breast plate and body portion adjacent the lower end of the heel, a block having indentations into which the lugs project, and a facing secured to the block.

3. In a heel, the combination of a breast plate, means for securing the same to the sole of a shoe, a body portion, means for detachably connecting the breast plate and body portion together, a block arranged in the lower portion of the heel between the said plate and body portion, interengaging means between the block and the body portion and breast plate, for removably securing the block in place, and a facing carried by the block.

4. In a heel, the combination of a base

plate, a breast plate formed thereon, a body portion, interlocking means between the base plate and body portion, and means detachably securing the breast plate and body portion together.

5. In a heel, the combination of a breast plate, means for securing the breast plate to the sole of a shoe, a body portion, means for detachably connecting the body portion to the breast plate, a block removably held between the breast plate and body portion, and a facing carried by the block.

6. In a heel, the combination of a base plate having a breast plate thereon, a body portion, means detachably securing the body portion to the base and breast plates, and a tread member detachably engaged against the body portion and breast plate.

HARRY VARWIG.