Feb. 9, 1932. F. T. GENTILE ET AL 1,844,248

HEEL FOR LADIES' SHOES

Filed June 16, 1930

Fig. 1.

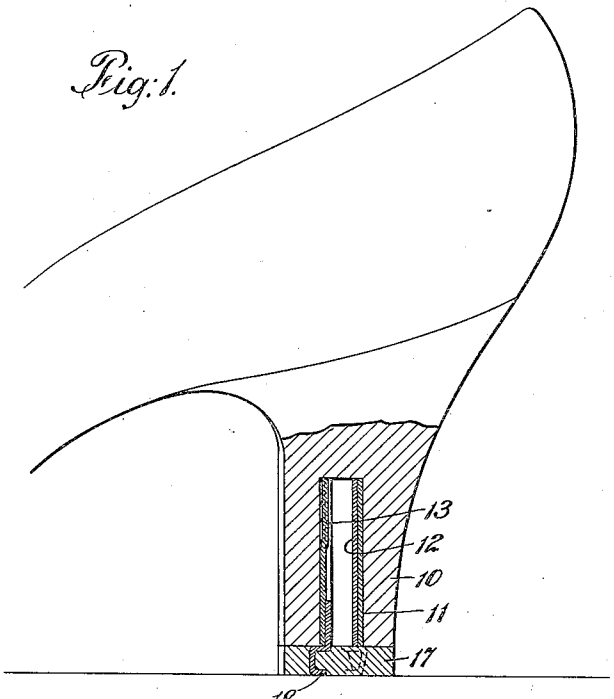


Fig. 2.

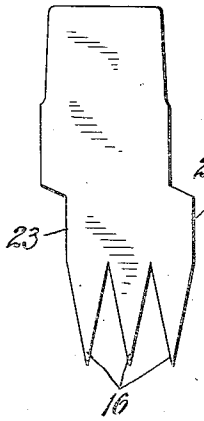


Fig. 3.

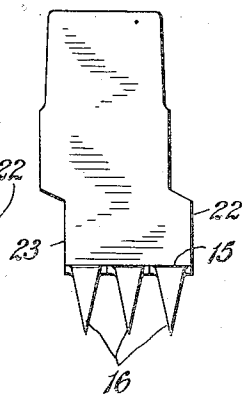


Fig. 4.

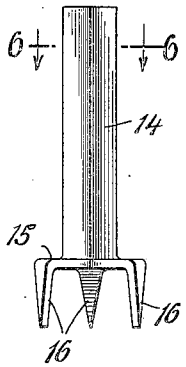
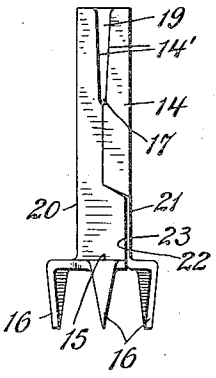


Fig. 5.



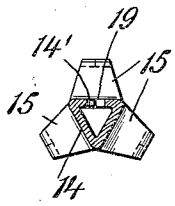


Fig. 6.

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Patented Feb. 9, 1932 1,844,248

UNITED STATES PATENT OFFICE

FRANK T. GENTILE AND FRED MACCARONE, OF BROOKLYN, NEW YORK

HEEL FOR LADIES' SHOES

Application filed June 16, 1930. Serial No. 461,405.

Our invention relates to heels for shoes.

The object of our invention is to provide an improved removable lift construction for heels of women's shoes for use with high heels of small cross section, in which a sleeve of triangular cross section is firmly fixed in a bore in the heel, and a removable lift carried by a metal shank, triangular in cross section, is fitted in the sleeve in removable relation thereto, our improvement consisting in dividing the shank portion vertically its entire length, and forming its lower end to provide a claw for each side portion of the shank, adapted to hold the lift of the heel to the shank. A further object is to spread the shank to expand it laterally against the walls of the sleeve to securely hold it in the sleeve.

The following description will more clearly define our invention.

The heels of shoes for women's wear known as "French heels" are made high, and narrow in cross section at their lower ends, and therefore a removable lift construction must be made small in cross section in order to leave enough material to form the heel proper, which is usually made of wood, and to prevent splitting the wood in making the bore in the heel and in fitting the sleeve therein.

Incidentally, our construction strengthens the heel and at the same time provides a ready means for renewing a worn out lift at a low cost.

Referring to the drawings which form a part of the specification:

Fig. 1 is a vertical sectional view thru a heel made of wood with our improved construction located therein, also shown in section.

Fig. 2 is a view of a side view of a sheet metal blank as it is formed by a die in the first operation of making the shank portion of the construction.

Fig. 3 is a view of the blank shown in Fig. 2 after an offset flange is formed on its lower end and from which the claws depend.

Fig. 4 is a view of one side of the shank.

Fig. 5 is a view of the opposite side to that shown in Fig. 4.

Fig. 6 is a cross sectional view taken on line 6—6 of Fig. 4.

10— indicates the wood heel portion of a shoe in which a bore 11— of triangular cross section is formed by a mortising tool.

This bore extends from the bottom of the heel to near the upper end thereof as illustrated.

12— indicates a sleeve of metal of the same shape and length as that of the bore 11— into which it is forced and permanently held by friction therein.

The sleeve is provided with an inwardly extending projection 13— formed integral therewith by pressing a portion of the material inwardly by a die operation to provide a vertically extending rib adapted to project between the edges 14'— of the shank 14—, and spread the shank to cause it to fit tightly in the sleeve. It will be noticed that the offset base portion 15— of each claw 16— extends the entire width of the flat side portion of the shank, to provide the necessary strength, and that the claws extend thru the leather lift 17—, and are bent inwardly toward the centre of the lift and clinched thereunder as illustrated at 18—.

The edges 14'— are inclined toward each other from the upper open end of the space 19— to the point 17— to insure a strong frictional contact between the shank and sleeve walls.

In order to provide a claw on each of the flat sides of the shank, and yet divide the shank midway between the corners 20— and 21—, the blank is formed as shown in Figs. 2— and 3— and bent into the form shown in Fig. 5— so that the lower edge portion 22— rests adjacent the edge 23— as shown, thus providing a full width of base portion 15— to support a claw, as will be readily understood. The drawings are made about twice the size of the heel and metal parts, as manufactured for general use.

While we prefer to use the triangular form of sleeve and shank, as illustrated, it is obvious that the shape may be changed to provide a sleeve and shank construction square in cross section, or of other desired form, and we therefore do not wish to be limited to the specific form of construction shown, but may

modify the same within the scope of the claims.

Having thus described our invention, we claim as new:

1. A heel of the character described having a central bore formed irregular in cross section and extending from its lower end to near the upper end thereof, a hollow metal sleeve fitting in said bore and having an inwardly extending projection formed on its inner side; a hollow sheet metal shank fitted to slide closely in said bore and divided lengthwise with the adjacent edges spaced from each other at its upper end and bearing against said projection to spread the shank, and each side portion of the shank having an offset base portion of equal width, and having a depending claw formed integral therewith; and a lift held to said heel by said claws.

2. A heel of the character described having a central bore formed irregular in cross section with flat sides and extending from its lower end to near the upper end thereof, a hollow metal sleeve fitting in said bore and having flat sides, an inwardly extending projection formed on one of its inner sides; a hollow sheet metal shank fitted to slide closely in said bore, the upper end being divided midway of one of the flat sides to provide edge portions which engage the said projection in the sleeve to spread the shank, and the lower side edge portions being offset from the median line of the flat side to provide a base portion of equal width to that of the flat portion to which it is attached, each of said flat portions having a base portion offset from the shank portion and a claw carried by said base portion; and a lift connected to said claws and held in contact with said heel in removable relation thereto.

In testimony whereof I have affixed my signature.

FRED MACCARONE.

In testimony whereof I have affixed my signature.

FRANK T. GENTILE.