(No Model.)

I. H. FISH.

BOX TOE BLANK.

No. 588,638. Patented Aug. 24, 1897.

FIG. 1.

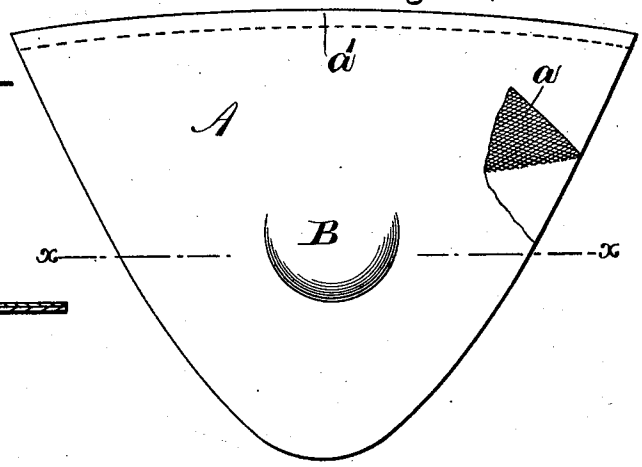
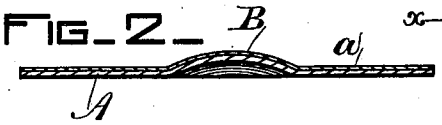


FIG. 2.



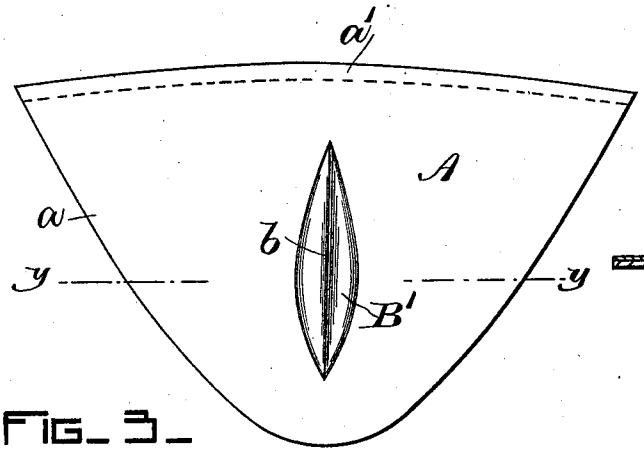


FIG. 3.

FIG. 4.



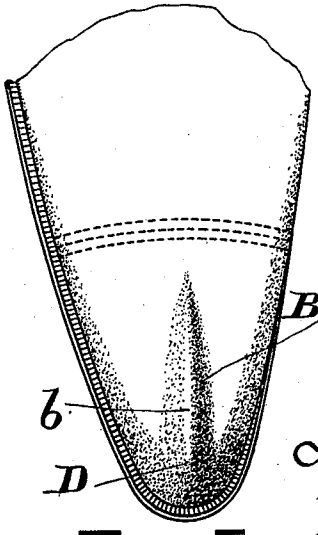


FIG. 5.

WITNESSES

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BOX-TOE BLANK.

SPECIFICATION forming part of Letters Patent No. 588,638, dated August 24, 1897.

Application filed February 23, 1897. Serial No. 624,531. (No model.)

To all whom it may concern:

Be it known that I, ISAAC H. FISH, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Box-Toe Blanks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the manufacture of boots and shoes it is common to insert a stiffening between the lining and upper at the toe portion, forming what is commonly known as a "box-toe." The stiffenings above referred to are commonly termed "box-toe blanks" and are sold separately from the boot or shoe as an article of manufacture. Box-toe blanks have heretofore consisted of two common types—the molded blank, which is molded into the shape required for use before being inserted in the shoe, and the flat blank, which is shaped over the toe of the last during the lasting operation. It is to be noted in this connection that the flat blank has been found to be far preferable to the molded blank, provided the strength or stiffness and proper shape can be secured thereby—that is, for all styles of shoes for which flat blanks could heretofore be used they have been found more convenient and superior to the molded blanks. To illustrate such superiority, it is only necessary to call attention to the fact that to secure a neat and finished appearance in the finished shoe the manufacturer, if he uses a molded blank, must have a different blank for almost every variation in the style and size of the last, while if he uses flat blanks, which are shaped on the toe of the last upon which they are used, it is common to carry but three sizes, one for men's, one for women's, and one for misses' and children's shoes. It has heretofore been found impractical to use a flat blank for styles of shoes having marked variations in contour at the toe—such, for example, as is found in what is termed in the trade the "bull-dog" toe or the "ribbed" or "cottage" toe.

The object of the present invention is to provide a flat blank which when lasted into a boot or shoe gives the required shape for the styles above suggested and analogous styles and in which the material is arranged and formed to give sufficient strength and elasticity at the required points; and to the above end the present invention consists of a box-toe blank constructed and formed as hereinafter described and claimed.

The present invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved blank as provided for a bull-dog toe. Fig. 2 is a section on line $x\,x$, Fig. 1. Fig. 3 is a plan view of a blank as provided for a ribbed or cottage toe. Fig. 4 is a section on line $y\,y$, Fig. 3; and Fig. 5 illustrates the toe portion of a ribbed or cottage toe shoe as formed with my improved blank.

Similar letters of reference indicate similar parts in the several views.

My improved blank comprises a substantially flat body portion A, which is cut to the required shape, which is substantially that shown in the drawings and which is conveniently covered by a covering a, of canvas or other suitable textile fabric, which I prefer to form of such size and shape that its edges will be flush with the edges of the body A, except along its upper edge, (which crosses the toe portion of the finished shoe,) along which the covering a projects to form the usual flap a'.

The body portion A preferably consists of gutta-percha, which, when prepared in a manner well known in the art, possesses the required qualities, and the covering a is conveniently secured thereon by paste or cement in the usual manner. I may say in this connection that a blank formed of a gutta-percha body portion and covering of textile material is well known in the art and for that reason I have not considered it essential to describe in detail the method of making the same. I also desire to be understood as not intending to limit the present invention to its application to such specific construction.

In accordance with the present invention the body A of the blank is indented along its medial line, said indentation being formed upon the reverse side of the body A and forming on its upper side, adjacent to the upper of the shoe, a ridge or projection, by which

ridge or projection the blank is enabled to readily assume the required form when lasted into a shoe and is rendred stronger and more elastic at portions where said qualities are most required.

It may be said that the indentation is preferably so positioned upon the blank that it terminates at a point toward the tip or point of the blank, which is substantially at the point of greatest curvature or salient point of the toe when the blank is lasted into the shoe.

The indentation required for a bull-dog toe is illustrated in Figs. 1 and 2, as designated by the reference-letter B. The indentation represented at B is depressed at its front end and becomes gradually shallower toward the back of the blank, the rear portion of the blank having the usual substantially flat surface. The front portion of the indentation B is curved preferably substantially circular.

For a cottage or ribbed toe I prefer to use an indentation substantially as indicated at B′ in Figs. 3, 4, and 5. The indentation B′ is considerably more elongated than indentation B and it forms a somewhat sharply-defined rib *b* along the medial line of the shoe. The sides of the indentation B are preferably curved, substantially as illustrated, to give a neat and symmetrical appearance to the toe of the shoe. It will be noted that when lasted into the shoe the indentation B′ terminates at D, which is the point of greatest curvature or salient point of the toe. It is of course understood that the shape of the indentation may be modified in many respects to meet the requirements of different styles of shoes.

In practice I form the indentation B or B′ by compressing the blank between a suitably-shaped male and female die.

In using my improved blank it is placed in the toe portion of the shoe between the upper and lining before the lasting operation, and during the lasting operation it is drawn over the insole with the upper and lining and secured therewith to the insole. The drawing over of the blank, as above stated, forms it over the toe of the last and brings it to the shape required to give the desired finish to the toe.

Having thus described my invention and the method of using the same, I claim as novel and wish to secure by Letters Patent of the United States—

A box-toe blank comprising a substantially flat body portion indented to form a ridge or projection along its medial line, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ISAAC H. FISH.

Witnesses:
WALTER L. EMERY,
GEORGE R. WHITCHEL.