

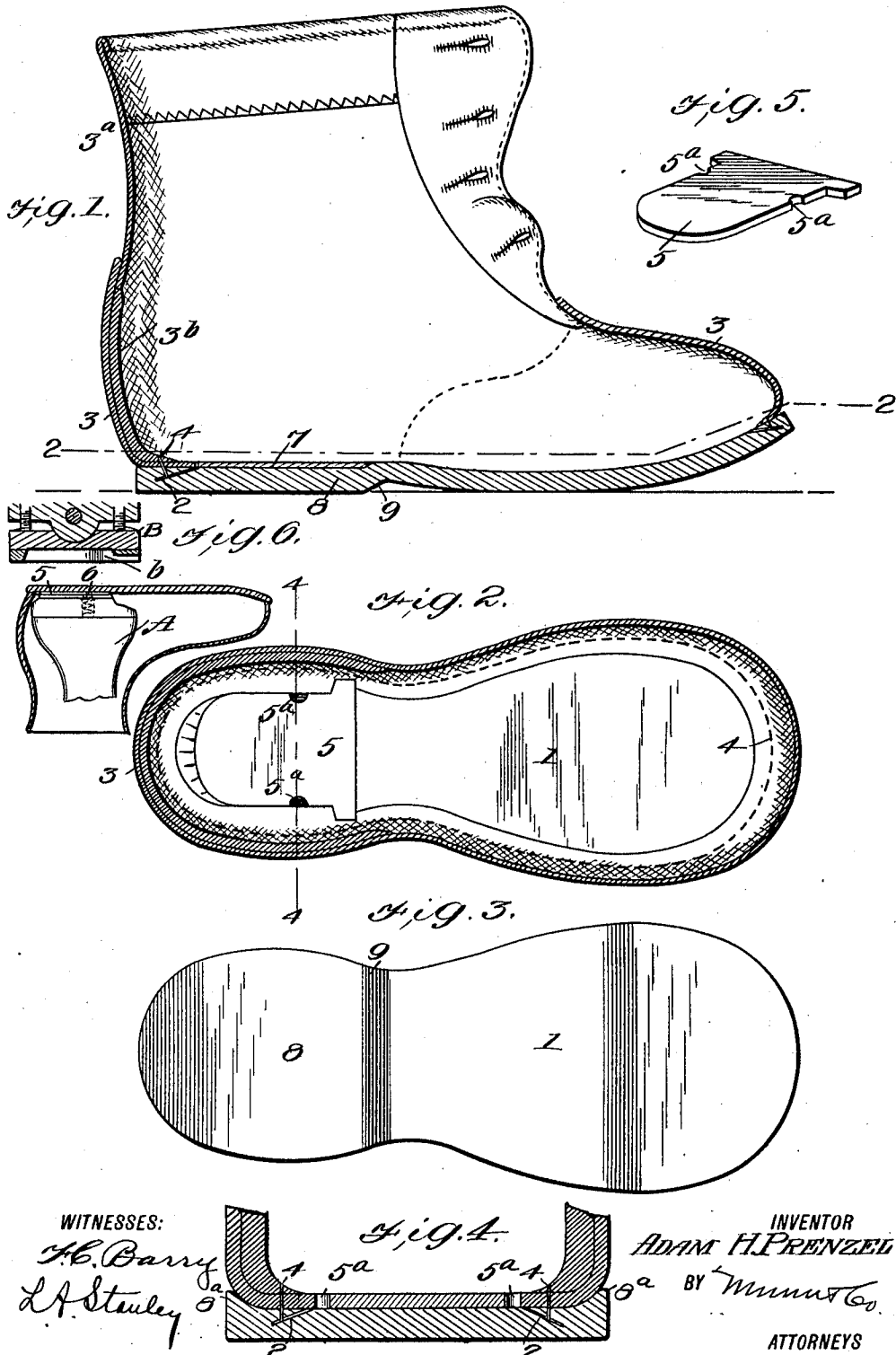
A. H. PRENZEL.

SHOE.

APPLICATION FILED AUG. 5, 1910.

1,031,196.

Patented July 2, 1912.



UNITED STATES PATENT OFFICE.

ADAM H. PRENZEL, OF HALIFAX, PENNSYLVANIA, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SHOE.

1,031,196.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed August 5, 1910. Serial No. 575,803.

To all whom it may concern:

Be it known that I, ADAM H. PRENZEL, a citizen of the United States, and a resident of Halifax, in the county of Dauphin and State of Pennsylvania, have made certain new and useful Improvements in Shoes, of which the following is a specification.

My invention relates to an improved shoe, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of my invention is to provide a shoe, preferably a child's shoe, in which the heel is embossed, pressed or stamped from the shoe bottom or sole after the upper is united to the sole, and in which a filler is preferably inserted to give a continuous surface to the bottom of the shoe upon the inside.

A further object of my invention is to provide a shoe in which the upper is sewed to the heel portion, the latter being stamped or embossed, so as to present a neat appearance. The selling value of the shoe is thus increased, while at the same time the shoe can be manufactured more cheaply.

A further object of my invention is to provide a shoe having an embossed heel whose edges are thicker than the edges of the sole proper, thereby giving the effect of a heel made of material added to the shoe bottom, when, in fact, no such material is added.

Other objects and advantages will appear in the following specification and the novel features of the shoe will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings in which—

Figure 1 is a central vertical section through the shoe from front to rear, Fig. 2 is a section along the line 2—2 of Fig. 1, Fig. 3 is a bottom view of the sole and heel portions, Fig. 4 is an enlarged section along the line 4—4 of Fig. 2, Fig. 5 is a perspective view of the filler or heel seat, and Fig. 6 is a sectional view of the shoe showing it in position preparatory to embossing the heel.

The explanation of the structure of the shoe will best be given by a statement of the steps taken in its manufacture.

In carrying out my invention, I take a bottom 1 of the shape shown in Fig. 3, and after channeling the bottom as shown at 2 in Figs. 1 and 4 entirely around the edge

of the sole and heel portions, the upper 3 is stitched, wrong side out, to the sole and heel portions by machines designed for that purpose. In Figs. 1 and 4 this stitching is denoted by 4. The shoe is now turned, right side out.

A pasteboard filler or spring lift 5 is provided of the form shown in Fig. 5. This filler, it will be noted, has a semicircular groove 5^a on each side. One side of the spring seat or filler is treated with glue and it is then placed, with the glue side up, on a lower die like that shown at A in Fig. 6. This die is provided with a pair of spring controlled pins like that shown at 6 in dotted lines in Fig. 6. These pins are arranged to fit into the grooves 5^a so as to hold the filler in place upon the die. The turned shoe is then placed upon the lower die A so that the latter is in position to emboss the heel, while the leather is still in a moist condition.

The description of the form of die and the means by which it is operated forms the subject of a separate application Serial No. 575,801 on the machine itself, and is not properly a part of this present application. It will suffice to say that an upper die B is provided having a heel shaped recess *b*. The shoe is centered and the lower die is forced upwardly against the upper die. The lower die forms a recess 7 (see Fig. 1) in the inner side of the heel portion and an embossed heel 8 on the outer side. The filler does not extend over the entire heel and this is one respect in which my improved shoe differs from other shoes. Fig. 2 shows the relation of the spring lift or filler 5 to the inner edges of the upper. It will be observed that the filler lies between, and is contiguous to, the inner edges of the upper, which, as clearly shown by the figure, extend partly over the heel itself. The pressure of the lower die forces the filler in place and it is securely glued to the leather.

In Fig. 1 I have shown a shoe having an upper consisting partly of a strip of patent leather 3 and partly of more pliable material 3^a. There is also a stiffening piece 3^b. It will be understood, however, that the upper may be made in one continuous piece without departing from the spirit of the invention.

The appearance of the bottom of the shoe, after it is embossed, is that shown in Fig. 3, in which the heel portion 8 is embossed

and the sole portion 1 is connected with the heel portion or breast by a beveled portion 9. In forcing the lower die A up against the upper die B, the outer edges of the heel are crowded up, as clearly shown in Fig. 4 at 8^a. This gives the heel the appearance of being thicker than it really is, and adds to the effect.

It will be seen that the construction of a shoe, as described, obviates the necessity of employing an additional piece of leather and the use of tacks or nails to secure the heel in place. At the same time, the heel presents the outward appearance of having this additional material.

The novel process herein described is made the subject-matter of a separate application Ser. No. 575,802 of even date.

I claim:—

1. A shoe having an embossed heel, an upper sewed to said heel, and a solid lift or filler between the sewed edges of the upper, the edges of said heel seat being contiguous with the edges of said upper.

2. A shoe having a bottom provided with an embossed heel, the edges of said heel being thicker than the body portion of the heel, said heel being channeled within said thick edges, and an upper sewed to the body portion of said heel inside of said thick edges.

3. A shoe provided with an embossed heel, the edges of said heel being thicker than the body portion of the heel, an upper sewed to the body portion of said heel inside of said thick edges, and a lift or filler secured to the body portion of the heel within the sewed edges of said upper.

4. A shoe provided with an embossed heel, the edges of said heel being thicker than the body portion of the heel, said heel being channeled within said thick edges, an upper sewed to the body portion of said heel inside said thick edges, and a solid lift or filler secured to the body portion of the heel within the sewed edges of said upper.

5. A shoe comprising an upper and a sole united upon the inside of said shoe, and having a complete heel embossed from the heel end of the sole.

6. A shoe comprising an upper and a sole united together, and having a complete heel pressed out of its heel end, the breast end of said heel extending across the entire width of said sole.

7. A shoe comprising an upper and a sole united together, and having a complete heel pressed out of its heel end, and a filler for the depression upon the inside of said shoe.

8. A shoe comprising an upper and a sole united together and having a complete heel pressed out of its heel end, the edges of said heel being thicker than the body portion, and a filler for the depression upon the inside of said shoe.

9. A shoe comprising an upper and a sole united upon the inside of said shoe, and having a complete heel pressed out of its heel end, and a filler for the depression upon the inside of said shoe.

10. A shoe comprising an upper and a single sole united together, and having a complete heel pressed out of the heel end of the sole, and a filler for the depression upon the inside of said shoe.

11. A spring heel shoe comprising an upper and a sole united together, and having a complete heel pressed out of its heel end, and a spring lift inside the shoe.

12. A shoe comprising an upper and a single sole united by stitching throughout their contiguous edges, said shoe having a spring heel pressed out of the heel end of the sole, and a spring lift inside the shoe.

13. A shoe comprising an upper and a sole united upon the inside of said shoe, and having a complete heel pressed out of its heel end, and a filler for said depression located between the inturned edges of said upper.

14. A shoe comprising an upper and a sole united by stitches upon the inside of said shoe and throughout their contiguous edges, and having a complete heel pressed out of its heel end, and a filler for the depression upon the inside of said shoe located between the inturned edges of said upper.

15. A shoe comprising an upper and a sole united upon the inside of said shoe, and having a complete heel pressed out of its heel end, the depression upon the inside of the shoe being greatest between the inturned edges of the upper, and a filler for said depression.

16. A shoe comprising an upper and a sole united upon the inside of said shoe, and having a complete heel pressed out of its heel end, the breast end of said heel extending across the entire width of said sole, and a filler for the depression upon the inside of said shoe, the body of said filler being located between the inturned edges of the upper and said filler having lateral extensions over the breast end of said depression.

ADAM H. PRENZEL.

Witnesses:

G. W. SHULTZ,
L. W. RYAN.