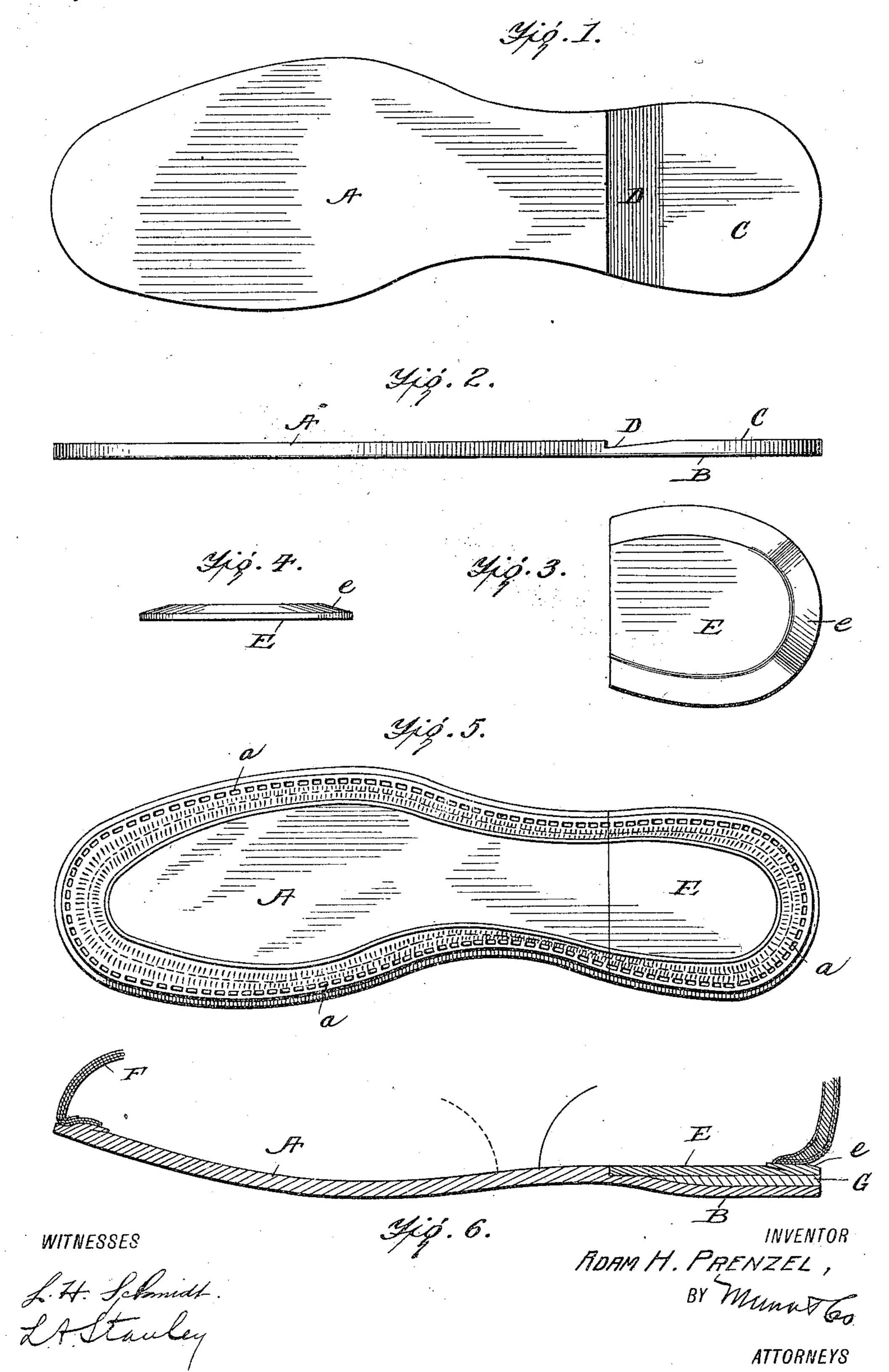
# A. H. PRENZEL. PROCESS FOR MAKING SHOES. APPLICATION FILED SEPT. 1, 1909.

960,234.

Patented May 31, 1910.



# TINITED STATES PATENT OFFICE.

## ADAM HENRY PRENZEL, OF HALIFAX, PENNSYLVANIA.

#### PROCESS FOR MAKING SHOES.

960,234.

Specification of Letters Patent.

Patented May 31, 1910.

Original application filed June 25, 1909, Serial No. 504,276. Divided and this application filed September 1, 1909. Serial No. 515,574.

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 5 State of Pennsylvania, and whose postoffice address is the same, have invented a certain new and useful Improvement in Processes for Making Shoes, of which the following is a specification.

My invention relates to improvements in shoes and is more particularly applicable to those shoes designed for the use of children in which a wedge is inserted under the heel seat to raise the heel while at the same time 15 preserving the continuity of the bottom from

the front to the extreme rear.

The article made by this process is disclosed and claimed in a prior application No. 504,276, filed June 25, 1909, of which

20 this is a divisional application.

The usual manner of constructing a shoe of the type mentioned is to take a continuous piece of leather forming the sole and heel portions and sew the upper to the 25 sole portion. A heel seat is then placed inside the shoe and a wedge is placed above the heel proper. That portion of the upper above the heel is then fastened between the heel seat and the wedge by tacking the heel 30 seat to the latter. The heel thus constructed is nailed in the usual manner. This method has one great disadvantage, namely, that it requires hand labor to insert and tack down the heel seat. Furthermore, the front edge 35 of the heel seat forms a raised ridge which requires the insertion of a leveling strip on the inside of the shoe in order to give a smooth surface for the finished shoe.

An object of my invention is to provide a 40 shoe in which the heel seat is secured by sewing it to the upper by a machine, thus doing away with the manual labor required when the heel seat is tacked in.

A further object of my invention is to 45 provide a shoe with a smooth surface on the inner as well as the outer sides of the sole and heel portions, thus eliminating the necessity of a leveling strip on the inside of the shoe.

A further object is to construct a shoe in such a manner that the upper can be secured

to the heel portion at any desired distance from the edge by merely beveling the edge of the heel seat at the proper angle.

Other objects and advantages will appear 55 from the following specification and the novel features will be particularly pointed

out in the appended claim.

My invention is illustrated in the accom-

panying drawings in which—

Figure 1 is a plan view of the bottom piece showing the sole and recessed heel portion, Fig. 2 is an edge view of the parts shown in Fig. 1, Fig. 3 is a plan view of the beveled heel seat, Fig. 4 is an edge view of 65 the heel seat, Fig. 5 is a plan view of the channeled sole and heel seat, and Fig. 6 is a central vertical section of the bottom portion of a finished shoe.

In carrying out my invention, I provide 70 a bottom piece of the shape shown in Fig. 1 having the sole portion A and the heel portion B. I recess the heel portion slightly at C and toward the inner end of the heel portion I make the recess deeper as shown at 75 D. The recessing of the heel portion is done on a machine. The heel seat E is beveled around its outer edge in the manner shown at e in Figs. 3 and 4. It is then placed in the recessed portion C D prepared for it 80 and is glued temporarily in place. The piece thus formed is channeled as at a by a channeling machine, the heel seat E being treated in the same manner as the sole portion A, as shown in Fig. 5. The upper F 85 which is turned inside out, is now sewed both to the sole and to the heel seat, this being effected by one operation. The upper is now turned back, the heel seat separated from the heel portion B to which it was tem- 90 porarily glued, and the wedge G inserted between the heel seat and the heel. The heel thus formed is nailed in the usual manner.

It will be seen that with this process, the 95 hand labor involved in tacking in the heel seat is avoided. Both the inside and outside of the bottom form smooth, continuous surfaces, as clearly shown in Fig. 5.

The upper may be secured close to the 100 edge of the heel seat or farther away from the edge by varying the angle and extent of

the beveled edge e and sewing the upper accordingly, the beveled edge serving to set the upper away from the heel seat.

The recess C D in the heel as well as the heel seat E may be varied as to size or shape to suit occasion without departing in the least from the spirit of the invention.

I claim:

The herein described process of making spring heel shoes, which consists in cutting away a part of the upper side of the heel portion of a bottom piece, the depth of the cut at the front end of the heel portion being equal to the thickness of the heel seat, temporarily gluing a heel seat of uniform

thickness in said cut-away portion, forming a continuous channel in the sole and heel seat, sewing along said channel to unite the upper wrong side out to the sole and heel seat, turning the shoe, separating the 20 temporarily glued heel seat from the bottom piece, inserting a wedge between said separated parts, and permanently securing the wedge between the bottom and the heel seat.

### ADAM HENRY PRENZEL

Witnesses:

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