Sept. 23, 1941. S. SZAUER 2,257,026

SHOE SOLE

Filed Jan. 24, 1938

Fig. 1.

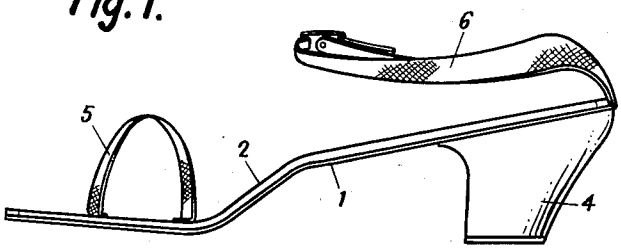


Fig. 2.

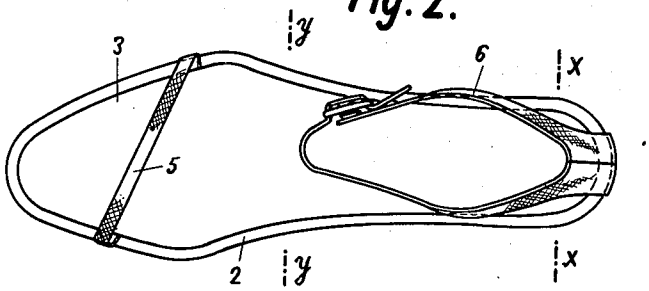


Fig. 3.

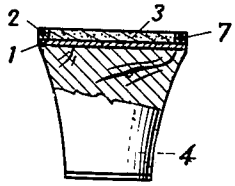


Fig. 4.

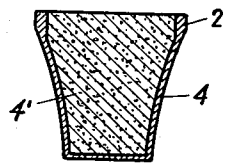


Fig. 5.

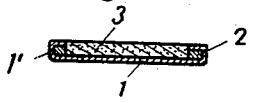


Fig. 6.

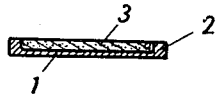
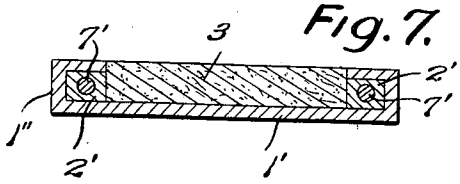


Fig. 7.



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UNITED STATES PATENT OFFICE

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SHOE SOLE

Sandor Szauer, Budapest, Hungary

Application January 24, 1938, Serial No. 186,722
In Hungary January 30, 1937

1 Claim. (Cl. 36—25)

My invention relates to boots and shoes and more particularly to the lower part of boots and shoes, namely to their soles or soles and heels.

The invention relates to a process for the production of shoe-bases (sole, or sole and heel, respectively), the characteristic feature of which is that the sole which is made of paper or other fibrous material impregnated with artifical resins, particularly synthetic resins, is introduced together with the heel made of artifical resins or with the same artifical resin used for the production of the sole into a pressing mould, wherein these parts are pressed in a single operation to form a shoe-base unit.

In the accompanying drawing a sandal is shown by way of example which is provided with a base-part, according to the invention.

Fig. 1 is a side view of the sandal,

Fig. 2 is a plan view of the same.

Figs. 3 and 4 are cross-sections of the heel-part taken on the line x—x of Fig. 2 in two modifications, whereas

Figs. 5 and 6 illustrate cross-sections of the sole-part taken on the line y—y of Fig. 2 in two modifications and Fig. 7 is a sectional view of a further modification of the invention.

The shoe-base according to the invention consists of a sole-plate 1, a welt 2 bordering the sole-plate from above, a filler 3, filling the space enclosed by the welt, and the heel 4. The upper part of the sandal, shown by way of example is formed by straps 5 and 6 but this part of the shoe may be otherwise formed.

The welt 2 may consist of a separate piece being detached from the sole-plate (Fig. 3), the welt being eventually covered by the upstanding and recurved rim 1' of the sole-plate (Fig. 5).

The heel 4 may also consist of some artificial resin and may form a separate part connected with the sole plate 1, see Fig. 3. It is also possible to make the sole-plate, the heel 4 and the welt from one piece (Figs. 4 and 6), in this case the hollow heel 4 is filled with material, in the manner shown at 4' in Fig. 4. The filler 3 and the filling material 4' of the heel form in this case a single unit.

The constructional forms described may also be combined with each other.

The manner of making of the shoe-base depends upon the material used and the shape of the shoe-base.

The sole plate 1 and the welt 2 may be made separately as well as a unit. In both cases their material is paper or other fibrous material impregnated with any artifical resin. The sole plate and the welt are cut from this material and pressed under the influence of heat, but one may also start with a ready made sheet of paper, or other fibrous material impregnated with artificial resin, and cut out therefrom the sole plate and the welt and bend it into the desired shape by applying pressure and heat or, by a solvent or a softener. The heel may also be made of any artificial resin and it is formed and pressed together with the sole plate and also with the welt in a single operation.

In case the different parts are made separately the same are unified by warm pressing or, particularly if the parts are made of cellulose-ester or cellulose-ether the same may be pasted together by using a solvent such as aceton.

In case of using impregnated paper for making of the welt 2, the same is preferably stiffened by an elastic core, for example a metal wire 7, the welt so obtained is pressed in a hot state into the desired shape and secured to the sole-plate.

In Fig. 7 there is shown a combination of Figs. 3 and 5 in which the wire 7' is embedded in the welt 2'.

The materials and manners of making may also be combined with each other. Thus, the sole-plate may be made separately of impregnated paper, the welt of cellulose derivatives and the heel of wood, or the sole-plate and the welt are made of the same material, for example by pressing, whereas the heel-part is made separately and is fastened to the uniform sole- and welt-parts etc. This enables the use of materials of different colours and thereby very advantageous colour-effects are obtainable. For example, the welt can be white, the sole-part red and the heel black, which combination makes a very vivid and pleasant impression. It is self-evident that the shoe-base can also be made of a material of the same colour or of other combination of colours. In case the sole-plate and the welt are not made from one piece the border line of the parts 1 and 2 will not be visible, since the welt 2 will be covered by the rim 1' of the sole-plate 1.

The constructional form shown in Fig. 5 has the further advantage that the welt is firmly fixed in position and stiffened by the rim 1' of the sole-plate which is bent over the welt 2. The same uniform effect can also be obtained if the parts 1 and 2 are made from one piece (Fig. 6) and even the whole shoe-base will appear uniform in case all the three parts are made from one piece and in one working operation (Figs. 4 and 6).

Upon the base-part, made in the manner described, the upper part of the shoe can be fixed in any suitable manner, such as by pasting or nailing.

What I claim is:

A sole consisting of a flexible fibrous material waterproofed and stiffened by impregnation with a synthetic resin, a welt bordering the sole and a rim on the sole covering the edge of the welt, and a stiffening core within said welt.

SANDOR SZAUER.