Dec. 18, 1928. 1,695,996

R. DAVIS ET AL

SHOE SHANK

Filed May 13, 1927

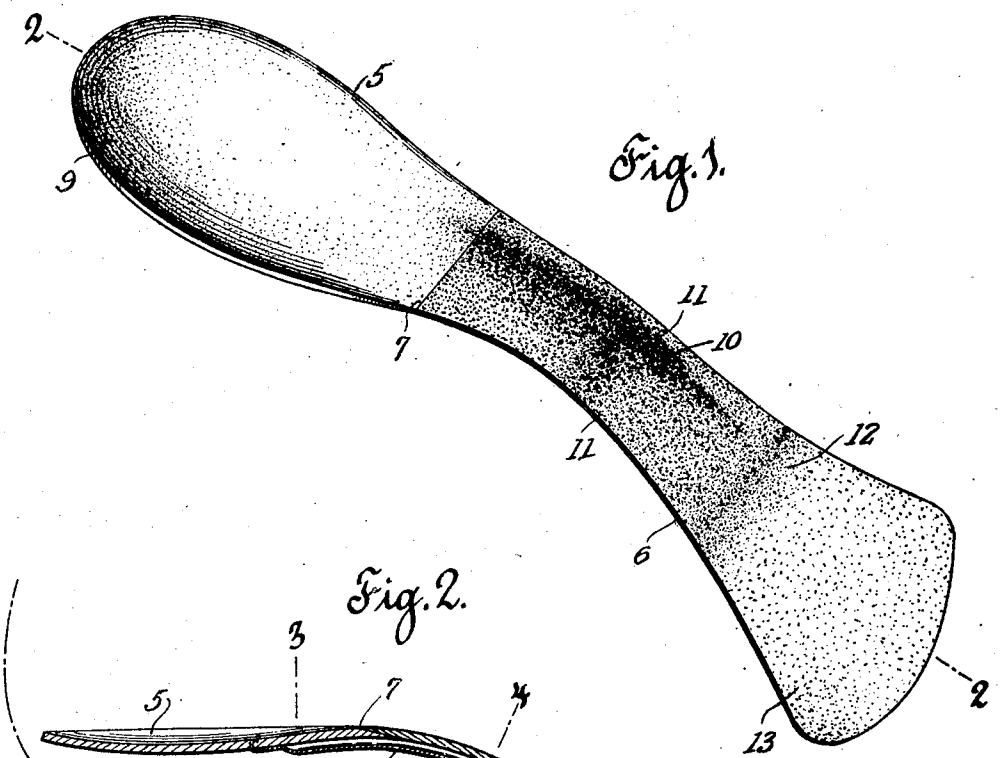


Fig. 1.

Fig. 2.

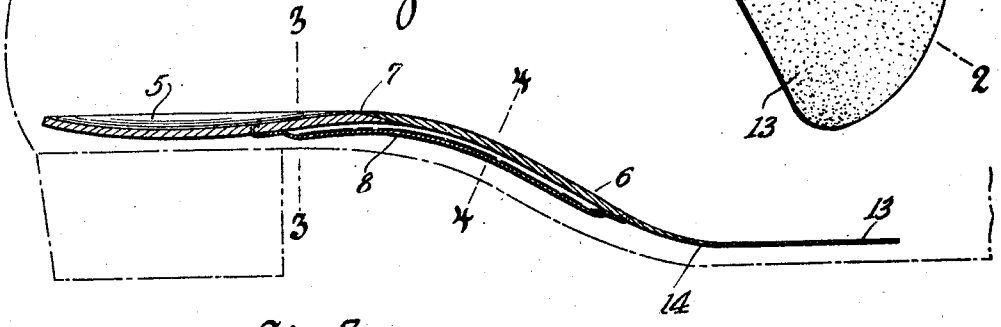


Fig. 3.

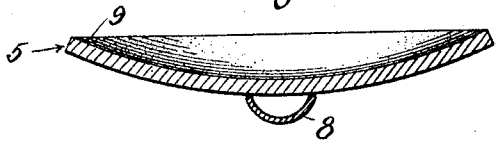
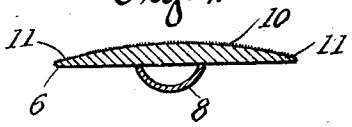


Fig. 4.



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ROBERT DAVIS AND ISAAC TAPMAN, OF BROOKLYN, NEW YORK.

SHOE SHANK.

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Special objects of the present invention are to provide a shank which will better fit and support the cavity in the arch of the foot than the shanks as heretofore constructed; which, in addition to fitting the arch cavity, will act as a cushion therefor; to effect savings in the cost of construction and enable smaller pieces, or even "scrap" leather being used, which would be unsuited to the making of an ordinary shank; to brace the joint at the connection between the foot of the arch and the sole of the shoe; to enable the combining of different kinds or sizes of shank foreparts with different sizes or shapes of heel seats and to accomplish all of such desirable objects in a simple and entirely practical way.

The objects mentioned are attained by certain novel features of construction, combination and relation of parts, as hereinafter described in detail and broadly claimed.

The drawing accompanying and forming part of this specification illustrates a single commercial embodiment of the invention, in which:

Figure 1 is a perspective top view of a form of the new shoe shank.

Figure 2 is a longitudinal sectional view of the same, illustrated by broken lines, its position in a shoe structure.

Figures 3 and 4 are enlarged cross sectional views on the planes of lines 3—3 and 4—4 respectively of Figure 2.

One of the important new features of the invention is the constructing of the main parts of the shank, that is, the heel seat and the forepart in two separate pieces or parts 5, 6. These are shown integrally united, substantially at the junction of the forward end of the heel seat with the top of the arch by a scarfed joint 7, suitable cement being employed as the uniting agent. The exact position of this joint may vary and the line of the joint may be transverse as indicated, or on an angle, depending on different conditions. The simple transverse joint shown has proved practical, the upper forward edge of the heel seat piece and the under rearward edge of the forepart piece being similarly bevelled and these bevelled parts being secured together with the forepart overlying the heel seat.

This two-part construction makes it possible to use relatively small pieces of leather, such as would be wholly unsuited to forming an ordinary shoe shank, thus rendering available for the purpose, bits of leather that are now wasted or put to less profitable uses, and this construction furthermore enables heel seats and foreparts being blanked out separately in different sizes, styles and shapes and being subsequently united in various different combinations to meet particular requirements.

A suitable shank stiffener may be employed such as indicated at 8 and this serves to further unify the two pieces of which the shank is made.

It has been the practice heretofore to use the grain side of the leather as an actual heel seat since it presents a smooth, good wearing surface. In the present disclosure, the heel seat piece is shown arranged with the grain side 9 upward and as concaved somewhat, after the approved manner of the heel seats of ordinary shoe shanks.

Attempts have been made heretofore to give the forepart of the shank an upward transverse curvature to fit up into the cavity of the arch in the foot, but such attempts have not been wholly satisfactory because the grain surface of the leather has a tendency to flatten out and lose its transverse curvature. Another special feature of this invention is the use and arrangement of the forepart piece with the flesh side, indicated at 10, faced upwardly and skived or bevelled on the edges as at 11 to give it the permanent transverse arch indicated in Figure 4. This transverse arch is shown as tapering out at 12 into the flat tongue extension 13 and this substantially flat tongue is indicated as extended far enough forwardly over the sole (Figure 2) to cover that point 14 at the foot of the arch where a break in the sole frequently occurs.

In forming the transverse curvature by skiving the flesh side of the leather, a permanent arch is produced on the upper side of the forepart and the lower grain side of the leather is left in its normal flat condition. The transverse arch so produced therefore is a permanent structure which does not lose its shape with wear and as the flesh side is more or less porous and spongy, this arch actually has an elastic cushion effect which relieves strain on the arch cavity as well as actually supporting the same. The

new shank therefore is more comfortable and actually beneficial to the foot of the wearer.

What is claimed is:

1. A shoe shank comprising separately constituted heel seat and forepart sections arranged to form one an extension of the other and integrally united in such relation, said heel seat section having a preformed heel seat cavity in the top of the same and the forepart section having a preformed upwardly extending transverse arch in the top of the same and the joint between the two sections being located substantially in a line of merger from the concave heel seat to the upwardly arched cross section of the forepart.

2. A shoe shank comprising separately constituted sections, one a leather heel seat arranged with the grain side of the same upward and the other a leather forepart arranged with the flesh side of the same upward, said parts being shaped and united to constitute one an extension of the other.

3. A leather shoe shank having the forepart of the same arranged with the flesh side upwardly and forming a cushion for the cavity in the arch of the foot, the upper flesh side of said forepart being permanently arched upwardly transversely of the same.

4. A shoe shank comprising a leather heel seat with the grain side faced upwardly and a leather forepart arranged with the flesh side faced upwardly, said reversely faced leather sections having reversely bevelled end edges secured in overlapping engagement and the upper edges of the forepart being bevelled to impart downwardly to the flesh side of the forepart an upward transverse arch.

In testimony whereof we affix our signatures.

ROBERT DAVIS.
ISAAC TAPMAN.