

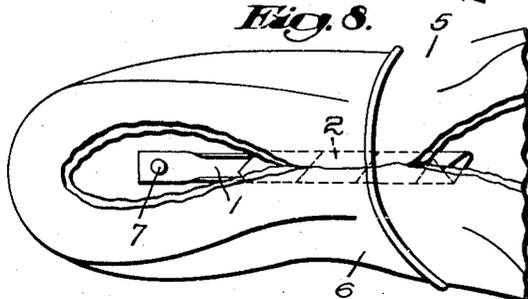
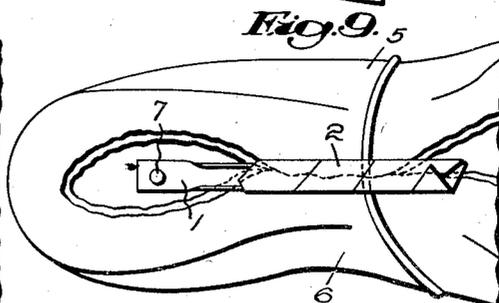
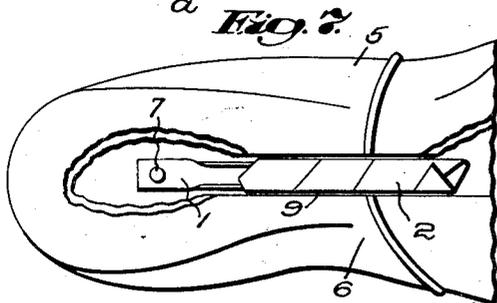
Oct. 16, 1934.

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1,977,451

SHOE SHANK STIFFENER

Filed Dec. 20, 1930



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# UNITED STATES PATENT OFFICE

1,977,451

## SHOE SHANK STIFFENER

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Application December 20, 1930, Serial No. 503,801

### 1 Claim. (Cl. 36—76)

This invention relates to shoe shank stiffeners or springs and particularly to the use of such stiffeners in the making of cemented shoes of the McKay type, so called, and it aims to provide a novel and improved stiffener, and shoe having the advantages herein described and illustrated.

In the drawing of one embodiment of my invention shown herein,

Fig. 1 is a plan of the stiffener partly broken out;

Fig. 2, a side elevation or edge view;

Fig. 3, a plan of a slightly modified form;

Fig. 4, an edge view of the same;

Fig. 5, a plan of a further modification;

Fig. 6, an edge view thereof;

Figs. 7, 8 and 9, views of the sole of a shoe showing different methods in which my novel shank may be embodied in the shoe; and

Fig. 10, another form of my invention.

In women's and children's shoes and some men's shoes of the McKay type, with a narrow sole and shank, and particularly when the shank is to be finished with a narrow downwardly rounded surface, it is customary to use only the plain, thin metallic stiffener or spring, in outline like that shown in Figs. 1 and 2, channeled as at *a* if desired.

Now in making cemented shoes it is necessary to use all the available space at the shank for cementing the opposite edges of the upper to the insole so that they will hold firmly thereto, and, if the plain steel spring is used, the upper edges must at least be firmly cemented to the very edges of the spring as in Fig. 7, or even overlie it as in Fig. 8. Of course the cement will not hold securely to the metal stiffener, as commonly used.

To meet this difficulty, I have conceived the idea of covering the steel shank support 1 either in part, as in Figs. 1 and 2, or throughout, as in Figs. 3 and 4 with a fibrous jacket of any suitable material 2, as a fabric or leather strip, to which the shoe cement will adhere. One face of the fabric strip may be provided with an adhesive 3 and the strip wound around the shank diagonally, if the fabric is in the form of a strip, as in Figs. 1 and 2, the successive windings of the strip preferably overlapping sufficiently at the edges to lock themselves securely to each other about the shank. This winding also acts to secure each diagonal section to the shank at each edge thereof so that stretching or loosening of the strip is impossible.

Or the fabric may be in the form of a woven tube 4, as in Figs. 5, 6, into which the stiffener

is forced endwise. In such case the opposite fabric walls of the tube will hold the stiffener tightly between them and, in either case, provide a firm anchorage for the uppers 5, 6, if desired, or for the outsole, or the jacket, Fig. 10, may be in the form of a liquid coating 10 adherent to the shank and receptive to the shoe cement. This coating may take the form of a film adhering and conforming closely to the stiffener surfaces, without adding materially to its bulk, said film being composed of an air-drying fluid composition, such as shellac, latex cement, composition, for examples, solidified on the stiffener and adapted to have a non-squeaking contact with shoe parts between which the stiffener is interposed.

This form of my invention is the subject of a divisional application hereof, filed September 5, 1934, Ser. No. 742,772, for Shoe shank stiffener.

After a stiffener has been secured at the shank of the shoe as by a tack 7 through the hole 8 at the heel, Fig. 7, the edges 5, 6 of the upper are, during the lasting operation, brought down close to the shank as in Fig. 7, where the edges are trimmed to form a channel 9 for the supporter.

When the outsole, not shown, is applied, the cement will firmly anchor it not only to the edges 5, 6 of the upper but also to the jacketed supporter 1 itself, thus increasing by the width of the jacket the available anchorage area, which is a great advantage.

Or, if preferred, the jacketed shank supporter 1 may be applied over the edges of the upper, Fig. 9, and save the time and labor of trimming the edges to make the channel 9 and thus also secure the additional area of the jacketed supporter as an anchorage area for the sole.

Or the shank may be applied to the insole as in Fig. 7, and the uppers 5, 6, Fig. 8, lasted down over and cemented to the insole and jacketed shank 1, with the increased cementing area of the jacket and the outsole cemented to the uppers, providing again the increased cementing area.

My invention is not limited to the particular embodiment thereof described and illustrated.

I claim

A metal shank stiffener for shoes including an elongated body and an adhesive tape spirally wrapped therearound for the greater portion of the length thereof.

CHESTER M. MOORE.