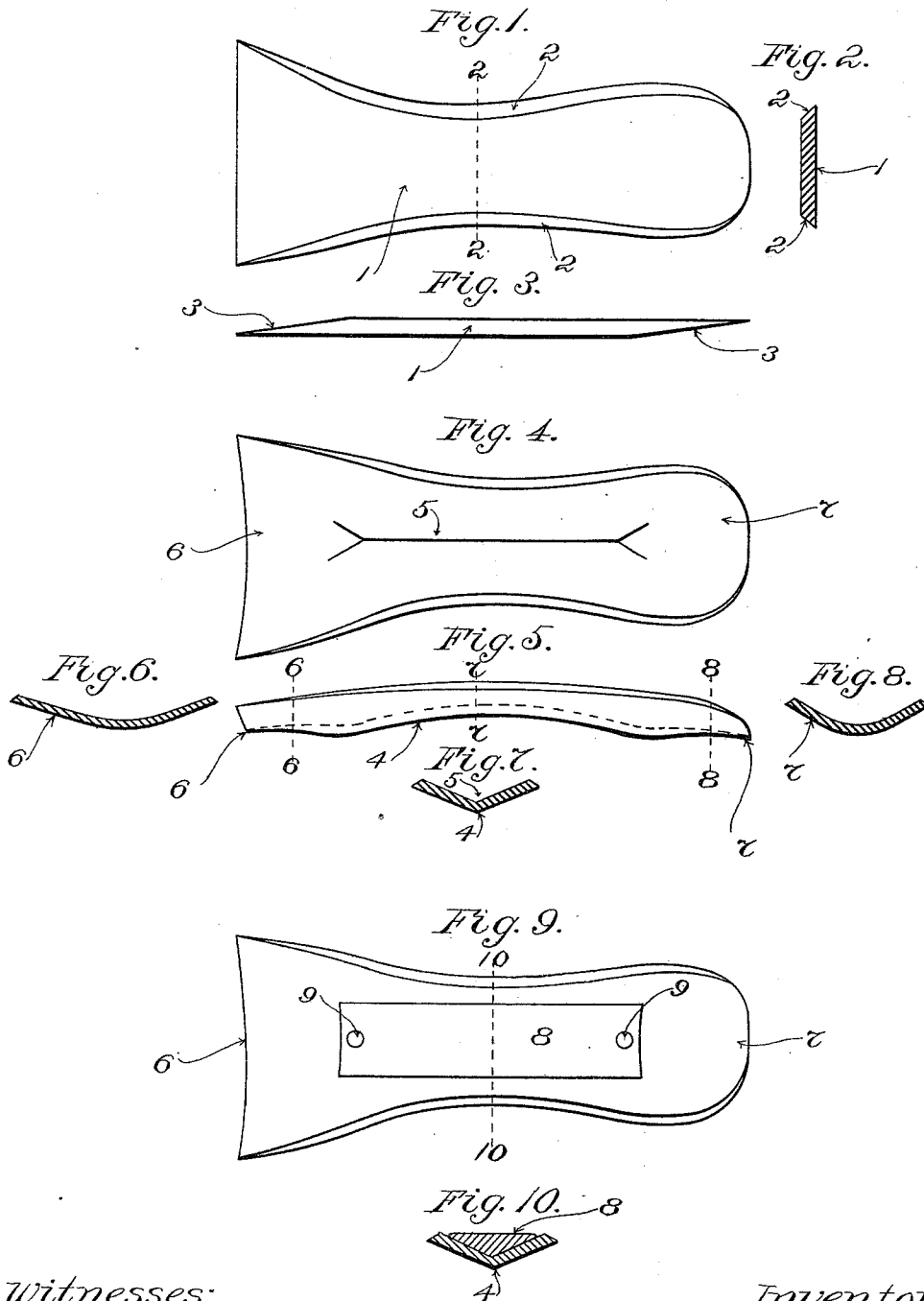


(No Model.)

G. H. STEVENS.
SHANK STIFFENER.

No. 566,240.

Patented Aug. 18, 1896.



Witnesses:

Oscar F. Hill
Edith J. Anderson.

Inventor:

George H. Stevens
by M. C. Calver & Randall
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE H. STEVENS, OF BOSTON, MASSACHUSETTS.

SHANK-STIFFENER.

SPECIFICATION forming part of Letters Patent No. 566,240, dated August 18, 1896.

Application filed May 9, 1896. Serial No. 590,865. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. STEVENS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Shank-Stiffeners, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to shank-stiffeners for use in the manufacture of boots and shoes, and more particularly to shank-stiffeners of the "cottage-roof" form; that is to say, stiffeners each formed on the under side thereof with a sharp ridge along a line extending lengthwise at mid-width of the stiffeners and sloping on each side of this ridge to the side edge.

The object of the invention is to produce a cottage-roof shank-stiffener of an improved and novel character and construction which will admit of being very quickly and inexpensively manufactured, which shall have a very smooth convex under surface formed with a clearly-defined sharp ridge, over which the shank portion of the sole of a shoe may be smoothly and evenly finished.

The invention will be described first with reference to the accompanying drawings and afterward will be more particularly defined in the claims at the close of this specification.

Figure 1 of the drawings is a view in plan of a flat blank such as that which I use in the production of my improved shank-stiffener, hereinafter to be described. Fig. 2 is a view in cross-section on the line 2 2 of Fig. 1. Fig. 3 is an edge view of the blank which is represented in Fig. 1. Fig. 4 is a view in plan of the said blank after it has been molded into the shape which is required to fit it for use in my improved shank-stiffener. Fig. 5 is an edge or side view of the molded blank which is represented in Fig. 4. Fig. 6 is a view in cross-section on the line 6 6 of Fig. 5. Fig. 7 is a view in cross-section on the line 7 7 of Fig. 5. Fig. 8 is a view in cross-section on line 8 8 of Fig. 5. Fig. 9 is a view in plan of the completed shank-stiffener embodying my invention. Fig. 10 is a view in cross-section on the line 10 10 of Fig. 9.

In the manufacture of my improved shank-stiffener I employ leather-board, preferably,

although any other customary or suitable material may be used. I take a blank, like that which is represented in Figs. 1, 2, and 3, and designated 1 therein, the same being by preference beveled off on its side edges, as indicated at 2 2, and skived off at its ends, as indicated at 3 3. This blank I subject to pressure between dies to give it the shape which is indicated in Figs. 4 to 8, inclusive. That is to say, the molded blank of these latter figures, as indicated in Fig. 5, has the proper longitudinal curve, and throughout the greater portion of the length thereof is V-shaped in cross-section, as indicated most clearly in Figs. 4 and 7, thus producing the desired longitudinal ridge 4 on the under face of the blank and a complementary cavity or depression 5 on the upper face thereof, extending in the direction of the length of the blank, as will be apparent from the drawings. The end portions 6 and 7 of the blank are somewhat flattened or curved slightly in cross-section, as indicated in Figs. 6 and 8. For the purpose of filling up the V-shaped cavity 5, I employ a filling-piece 8, (see Figs. 9 and 10,) the same being composed of leather-board, preferably. The filling-piece in cross-section corresponds approximately with the depression 5, and it is fitted into the said depression, as indicated in Figs. 9 and 10, and is secured therein by tacks 9 or otherwise, as desired. The upper surface of the said filling-piece 8 preferably is flat or slightly curved crosswise, and it is curved lengthwise to correspond with the curvature of the main portion or body 1. (See Fig. 5.)

The completed stiffener is compact, solid, and has the requisite stiffness, and is substantially triangular in cross-section intermediate its ends. The latter are somewhat flattened. The entire upper face which comes next the insole is flat, or nearly flat, crosswise and curved lengthwise, and the under face has the desired longitudinal ridge in the intermediate portion thereof, which fits the corresponding depression in the shank of the sole of the shoe in which the stiffener is used.

My improved shank-stiffener is of superior quality, and combines strength and lightness. It has the under or convex face thereof very smooth and flat and provided with a well-defined sharp ridge, which enables the shank

portion of the sole of a shoe to be finished over the same in a very superior manner.

What I claim is—

1. The improved cottage-roof shank-stiffener for boots and shoes, comprising a molded body portion having a longitudinal ridge on the undersurface thereof, and a complementary longitudinal angular depression in the upper face thereof, said body portion being V-shaped in cross-section, and having a filling-piece secured in the said depression and filling the same, the said filling-piece forming a bearing for the inner sole, substantially as set forth.

2. A shank-stiffener for boots and shoes, curved lengthwise thereof, and having a longitudinal ridge on the under face thereof and a complementary longitudinal depression in the upper face thereof, and also having secured in the said depression a filling-piece which is curved lengthwise, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. STEVENS.

Witnesses:

WM. A. MACLEOD,
ROBT. WALLACE.