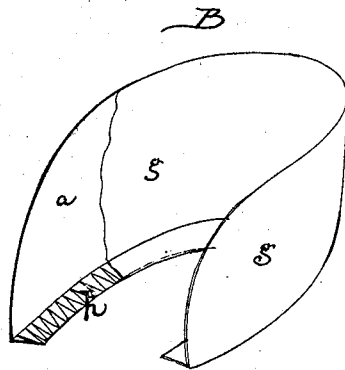
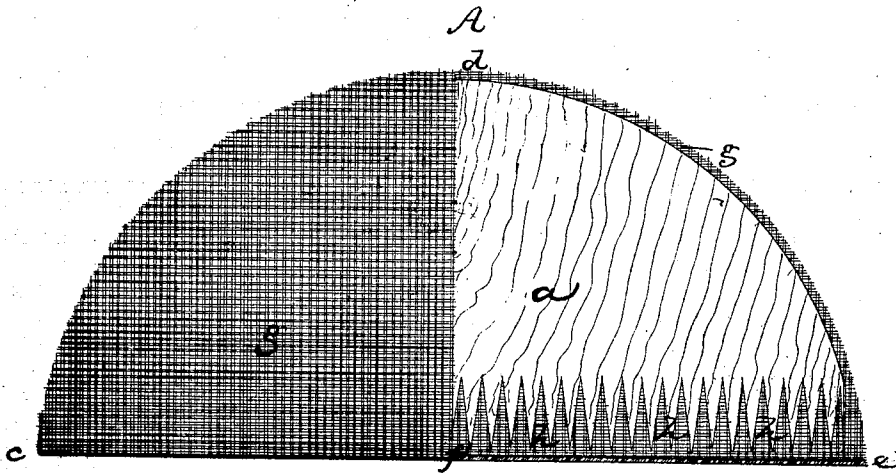


J. M. WATSON.

Improvement in Heel-Stiffeners.

No. 130,089.

Patented July 30, 1872.



Witnesses,
M^r. W. Frothingham.
J. Williams

Inventor,
Jeremiah M. Watson,
By his Attys.
Crosby & Gould

UNITED STATES PATENT OFFICE.

JEREMIAH M. WATSON, OF SHARON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND H. A. LOTHROP, OF SAME PLACE.

IMPROVEMENT IN HEEL-STIFFENERS.

Specification forming part of Letters Patent No. 130,089, dated July 30, 1872.

To all whom it may concern:

Be it known that I, JEREMIAH M. WATSON, of Sharon, in the county of Norfolk and State of Massachusetts, have invented an Improved Heel-Stiffener; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In the manufacture of boots and shoes heel-stiffeners are used for imparting the requisite rigidity to the back of the boot or shoe, said stiffener being interposed between the quarter and the lining. These stiffeners were formerly made of leather, but laterally have been made of various substitutes for leather, such as card-board, rubber compounds, and sometimes metal. My invention has reference to the production of heel-stiffeners which shall be cheaper and better than any now in use. In my invention I use a thin veneer-like sheet of wood, which I cover with suitable strong, but flexible, material, preferably canvas or cotton cloth, and instead of giving to such stiffeners a permanent form, as is done with other stiffeners made of sheet-rubber compounds, which are molded and vulcanized into shape, I simply make each stiffener of a shape from which, without the addition or removal of material, the stiffener can be bent to proper form, making the stiffener for this purpose with a curved upper edge running down to the bottom edge in the form of an arc, the bottom edge being straight, or nearly so, and made with angular incisions, the projections between which are bent under (in shaping the stiffener) to be united with the upper to the sole, while the sides are bent around to conform to the shape of the rear or heel part of the shoe, this shaping being done in applying the stiffener. It is in this construction of a heel-stiffener or

heel-stiffener blank that my invention consists, or in a heel-stiffener made of a thin sheet of wood, which is surfaced with cloth or other suitable fabric cemented to the wood.

The drawing represents a heel-stiffener or stiffener-blank embodying my invention.

a denotes the thin sheet of wood cut to proper peripheral shape to form the shaped stiffener, having the curved edge *c d e* and the straight or approximately straight bottom edge *c f e*. This piece of wood on one or both sides is covered with the cloth or other fabric *g*, the cloth being applied and cemented to the wood either before or after the wood is cut, as may be most convenient. Cloth and wood may be formed into a cemented sheet, from which the stiffeners may be cut or punched. In the bottom edge the incisions *h* may be made. When the stiffener is shaped in applying it to the shoe it assumes the form shown at B. At A I show the cloth as partly torn away, to display the wood beneath. By forming the stiffeners as shown at A they may be very compactly put up in packages for sale, and their construction is such that they may be as readily applied in making boots and shoes as if previously shaped. The wood imparts the desirable rigidity and retains such rigidity much better than any real or factitious leather, while by coating the wood with cloth all the necessary strength and flexibility are secured.

I claim—

As a new article of manufacture, a heel-stiffener formed with wood surfaced with cloth or other fabric, substantially as shown and described.

Executed this 6th day of May, A. D. 1872.
J. M. WATSON.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.