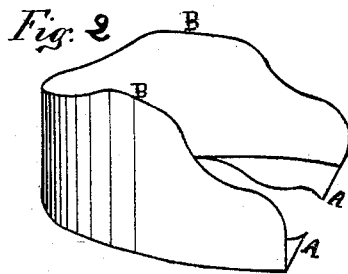
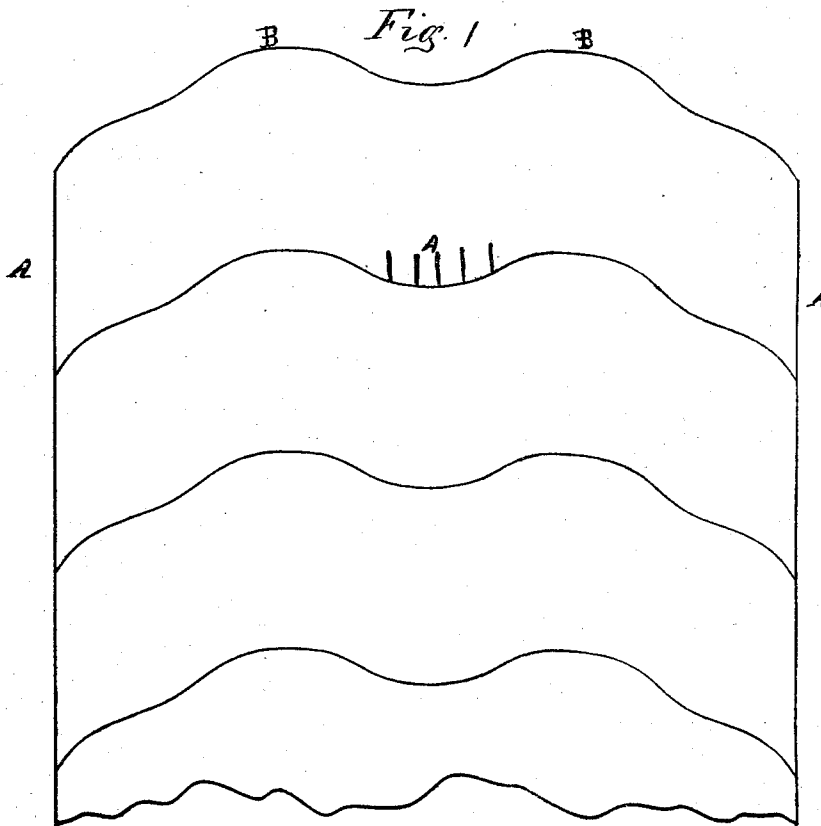


L. C. CROWELL.

Heel-Stiffeners.

No. 134,736.

Patented Jan. 14, 1873.



Witnesses.

George C. Phelps.

Robert W. Howard

Inventor.

Luther L. Crowell

UNITED STATES PATENT OFFICE.

LUTHER C. CROWELL, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF THREE-FOURTHS OF HIS RIGHT TO EDWARD DILLINGHAM AND NATHAN DILLINGHAM.

IMPROVEMENT IN HEEL-STIFFENERS.

Specification forming part of Letters Patent No. 134,736, dated January 14, 1873.

To all whom it may concern:

Be it known that I, LUTHER C. CROWELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Heel-Stiffener; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms a 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 it is necessary to interpose between the quarter and the lining an extra piece of leather or other substance to impart the requisite rigidity to the back and sides of the boot or shoe. These pieces or stiffeners are usually made of leather, rubber, or pasteboard, and are, in shape, if made of leather or pasteboard, curved on one edge in the form of an arc, the bottom or other edge being straight, or nearly so, and if made of rubber or a similar compound are of similar form in blank, and then pressed into such shape as will conform with that of the heel of the boot or shoe into which it is inserted.

My invention has reference to the production of a heel-stiffener which shall be of such shape as will require the least amount of material, and is efficient for supporting the shoe where the most rigidity is required, enables blanks of one size to fit boots and shoes of different sizes, and is the most convenient for packing and transporting, is readily applied, and admits of being readily and securely fastened in position with the least possible manipulation, and allows the use of metal in its construction, which has heretofore been too expensive on account of the waste and

amount of material necessary to construct it of the usual form.

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

Figure 1 represents the shape into which a sheet of metal or other suitable material may be cut, and produce heel-stiffeners of a desirable form, without waste of material. The blanks of the form shown, having the two projections B B upon the upper edge and the three projections A A A upon the opposite or lower edge, the middle projection A being slit, as shown, are inserted between the upper and the lining of the shoe, the upper or the edge having the projections B B being pressed between the upper and the lining until the sole of the shoe is on a line with the base of the lower edge, leaving but the three projections A A A extending beyond the sole. These projections are then bent in upon the sole and permanently secured in position in securing the heel and sole to the shoe. When in shape in the shoe my invention assumes the form represented by Fig. 2.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The described method of cutting blanks for heel-stiffeners from sheets of metal or other suitable material, without waste of material, of the form shown, having the two projections B B upon one edge and the three projections A A A upon the opposite edge, for the purposes herein shown and described.

LUTHER C. CROWELL.

Witnesses:

C. E. HOWARD,
ROBERT W. HOWARD.