C. Y. GARDNER.

HEEL-STIFFENERS FOR BOOTS AND SHOES.

No. 193,240. Patented July 17, 1877.

Fig. 1.

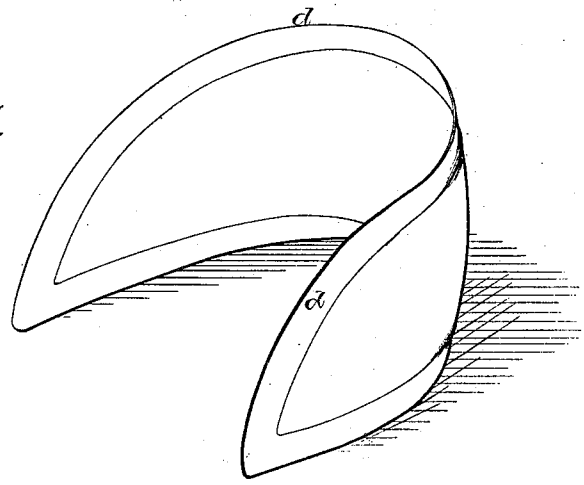


Fig. 4.

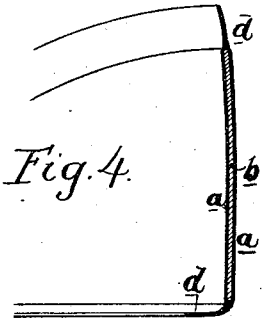


Fig 3

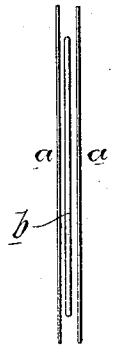
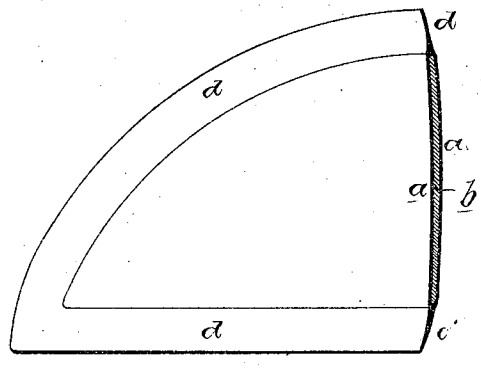


Fig. 2.



Witnesses.
Richard L. Gardiner
Harry Smith

Cornelius Y. Gardner
by his Attorneys
Howson and Howson

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CORNELIUS Y. GARDNER, OF VINELAND, NEW JERSEY.

IMPROVEMENT IN HEEL-STIFFENERS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **193,240**, dated July 17, 1877; application filed April 18, 1877.

To all whom it may concern:

Be it known that I, CORNELIUS Y. GARDNER, of Vineland, Cumberland county, New Jersey, have invented an Improved Heel-Stiffener or Counter for Boots and Shoes, of which the following is a specification:

The object of my invention is to make a heel-stiffener or counter for boots and shoes which will have more flexible edges, and be better adapted to the uses for which it is intended, than a stiffener made in the ordinary way, and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved heel-stiffener; Fig. 2, a sectional view of the same; Fig. 3, a view of the parts of which it is composed; and Fig. 4, a sectional view of the stiffener, with the edge bent up.

Ordinary heel-stiffeners are made of a strip of leather, or of a number of strips cemented together, so as to be of the proper thickness for the body of the stiffener, which, after being cut to the proper shape, has its edges skived or beveled, in order to impart the desired flexibility to the same.

Owing to the cost of the material and to the time and labor consumed in making a stiffener of this character, it is somewhat expensive. Furthermore, the edges of the stiffener are not so flexible as is desirable to form the flange in applying the stiffener to the boot or shoe.

In making my improved stiffener, I take two thin pieces, *a a*, of the proper shape to form the stiffener, and a piece, *b*, somewhat less in size and considerably thicker than the pieces *a a*. (See Fig. 3.)

I then coat the pieces *a a* with a suitable cement, and apply them to the opposite sides of the piece *b*, to which they adhere, the projecting edges of the pieces *a a* being also cemented to each other.

A stiffener is thus produced which possesses all the central rigidity of a stiffener made in the ordinary way, while the flexible edge *d*, bent up to make the flange, which is formed solely by the outer strips, as seen in Figs. 2 and 4, is much superior to one made by skiving, as usual.

The strips *a* and *b* may be made of leather, if desired; but I prefer to make the strip *b* of pasteboard or leather-board, and the strips *a* of common Manila paper, water-proofed, as I have found that a stiffener thus made is preferable to one made of leather.

I am aware of the patents granted to Simonds, July 14, 1870, and June 6, 1871, in which counters are formed of a back and covering and intermediate pieces of leather; but, as shown in Fig. 2 of his patent of 1871, in bending the edge of the stiffener to form the required flange, the intermediate as well as the outer pieces have to be bent, and hence the edges have not the desired flexibility, which is attained by forming the edges solely of the thin outer strips.

I claim as my invention—

A heel or counter stiffener, consisting of a central piece, *b*, and covering-pieces *a a*, cemented together, the covers projecting sufficiently beyond the central piece to form the flange of the stiffener, as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CORNELIUS Y. GARDNER.

Witnesses:

LEWIS S. MANNING,

FRANK E. LOUGHRAN.