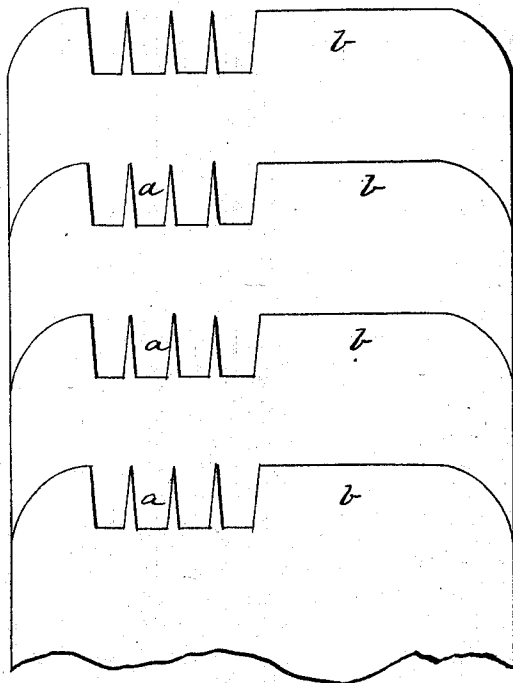


L. C. CROWELL.  
Heel Stiffeners.

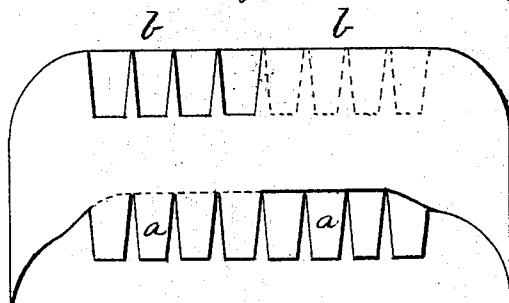
No. 139,238.

Patented May 27, 1873.

*Fig. 1*



*Fig. 2*



*Witnesses*

*John Smith*  
*R. W. Howard*

*Inventor.*

*Luther C. Crowell*

# UNITED STATES PATENT OFFICE.

LUTHER C. CROWELL, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN HEEL-STIFFENERS.

Specification forming part of Letters Patent No. **139,238**, dated May 27, 1873; application filed March 19, 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 an Improvement in the Construction of Heel-Stiffeners, of which the following is a specification:

My invention consists in cutting blanks for heel-stiffeners from card-board, leather-board, or other suitable material, of such a form that when two of said blanks are cemented together (one being reversed upon the other) the combination shall be a heel-stiffener, with its lower edge notched and the line of its upper edges unbroken, of the usual crescent shape, the form of the blanks being such that there shall be no waste of material.

Figure 1 is a plan view of the form embodying my invention. Fig. 2 is a plan view of my invention, showing the relative position of the two blanks to each other when cemented together.

Leather-board, card-board, or any suitable material, should be cut in the form shown in Fig. 1, the blanks thus produced following

each other in succession without waste. These blanks are then cemented together in pairs, one being reversed upon the other, as shown in Fig. 2. It is advisable to coat these cemented pairs with a varnish or cement impervious to water.

By this method heel-stiffeners are produced without waste of material of the form shown at Fig. 2, *a a* representing the notched lower edge, which enables it to be readily bent in upon the sole of the boot or shoe, and secured in position; and an upper edge, *b b*, sufficiently thin to dispense with the customary beveling or skiving.

What I claim as my invention is—

As a new article of manufacture, a heel-stiffener, composed of two pieces, having notched and thin edges, as set forth, and united as described.

LUTHER C. CROWELL.

Witnesses:

JOHN SMITH,  
R. W. HOUARD.