

W. N. Brookhouse,

Manf. Boots & Shoes.

No. 107,864.

Patented Oct. 4, 1870.

Fig. 1.

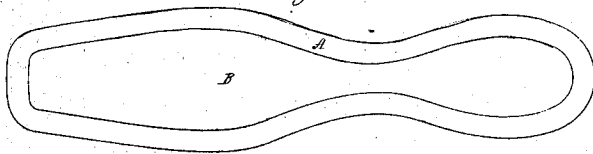


Fig. 2.

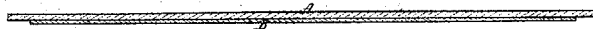


Fig. 3.



Fig. 4.

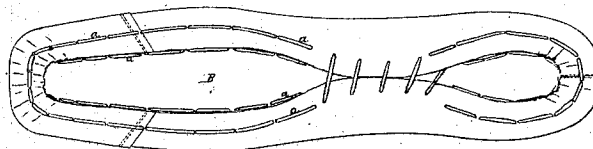


Fig. 5.

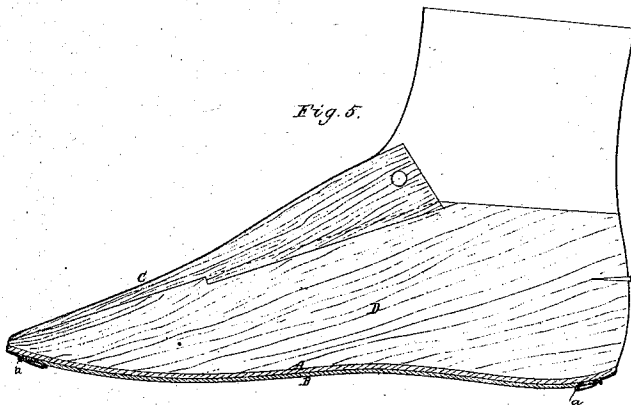
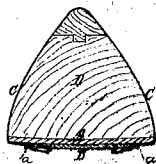


Fig. 6.



Witnesses:

S. W. Piper
J. M. Snow

W. N. Brookhouse.

by his attorney
R. W. Ledy

United States Patent Office.

WILLIAM N. BROOKHOUSE, OF WEST DANVERS, MASSACHUSETTS.

Letters Patent No. 107,864, dated October 4, 1870.

IMPROVEMENT IN THE MANUFACTURE OF BOOTS AND SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, WILLIAM N. BROOKHOUSE, of West Danvers, of the county of Essex and State of Massachusetts, have made a new and useful invention having reference to the Manufacture of either Shoes or Boots; and do hereby declare the same to be fully described, as follows, reference being had to the accompanying drawing, of which—

Figure 1 denotes an under side view, and

Figure 2, a longitudinal section, and

Figure 3, a transverse section of a duplex sole, made in accordance with and used in carrying out my improvement in the manufacture of shoes or boots.

Figure 4 represents a bottom view,

Figure 5, a longitudinal section, and

Figure 6, a transverse section of a shoe as lasted with such duplex sole.

In carrying out my invention, I arrange upon and cement to the bottom surface of an insole, A, of whatever material it may be, whether of leather, straw-board, or otherwise, a thin auxiliary smaller sole or filling piece, B, of leather, or other suitable material, the periphery or edge of the smaller sole being arranged within, and parallel to, and at a distance from, that of the insole, and perpendicular, or thereabout, to the bottom surface of the insole, so as to form a shoulder against which the upper or vamp C, while being sewed to the auxiliary or filling sole-piece, may be drawn by the stitches or thread *a* employed in fastening the vamp to such auxiliary sole.

The duplex sole so prepared is to be laid on the bottom of the last D, and fastened thereto by a few tacks, after which the last and the duplex sole are to be inserted within the upper or vamp C. Next, the latter should be drawn over and lapped down upon the insole and its auxiliary sole, and should be sewed to the latter by thread or threads going through the overlaps of the vamp or upper, and into the edge of the auxiliary sole or filling piece, and obliquely from such edge, the whole being so as to unite the vamp to the auxiliary sole or filling piece, and draw such vamp closely up to the edge of such auxiliary sole or filling piece, after which the outer sole may be applied to the overlaps of the upper and to the filling piece,

and be fastened to such overlaps and the insole by being sewed, pegged, nailed, or cemented thereto.

One advantage of my invention is, that it enables "straw-board" or "leather-board," paper, or other material usually cheaper than good leather, to be used for an insole, such being reinforced by the filling piece being cemented to it.

Another advantage which is presented by the duplex sole is, that the auxiliary or smaller sole or filling piece, while serving as a means of connection for the vamp and insole, and as a filling piece to the space within the laps of the vamp, answers as a shoulder for the shoemaker to draw the laps closely against.

I make no claim to any thing, combination, or arrangement as described in reissue No. 2,807 of patent No. 85,858, granted November 26, 1867.

In such patent, a simple rectangular band or strip is shown as fixed along the middle of the outer surface of an insole, the edges of the said strip being out of parallelism with the periphery of the insole, and the fastening threads of the vamp being carried across spaces between the vamp-laps and the said strip.

My invention differs from this latter in having the periphery of the part B parallel with that of the insole A, and so arranged as to constitute a shoulder to support the laps of the vamp when drawn up by the stitching, the laps, under such circumstances, being extended over and beyond such shoulder and upon the part B, the whole rendering the shoe, when completed, very much stronger and better.

What, therefore, I claim as my invention is as follows, viz:

1. The duplex sole, as composed of the larger and lesser sole-pieces A B, placed one on the other, cemented together, and having their edges arranged in parallelism, as set forth.

2. As an improved manufacture, a shoe as made, with its vamp arranged and combined as explained, with a duplex sole made as described.

W. N. BROOKHOUSE.

Witnesses:

R. H. EDDY,
J. R. SNOW.