

J. M. WATSON.  
Manufacture of Heels and Soles of Boots and Shoes.

No. 213,364.

Patented Mar. 18, 1879.

Fig. 1.

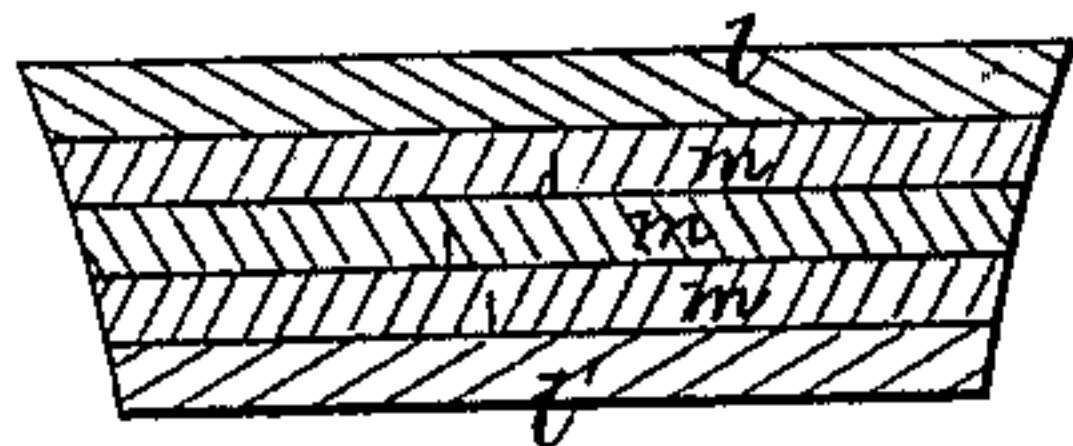


Fig. 2.

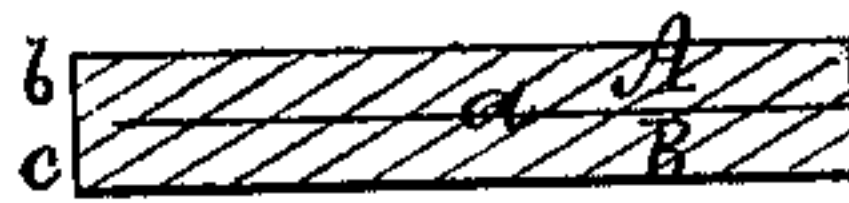


Fig. 3.



Fig. 4.

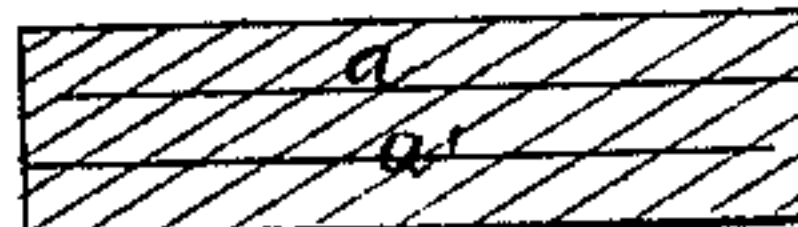
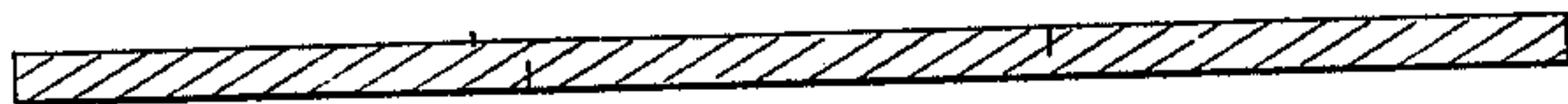


Fig. 5.



Witnesses

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# UNITED STATES PATENT OFFICE.

JEREMIAH M. WATSON, OF SHARON, MASSACHUSETTS.

IMPROVEMENT IN MANUFACTURE OF HEELS AND SOLES OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **213,364**, dated March 18, 1879; application filed September 4, 1878.

*To all whom it may concern:*

Be it known that I, JEREMIAH M. WATSON, of Sharon, of the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of the Heels or Soles of Boots or Shoes and lifts therefor; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 represents a transverse section of a heel having its intermediate lifts made in my improved manner. Fig. 2 is a transverse section of a piece of leather as split in my improved way for being converted into a heel or sole lift. Fig. 3 denotes the said piece as opened after being so split.

My invention relates to a heel having one or more of its intermediate lifts composed of two or more pieces, or what is termed "scrap pieces," of leather. In making such a heel it has been customary to abut such pieces together at their edges in order to compose the lift, and in some cases they have been connected by scarfing or beveling them at their edges, and applying the scarfs in contact, and pegging, nailing, or cementing them together, or they have been dovetailed together, in all of which cases there is a liability of the joint or joints opening on drying and shrinkage of the material composing the lift, such being avoided by my improvement.

The object of so making a heel is to utilize what is termed "scrap leather"—viz., the small pieces that are left from a hide or skin after cutting from it soles or other articles, or whole lifts for heels, such scrap pieces in their normal condition being usually smaller or narrower than a sole or heel lift.

Fig. 2 represents a transverse section of such a scrap and my mode of treating or splitting it to render it useful as a heel-lift.

In carrying out my improvement I split the scrap at its middle from one edge nearly to the opposite edge of it, or to a distance therefrom equal to half, or about half, the

thickness of the scrap, such being as indicated by the line *a*, and I afterward open the scrap or bring its half parts A B into one plane with each other, as shown in Fig. 3, in which case the halves *b c* of the edge *b c* will be brought into contact, and the two parts A B will be joined together above such contact.

In Fig. 1 the intermediate heel-lifts so made are shown at *m m m*, the outer lifts being represented at *l l*.

An insole or an intermediate sole may be similarly constructed from a scrap or piece of leather having in its normal condition a width less than what may be required for the sole. The advantage of so making a heel lift or sole of scrap leather is, that the parts folded into line with each other are hinged or connected together, so as not to readily open at the joint on shrinkage of them.

Cement may be placed on the edge *b c* before folding its parts together.

In making the heel I usually have the joint of one lift to cross or break joints with that of the lift or lifts next it. Sometimes I split the scrap twice, in manner as shown in Fig. 4 at *a a'*, and afterward open it, as shown in Fig. 5.

I claim—

1. As an improved manufacture, a shoe sole or heel having one or more of its lifts made by splitting the material composing it from one edge nearly to the opposite one, and opening the parts into one plane with each other, as set forth.

2. As a new or improved manufacture, a shoe-sole or heel-lift made substantially as described—viz., of a scrap or waste piece of material, split from one edge nearly to the opposite one, and having the connected portions turned or opened out into one plane, as set forth.

JEREMIAH M. WATSON.

Witnesses:

R. H. EDDY,  
S. N. PIPER.