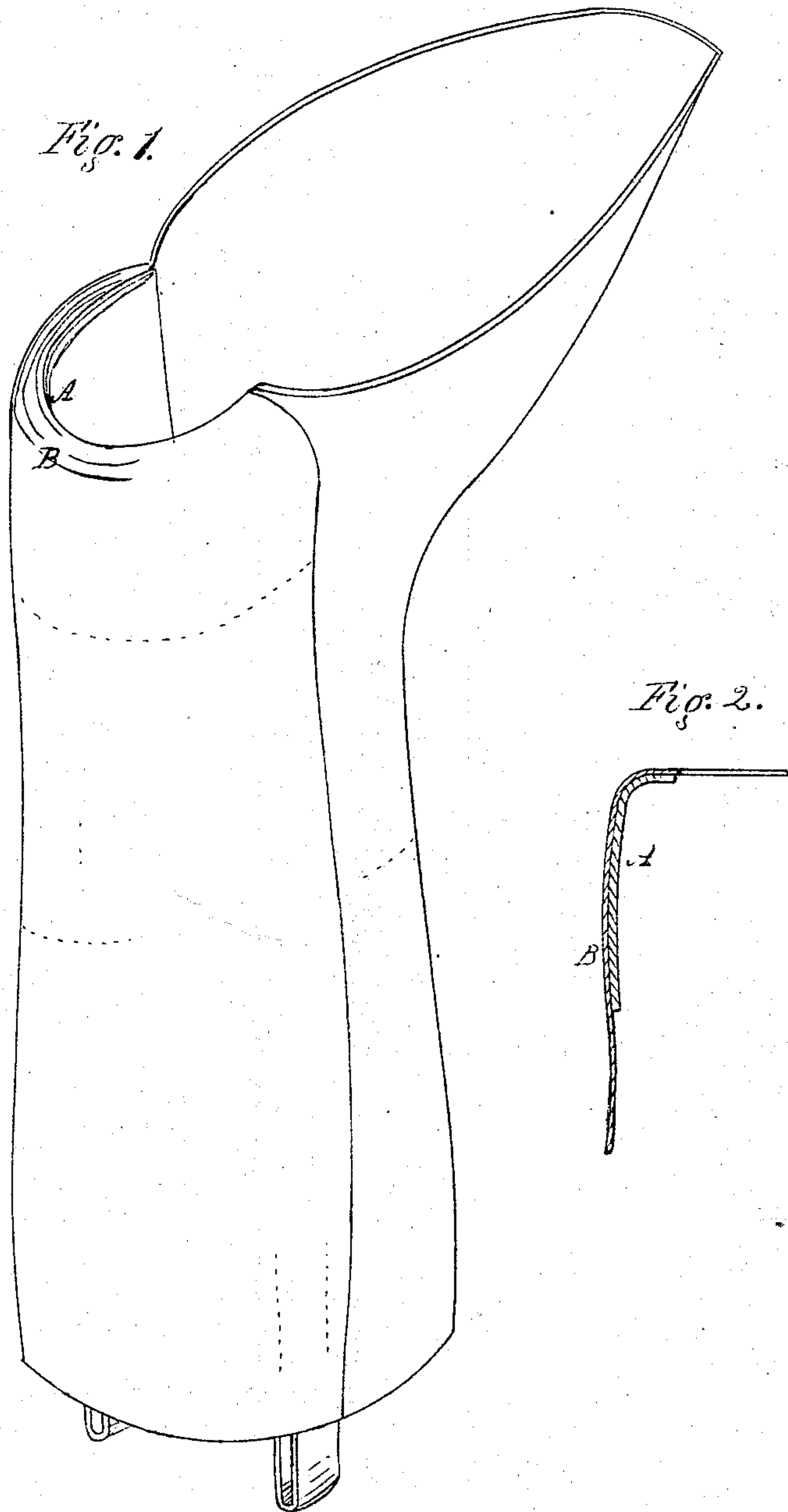


J. W. HATCH.

MANUFACTURE OF BOOTS AND SHOES.

No. 182,755.

Patented Oct. 3, 1876.



Witnesses.  
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— " —

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# UNITED STATES PATENT OFFICE.

JESSE W. HATCH, OF ROCHESTER, NEW YORK.

## IMPROVEMENT IN THE MANUFACTURE OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 182,755, dated October 3, 1876; application filed November 2, 1872.

*To all whom it may concern:*

Be it known that I, JESSE W. HATCH, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain Improvement in the Manufacture of Boots and Shoes, of which the following is a specification:

My invention relates to a process for manufacturing boots; and consists in crimping the counter or heel-quarter and its attached stiffening, and with or without a lining, at one operation, and prior to lasting.

In carrying out my process, I will refer to the accompanying drawing, in which—

Figure 1 is a perspective view of a boot in an unfinished state, showing my improvement; and Fig. 2 a vertical section, showing the counter and stiffener.

Heretofore, in the manufacture of boots having heel-stiffeners, it has been customary to apply the blank or unformed stiffening to the heel-quarter or counter, and the counter and stiffener were then bent over the last and insole, the operator hammering them over by hand during the process of lasting.

In the manufacture of shoes, a crimped or molded stiffening is inserted back of the heel-quarter or counter, and between the counter and lining, before the shoe is lasted, and the counter or heel-quarter is then bent over the stiffener and inner sole in the process of lasting.

In the old process of manufacturing boots much time is wasted, and when finished the counters or quarters are not crimped or turned as perfectly and smoothly as is necessary for operation in connection with machinery for trimming the heels, as it is seldom that both boots of a pair will be turned alike, even by the most skillful workman.

To obviate this difficulty, my improvement has for its object to crimp or form the stiffening A, and counter or heel-quarter B, by mechanical means, at one and the same operation, and previous to lasting. I sew up the side seam of a boot, as shown in Fig. 1, and at the same time seam in the stiffening, and I stitch the counter and stiffening at the back in the ordinary manner; or, if desired, the side seam may be first sewed up, and the stiffening be applied to the counter afterward,

and stitched or otherwise attached. This is especially desirable where leather-board instead of leather is employed. I then crimp or bend the edge of the counter and the stiffener, with or without lining, over together into the proper form for lasting, by placing it on a machine having a form for receiving the heel, and having crimping-jaws or mechanism that will press the counter and stiffener on the heel form or support at the center of the counter, and then the crimping mechanism will turn the edges inward to crimp them. This process may be best carried out on a crimping-machine provided with crimping-jaws such as are described in a former patent granted to me, No. 117,627. By this process the counter, lining, and stiffening are crimped, forming a solid and smooth seat at the turn, and the crimps or wrinkles are carried down to the extreme inner edge of the turned-over or flanged portions of the counter and stiffener.

A boot crimped in this way may be placed upon the last and lasted without the operator being obliged to hammer down the counter and stiffener, as usual, and it is only necessary to drive the pegs or tacks through the flanged parts of the counter and stiffener so turned over, in order to prepare the boot for the reception of the outer sole.

In this method it takes only about one-third of the usual number of tacks or pegs. In a large factory great expense is saved by this process. The boot-leg, with stiffener attached to the counter, is passed to the machine very rapidly, and comes out with the stiffening and counter fitted and crimped in place, and much more perfectly and evenly than can be done by hand. The process saves substantially one-third of the labor usually required to last the counters and stiffeners, and these boot-legs may be made in large quantities, and then be lasted and finished at pleasure.

I obviate many of the difficulties attending the old process, and make a solid and substantial counter, which has a close-fitting stiffener throughout, while in the old way the stiffening and counter of the heel do not preserve their contact, but are loose and separated.

In my case the heels, quarters, or counters are counterparts in all cases, while in the old style it is almost impossible to secure uniform-



ity. In my case the seat or bend of the stiffening and counter of the heel-quarter are perfectly smooth, and therefore the heel-seats can be shaved without liability of cutting or injuring the counter, particularly when machinery is used. In the old style it is quite impossible to prevent wrinkles, particularly when leather-board is used, and for this reason leather-board counters are not commonly used in boots. Aside from these considerations, the great saving of labor and time is a matter of great moment.

What I claim, and desire to secure by Letters Patent, is—

The improvement in the art or process of

manufacturing boots having attached stiffenings to support their counters, consisting in crimping the counter and stiffening prior to lasting by turning the edges of the counter and stiffener from the outside toward the center of the heel-form, and closely about the edges of the heel-form, and then applying the boot-leg and crimped counter and stiffener to a last, having thereon an inner sole, and then lasting the parts, substantially as described.

J. W. HATCH.

Witnesses:

R. F. OSGOOD,  
ARCHIE BAINE.