

L. COTÉ.

MACHINE FOR SHAPING BOOT AND SHOE COUNTERS.

No. 305,427.

Patented Sept. 23, 1884.

Fig. 2.

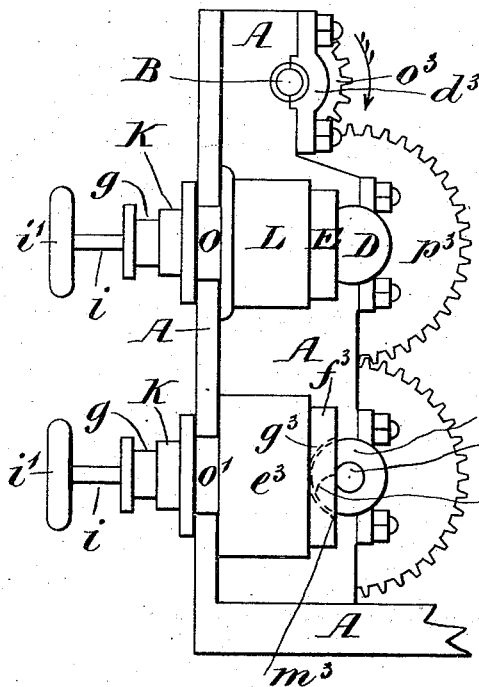


Fig. 1.

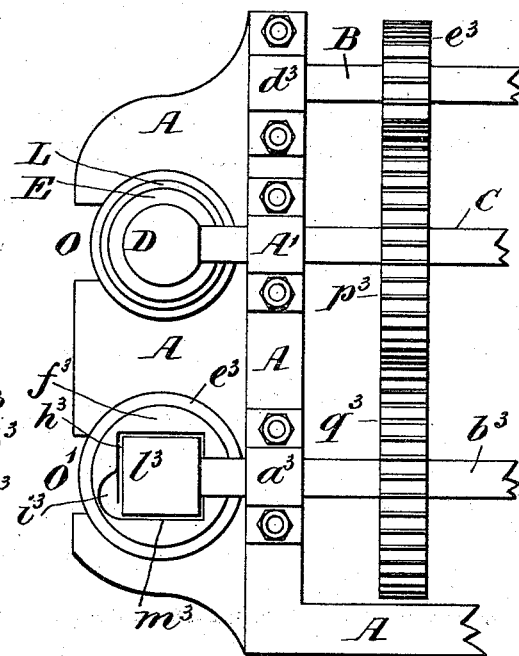
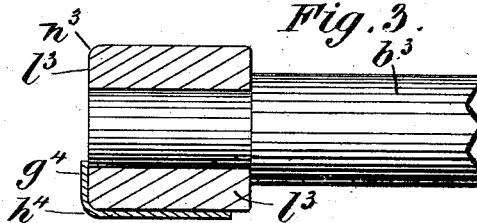


Fig. 3.



Witnesses.

C. M. Denica
H. M. Millard

Inventor.

Louis Cote

Per

Charles H. Simpson
Attorney

(No Model.)

2 Sheets—Sheet 2

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Fig. 4.

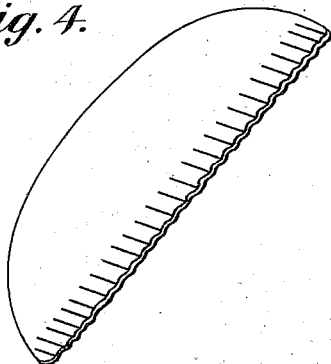


Fig. 5.

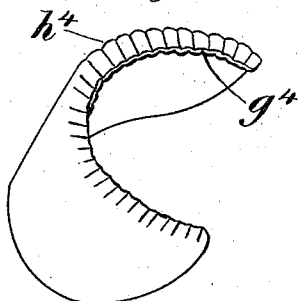


Fig. 6.

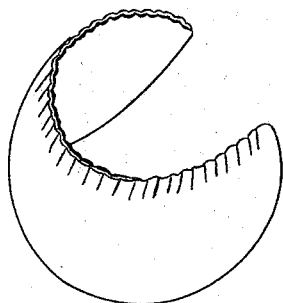


Fig. 7.

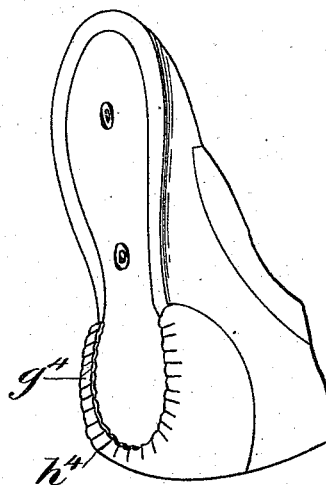
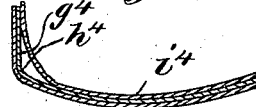


Fig. 8.



Witnesses.

C. O. S. S. S.
H. H. Milford

Inventor.

Louis Cote
Per Charles E. Simpson
Attorney

UNITED STATES PATENT OFFICE.

LOUIS COTÉ, OF ST. HYACINTHE, QUEBEC, CANADA.

MACHINE FOR SHAPING BOOT AND SHOE COUNTERS.

SPECIFICATION forming part of Letters Patent No. 305,427, dated September 23, 1884.

Application filed November 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, LOUIS COTÉ, of St. Hyacinthe, in the county of St. Hyacinthe, Province of Quebec, Canada, have invented certain new and useful Improvements in Machinery for Shaping Boot and Shoe Counters; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention has reference to an improved process and machinery for forming counters, and is, in fact, further improvements on the process and machine for which Letters Patent of the United States were granted to me June 19, A. D. 1883, under No. 279,717.

In the drawings hereunto annexed similar letters of reference indicate like parts. The said letters of reference will also be made to agree with the letters of reference used in the specification and drawings of said Patent No. 279, 717 in so far as the parts of the two machines are alike or substantially the same, because my present invention consists in certain additions and changes to my said patented invention.

Figure 1 is a front elevation of part of a machine embodying my invention. Fig. 2 is an end elevation of the machine shown in Fig. 1. Fig. 3 is a section of cylindrical former. Fig. 4 represents the counter as first cut and corrugated. Fig. 5 represents the counter as secondly acted upon by the cylindrical former. Fig. 6 represents the counter as thirdly acted upon by the former D. Fig. 7 represents the counter as applied to a last. Fig. 8 is given to illustrate more clearly a difficulty overcome by my present invention.

I will, in the first place, explain how far the machine embodying my present invention agrees with the machine shown in my said patented invention.

Letter A is the front part of a frame; B, the driving-shaft; C, the shaft upon which the former D is secured. E is a mold. These parts are all substantially similar to those referred to by the same letters of reference in my said patented invention. The frame A is, however, very much modified to suit the changes hereinafter mentioned. It is provided with bearings a^3 , to carry a shaft, b^3 . It is also provided with two slots, O O', instead of one, as in my said patent. The shaft

B is carried in bearings d^3 . I would here remark that in Fig. 1 only one set of bearings, being the front bearings, for the shaft are delineated or shown; but if the frame had been delineated in full the drawings would show a second corresponding set of bearings—two to each shaft—the same as shown in my said patent, also a driving-pulley on the shaft B. In the present drawings the socket and means by which the mold E is held in place and adjusted, &c., are only partly shown, these having been fully shown and described in my aforesaid patent. The socket L, rod i , wheel i' , and nut K are, however, shown. In the slot O' a socket, e^3 , is secured in the same manner as the socket L, carrying a mold, f^3 , similar to the mold E, but having a recess, h^3 , of somewhat less than a semi-cylinder, as shown by the dotted line g^3 . (See Fig. 2.) This recess h^3 is extended by an enlargement, i^3 , being a concavity the form of a quarter of a sphere. The extent of this is shown by the dotted line h^3 . On the end of the shaft b^3 is secured a cylindrical former, l^3 , arranged so that when the two are in place, as shown, a small space is formed between them. This space is made a little larger on the under side by chamfering off the mold at m^3 , to enable the counter to be entered more readily. The corner or end of the former l^3 will be more or less rounded off, as shown at n^3 in Fig. 3. On the driving-shaft B a pinion, o^3 , is secured, gearing with the wheel p^3 , secured on the shaft C, (carried in bearings A',) which wheel p^3 gears with an equal wheel, q^3 , secured on the shaft b^3 , carried in bearings a^3 .

I will now describe the manner of operating with the machine above described, and in doing so will set forth my improved process.

The material to be formed into counters is first cut to shape, and corrugated or not, as desired, as shown isometrically in Fig. 4. It is then fed to the former l^3 , being entered at the under side. This bends it to the configuration of part of a flanged cylinder, shown isometrically in Fig. 5 and sectionally in Fig. 3—that is to say, it turns the corrugated part into a flange, g^4 , by forming a bend in it at h^4 . The counter is then passed to and acted upon by the former D, which forms it into a portion of the periphery or surface of a spheroid, as shown in Fig. 6. The counter formed as

just described is now ready to be used with the "upper" of a boot or shoe on the last. Now, when the counter is brought to the configuration shown in Fig. 6 without having
5 been acted upon by the former l^3 , very great difficulty is experienced in getting the part forming g^4 to "sit down" upon the last, as shown in Fig. 7; but when the bend h^4 has been once put into the material forming the
10 counter it readily returns to that shape, when required to do so, upon the last. When the counter is finished with a flange, g^4 , turned over, as shown in Figs. 3 and 5, (which is the way they are at present in general made,) a
15 difficulty is experienced, which is that the operator has in many cases to straighten out the flange before putting the counter into the boot or shoe, to enable the lining to be got at to adjust and gather it equally around the heel.
20 This said straightening of the counter by the operator does considerable damage to it.

When the bend h^4 is first made and after-

ward in a measure taken out, as above described for my present invention, the gathering of the lining i^4 can be properly done without any difficulty, as also the after turning
25 down of the flange g^4 upon the last.

What I claim, and wish to secure by Letters Patent, is as follows:

1. The combination of the mold f^3 , having 30 recess h^3 and extension of recess i^3 , as described, with a former, l^3 , constructed and operated, substantially as described, to form heel-stiffeners, as shown and described.

2. The combination of the mold f^3 and 35 former l^3 , constructed as described, with the mold E and former D, constructed as described, the whole substantially as described, to form heel-stiffeners, as shown and described.

LOUIS COTÉ.

Witnesses:

CHARLES G. C. SIMPSON,
I. NAULT.