

No. 607,623.

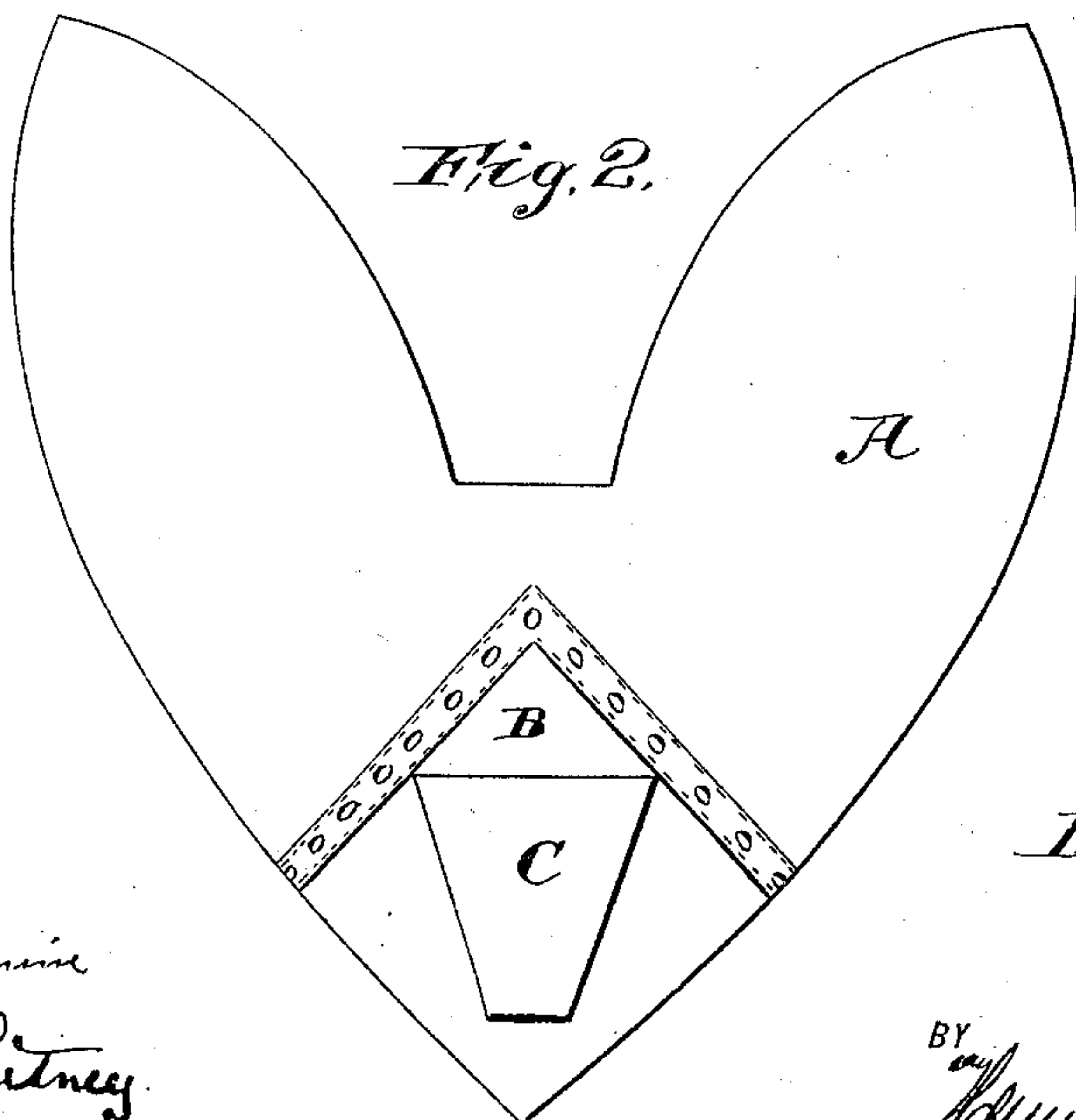
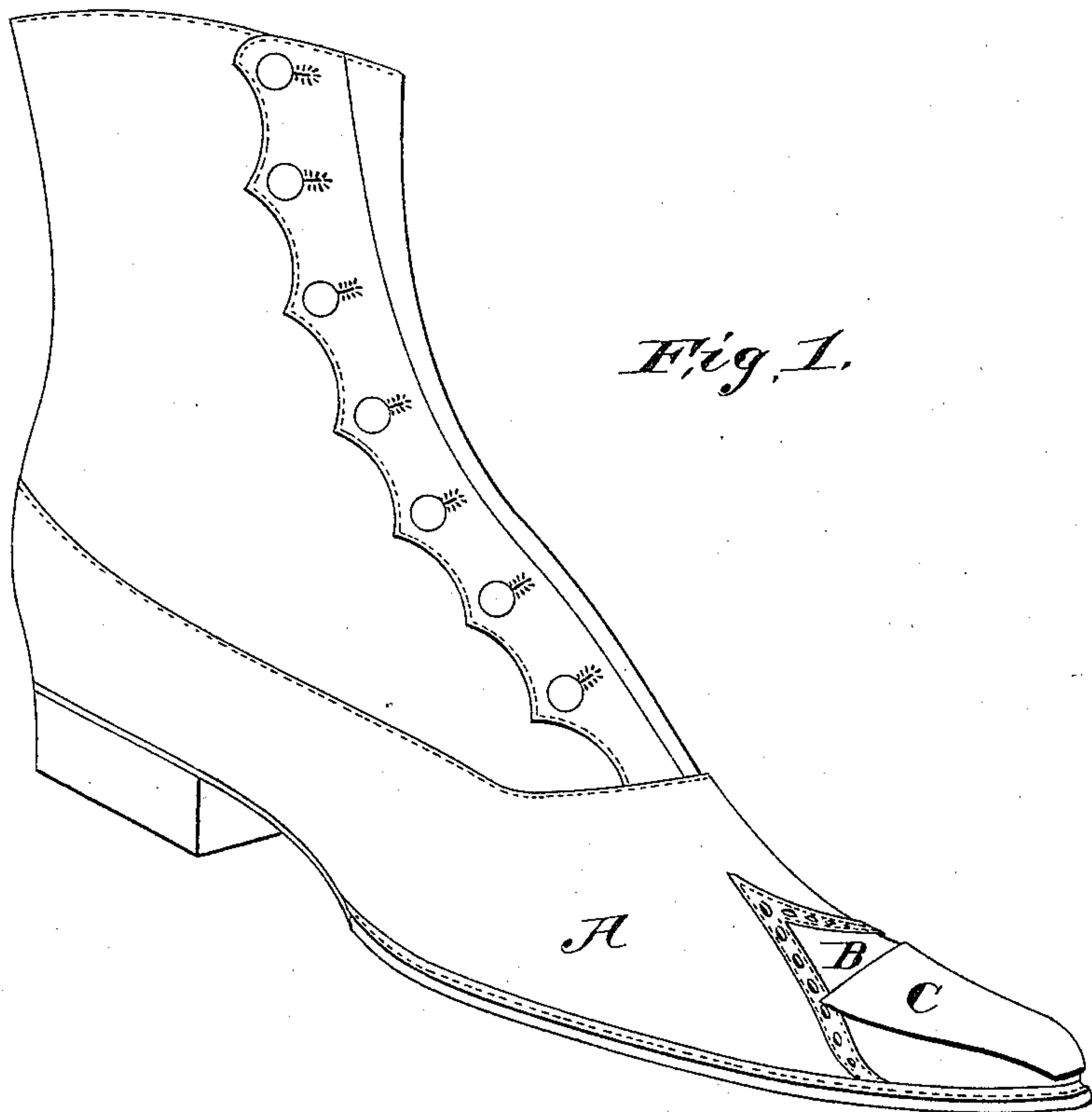
Patented July 19, 1898.

L. J. NEU.

MANUFACTURE OF SHOES OR OTHER ARTICLES WHOLLY OR IN PART OF PATENT
LEATHER.

(Application filed Jan. 9, 1896.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

LOUIS J. NEU, OF NEW YORK, N. Y., ASSIGNOR TO JAMES COUSINS, JR.,
OF SAME PLACE.

MANUFACTURE OF SHOES OR OTHER ARTICLES WHOLLY OR IN PART OF PATENT-LEATHER.

SPECIFICATION forming part of Letters Patent No. 607,623, dated July 19, 1898.

Application filed January 9, 1896. Serial No. 574,910. (No model.)

To all whom it may concern:

Be it known that I, LOUIS J. NEU, a citizen of the United States, and a resident of the city of New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in the Manufacture of Shoes or other Articles Wholly or in Part of Patent-Leather, of which the following is a specification.

10 In the lasting of patent-leather shoes or shoes having patent-leather tips, particularly those having pointed toes, in the methods of manufacture at present in use great difficulty and loss is experienced from the crack-
15 ing of the enameled surface of the patent-leather. This cracking occurs principally along the median line of the tip or shoe near the toe. Out of a dozen pairs of shoes not unfrequently as many as eight pairs will
20 show these cracks. This necessitates repair before the shoes are merchantable, which is usually done by sandpapering off the enameled surface of the patent-leather until the
25 cracks are eliminated, applying a coating of collodion, and then applying upon the collodion two or three coats of liquid enamel, each coat being allowed to dry thoroughly before another is applied. In an output of five hundred pairs of such shoes a day the labor of
30 three men will be constantly required merely to repair these cracks. My invention has been tried on many hundred pairs of such shoes and obviates this difficulty. Furthermore, in the old process of manufacture of
35 such shoes an excellent and expensive quality of imported patent-leather is required to avoid excessive cracking of the enamel in lasting. In my process a cheaper domestic article may be used and will prove almost if not quite as
40 serviceable, while cracking of the enamel will be avoided.

Briefly described, my process consists in cementing a flexible crack-resisting patch of thin cloth or similar material to the enameled
45 surface of the leather over the place where the cracks usually occur before lasting, which patch is removed at some stage of the manufacture after the lasting, preferably when the shoe is finished.

50 In the drawings forming part of this speci-

fication, Figure 1 represents a pointed-toe shoe having a patent-leather tip finished, except that my patch has not been removed. Fig. 2 represents the vamp of the same shoe before the vamp is put upon the last and just
55 after my patch has been applied.

A represents the vamp of the shoe, B the patent-leather tip, and C the patch.

In carrying out my process I preferably use thin linen or cotton cloth for the patch C. 60 Almost any textile fabric or similar material will do that has little stretch. Most textile fabrics stretch very little in the direction in which the threads run—that is, lengthwise and crosswise of the fabric—while they stretch 65 much more easily on the bias. This should be taken into account in cutting the patch, since it is desirable to have a patch which will stretch as little as possible. The patch should therefore preferably be cut so that the
70 threads of the cloth, if of cloth, run lengthwise and crosswise.

As the cracking occurs principally along the median line of the toe in lasting pointed-toe shoes, the patch should cover the median 75 line of the toe and reach over the end of the toe as far as is practicable, yet not so far as to be fastened in during the subsequent process of uniting the sole to the upper, as is clearly shown in the drawings. It is not necessary 80 to extend the patch downward at all closely toward the line where the sides of the upper join the sole. This patch C is cemented to the enameled surface of the patent-leather B while the vamp A is flat and before lasting, 85 as shown in Fig. 2. Usually a patch one to one and a half inches long and about an inch at the widest and half an inch at the narrowest part will answer. Any cement will answer which will stick the patch firmly to 90 the leather and keep it there during the process of lasting, provided it is such that the patch can be subsequently removed without injury to the enameled surface of the leather.

I have used with most satisfaction thin linen 95 or silesia having one surface coated with gutta-percha tissue, the gutta-percha forming the cement. The patch having been cut of the desired size and shape, is laid upon the desired place with the gutta-percha surface 100

in contact with the enamel of the patent-leather. A warm iron is then applied to the surface of the cloth, which melts the gutta-percha and cements the patch to the leather.

5 The vamp is then laid aside till the gutta-percha sets firmly. The vamp is then lasted in the usual manner. It is better to leave the patch in position until the shoe is finished. Then by warming the patch gently over a
10 flame it can be peeled off without injuring the enameled surface of the leather, and the leather can be easily cleaned, so that no trace of the patch remains, by wiping with a rag.

It is best to have the under surface of the
15 patch smooth, or at least without much grain, lest it mark its grain upon and thus somewhat disfigure the enameled surface of the leather to which it is applied.

Of course my process is applicable wherever it is required to stretch patent-leather
20 over an approximately sharp edge in process of manufacturing the leather into merchandise.

Patent-leather when strained during process of manufacture into merchandise is apt
25 to crack if exposed while strained to sudden change of temperature, particularly cold. Patent-leather will not crack under these circumstances where covered by my patch.

30 Having now described my invention, what I claim as new, and desire to patent, is—

1. The within-described process of making articles wholly or in part of patent-leather, which consists in first cementing a flexible
35 crack-resisting patch upon the enameled surface of the patent-leather where the enamel is liable to crack, then proceeding with the manufacture, and lastly removing the patch.

2. In the manufacture of patent-leather shoes or shoes having patent-leather tips, the within-described process of preventing the enamel from cracking during the process of making the shoe which consists in cementing a removable crack-resisting patch of suitable
40 flexible material upon the enameled surface of the leather where the enamel is liable to crack, and permitting the same to remain attached until after the shoe is lasted.

3. In the manufacture of patent-leather
50 shoes, or shoes having patent-leather tips, the

within-described process of preventing the enamel from cracking, during the process of making the shoe, which consists in applying to the enameled surface of the patent-leather, where the enamel is liable to crack, a removable crack-resisting patch of suitable cloth
55 coated on the side next to the enamel with gutta-percha, heating said patch to cause the gutta-percha to adhere to the enamel, allowing said gutta-percha to cool and set, and permitting said patch to remain attached until
60 after the shoe is lasted.

4. The within-described process of making merchandise from patent-leather, free from cracks, which consists in applying to
65 the enameled side of the leather, before it is stretched, a flexible crack-resisting patch coated on the side next to the enamel with gutta-percha, heating said patch to cause the gutta-percha to adhere to the enamel, allowing
70 said gutta-percha to cool and set, then proceeding with the manufacture in the ordinary way, and lastly heating the patch again and removing it from the manufactured article.

5. The within-described process of preventing patent-leather from cracking from change of temperature during its manufacture into merchandise which consists in first cementing a crack-resisting patch upon the enameled
80 surface of the leather where the enamel is liable to crack, then proceeding with the manufacture in the ordinary way, and lastly removing the patch before packing the merchandise for sale.

6. A shoe-vamp or the like of patent-leather having its enamel temporarily reinforced by a superposed crack-resisting patch.

7. A shoe vamp or tip of patent-leather provided with a removable crack-resisting
90 patch cemented to the enamel along the median line of the toe.

Signed at the city of New York, in the county of New York and State of New York, this 8th day of January, A. D. 1896.

LOUIS J. NEU.

Witnesses:

HENRY P. WELLS,

WM. O'SHAUGHNESSY.