

(No Model.)

2 Sheets—Sheet 1.

L. C. KENTON.

BOOT OR SHOE.

No. 342,752.

Patented May 25, 1886.

Fig. 1.

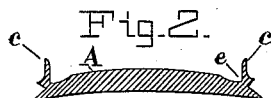
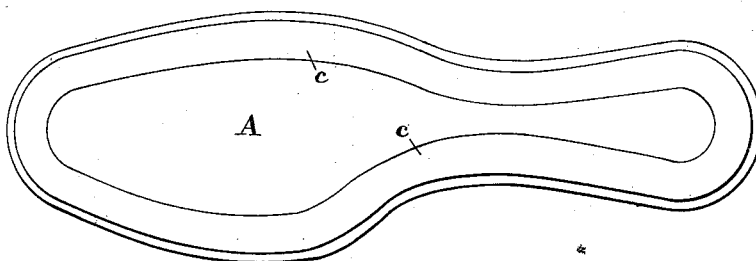
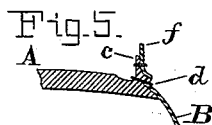
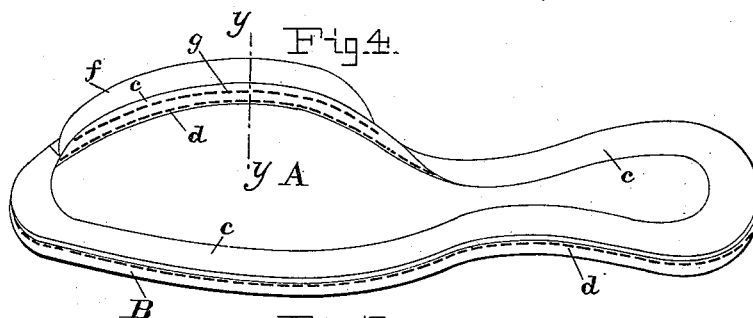
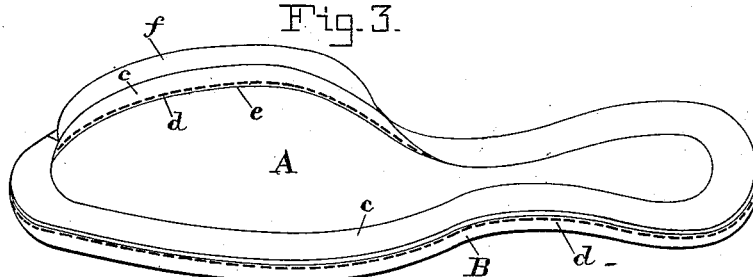


Fig. 3.



Witnesses:

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By Chas B. Mann

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Fig. 5.

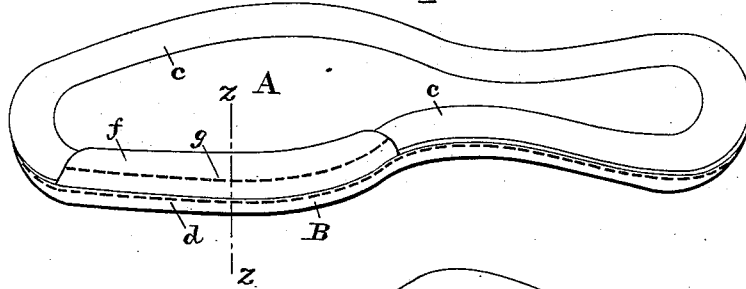


Fig. 7.

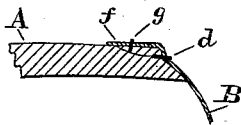
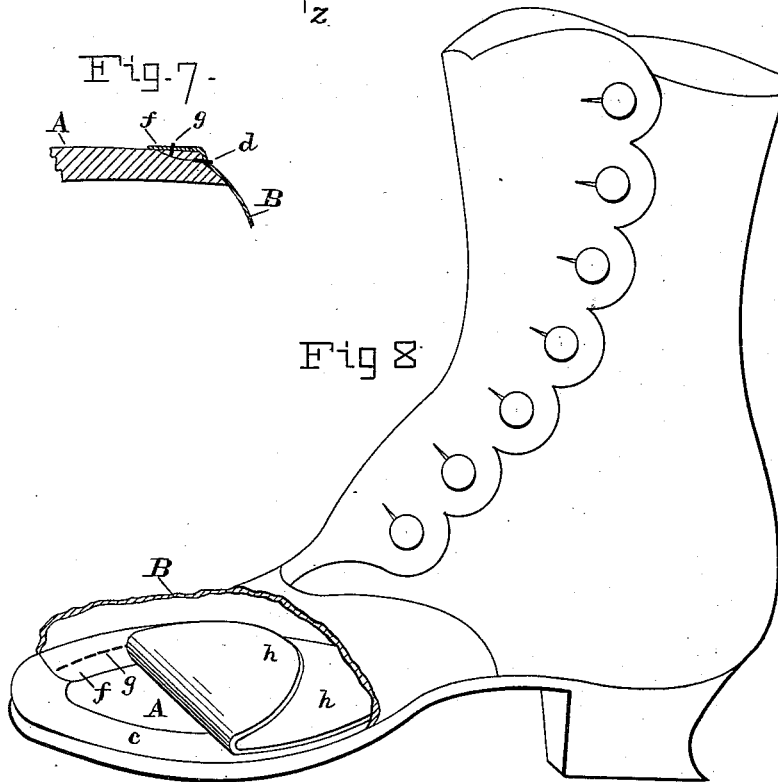


Fig 8



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UNITED STATES PATENT OFFICE.

LEVI C. KENTON, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO
JAMES CLEMENT AND THOMAS W. BALL, BOTH OF SAME PLACE.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 342,752, dated May 25, 1886

Application filed March 3, 1886. Serial No. 193,841. (No model.)

To all whom it may concern:

Be it known that I, LEVI C. KENTON, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Sewing Turn Boots and Shoes, of which the following is a specification.

My invention relates to an improvement in that class of turn boots and shoes in which the sole is channeled to receive the stitches which unite the sole and upper. In this description of boots and shoes the sole and upper are "lasted" wrong side out, and sewed while the last is in. The last is then removed and the boot or shoe turned right side out. The thicker the sole of this kind of shoe the more difficult is the operation of turning, and also the more trying is the said turning operation upon the thread which unites the sole and upper.

As ordinarily sewed in the shoe-factory, a given number of shoes of the description above referred to will, when subjected to wear, show a certain percentage to rip at the seam which unites the sole and upper. This ripping usually occurs between the shank and toe on the inner side of the shoe, at that part where the ball of the foot comes, as the greatest strain takes place at that part of the shoe.

The object of this invention is to provide a method of sewing boots or shoes which will overcome the above-mentioned liability to rip.

The invention is illustrated in the accompanying drawings, in which Figure 1 is a view of the top side of a shoe-sole channeled ready for sewing to the upper. Fig. 2 is a cross-section of a channeled shoe-sole, with the flap of the channel turned up to more readily show the parts. Fig. 3 is a view of the top side of a shoe-sole and the upper wrong side out stitched thereto in the ordinary way. Fig. 4 is a view of the top side of a shoe-sole and the upper wrong side out stitched thereto in the ordinary way, and showing the first step in adding my improvement. Fig. 5 is a cross-section on the line *yy* of Fig. 4. Fig. 6 is a view of the top side of a shoe-sole and the upper wrong side out stitched thereto in the ordinary way, and showing the final step in adding my improvement. Fig. 7 is a cross-section on the line *zz* of Fig. 6. Fig. 8 is a view of a "turn" shoe having my improvement

right side out and complete. A portion of the upper at the front and toe is removed to expose the inner sole and the top side of the bottom sole, in order to give a view of my improvement.

In carrying out my invention no change is made in the usual manner of channeling the sole or in the present mode of sewing the sole to the upper on the well-known McKay & Goodrich sewing-machine; but for the purpose of making the nature of my improvement fully understood the well-known parts and usual procedure will first be described.

The letter A designates the top side of a shoe-sole, and B the shoe upper. The sole is channeled in a well-known manner. The flap of the channel is shown in Fig. 2 turned up at a right angle with respect to the top surface of the sole, and the usual stitches, *d*, pass through the shoe-upper B while wrong side out, and on the inner side of the flap are seated in the deepest part of the channel *e*. An edge, *f*, of the upper is thus left lapping over on the top surface, A, of the sole. When the flap *c* is laid down, as shown in Figs. 6 and 7, upon the part from which it was cut, the shoe is ready to be turned.

My improvement consists of a second row or a supplemental row, *g*, of stitches, located in the same channel with the usual stitches, to unite the sole and upper. The stitches of the supplemental row, *g*, are made after the usual stitches, *d*, and while the channel flap *c* is turned up, as seen in Figs. 2, 3, 4, and 5, and these stitches pass through the overlapping edge *f* of the upper and the flap *c* of the channel.

By reference to Figs. 4 and 5 it will be seen that when the two rows of stitches *d g* are put in the threads composing the stitches of both rows extend substantially in the same direction; but when the position of the channel-flap *c* and overlapping edge *f* of the upper is changed from the upright, as in Figs. 4 and 5, to the laid-down position, as in Figs. 6 and 7, then a change is made in the direction of the threads composing the supplemental row, *g*, of stitches, while the threads of the usual stitches, *d*, being in the deepest part of the channel, retain their original position. It will therefore be understood, and by reference to Fig. 7

it will be seen, that in the finished shoe the threads of the supplemental row, *g*, of stitches extend in a direction at right angles with respect to the threads of the usual stitches, *d*. This is of importance for two reasons: first, because in the course of wearing the shoe the two rows of stitches will not be subjected to the same wear, both will not wear out equally fast, and, second, because the strain to which the stitches are subjected by the tendency of the shoe-upper to draw away from the sole does not effect the two rows of stitches alike. On the usual stitches, *d*, the strain comes in the same direction as that which the threads take, while on the supplemental stitches, *g*, the strain comes in a direction crosswise of that which the threads take. This construction gives the greatest possible strength, and in practice it is found that a shoe thus sewed will wear out before the seams will rip.

In the drawings the supplemental seam is shown only at one side between the shank and toe, at that part where the ball of the foot comes. This is ordinarily sufficient, and the overlapping edge *f* of the upper on the rest of the bottom is removed; but it is obvious that the supplemental seam may, if desired, extend all around the channel-flap. If an in-

ner sole, *h*, is used, (and its use in this connection is deemed advantageous,) the supplemental stitches will thereby be covered and the channel-flap kept in place.

Having described my invention, I claim—

1. A turn boot or shoe having a channeled sole and the usual stitches, *d*, seated in the deepest part of the channel, for uniting the sole and upper, and provided with a supplemental or second row of stitches, *g*, through the overlapping edge of the upper and the channel-flap of the sole, as set forth.

2. A turn boot or shoe having a channeled sole and the usual stitches, *d*, seated in the deepest part of the channel, for uniting the sole and upper, and provided with a supplemental or second row of stitches, *g*, through the overlapping edge of the upper and the channel-flap of the sole, the threads of said supplemental stitches extending in a direction at right angles with respect to the threads of the usual stitches, as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

LEVI C. KENTON.

Witnesses:

JOHN E. MORRIS,
JNO. T. MADDON,