

(No Model.)

J. G. BROOKS.
INSOLE.

No. 469,537.

Patented Feb. 23, 1892.

Fig. 1.

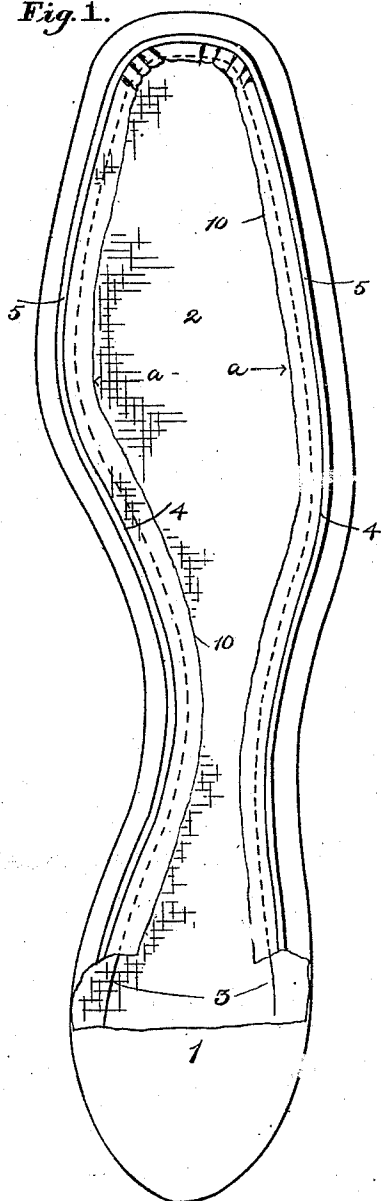


Fig. 2.

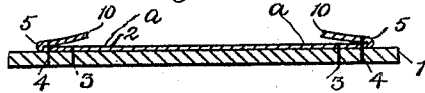


Fig. 3.

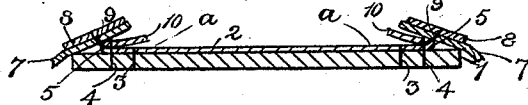


Fig. 4.

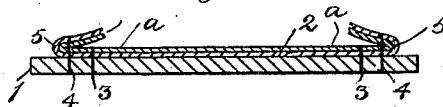
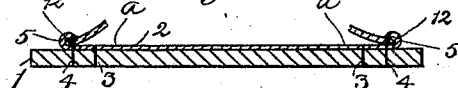


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES G. BROOKS, OF ROCHESTER, NEW YORK.

INSOLE.

SPECIFICATION forming part of Letters Patent No. 469,537, dated February 23, 1892.

Application filed November 2, 1891. Serial No. 410,597. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. BROOKS, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Insoles; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

My present invention has for its objects to provide an improved insole for shoes that will not only be cheap and very flexible, but one that can be sewed to the welt and upper of a shoe on an ordinary shoe-sewing machine without the necessity existing heretofore of being channeled; and to this end it consists in a certain improved construction herein-after described, and the novel features pointed out particularly in the claim at the end of this specification.

In the accompanying drawings, Figure 1 is a plan view of an insole constructed in accordance with my invention; Fig. 2, a cross-sectional view of the same; Fig. 3, a similar view showing the manner of applying it to a welt and upper; Figs. 4 and 5, sectional views of modifications.

Similar reference numerals and letters in the several figures indicate similar parts.

In the manufacture of the ordinary machine-sewed welt-shoes it is customary to take a channeled insole and by means of a Good-year sewing-machine sew the welt and upper to it, the stitches passing through the bottom of the channeled portion, the edge of the inner sole, the upper, and welt; but this construction necessitates the employment of an insole thick enough to be channeled, which makes the shoe rather stiff, and therefore, with a view of making an insole that is flexible, light, cheap, and at the same time capable of being sewed on an ordinary machine, I first provide an insole 1, of leather, preferably rather thin, and to the outer surface of this secure a piece of canvas or cloth 2 (which for convenience extends over the whole face of part 1) by means of stitches 3 a short distance from the edge. The edge of this part 2 is then doubled back upon itself and sewed down through the parts 1 and 2 by the stitches

4, forming a wale or cord 5 on the outside and leaving the inner edge 10 of the fabric 2 projecting, and the wale or cord does not extend entirely around the part 1, but only to the heel, as usual, though it could be, if desired. In forming shoes with my insole the latter is placed on the last, as usual, with the fabric 2 on the outside. Then the upper 7 is applied over the inwardly-projecting edge or flap 10 of the fabric and secured in position by the lasting-tacks. Then the welt 8 is applied, as usual, when the shoe may be sewed on an ordinary Goodyear machine in precisely the same manner that the shoes embodying ordinary channeled insoles are sewed, one guide of the machine passing under the inwardly-projecting edge 10 of the fabric as it does in the channel, the shoulder formed by the cord or wale at the edge co-operating with the outside-edge guide on the machine, and the work being fed and stitches formed by the machine in the ordinary manner, the stitches 9 passing through the wale or cord (and possibly) into the surface of the part 1, serving to unite the parts firmly.

While it is desirable to make the part 2 of fabric extending the whole width of the insole, as it facilitates the construction, it is not absolutely essential that it be so made, as the portion between the points *a a* could be removed without changing the result. Still the difficulty in properly bending around or applying a narrow strip of fabric of approximately the shape of the part 1 to the latter would increase the cost of the shoe materially. It will be noted that the part 2 of the insole is attached to the part 1 by two lines of stitches, one of which 3 cannot be at all affected by the operation of sewing to the upper and welt, no matter how the stitches 4 might be broken or injured by the passage of the needle and awl of the sewing-machine, and the destruction of the latter could not in any way affect the shoe when completed, as their principal function is to enable the inwardly-projecting edge 10 of part 2 to afford a channel for the guide on the sewing-machine.

Sometimes the canvas or other material constituting the part 2 of the insole, if strong enough to hold the stitches, is not smooth enough to permit the ready movement of the

shoe on the machine-guide; but the projecting edge 10 is liable to catch and become folded, thus interfering with the proper operation, and to avoid this I employ an additional lining 11, as shown in Fig. 4, of some thin smooth material, as strong cambric, factory, or drilling, and this I prefer to employ in most instances; but I do not wish to be confined to its use, as the single piece answers all practical purposes, besides being cheaper, though the two pieces, if two are employed, may be cut out at a single operation and manipulated together in the formation of the insole.

A further modification of the invention is shown in Fig. 5, in which a cord 12 is laid inside the wale or cord 5, formed when the edge of part 2 is turned over and secured by the stitches 4, and this cord forms the shoulder

necessary for the machine-guide, enabling thinner material to be employed. After the shoe has been sewed the outer sole is applied in the usual manner, being sewed to the welt.

I claim as my invention—

The herein-described insole for shoes, consisting of the part 1 and the part 2, of relatively more flexible material, sewed to the part 1 near its edge, the outer portion of part 2 being turned inward again and sewed down by stitches passing through both thicknesses of part 2, and the part 1 forming an outer cord or shoulder and an inwardly-projecting flap or edge, substantially as described.

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Witnesses:

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