F. L. CORSON.

INNERSOLE AND REINFORCING STRIP THEREFOR.

APPLICATION FILED JUNE 19, 1914.

1,147,787. Patented July 27, 1915.

Fig. 1.

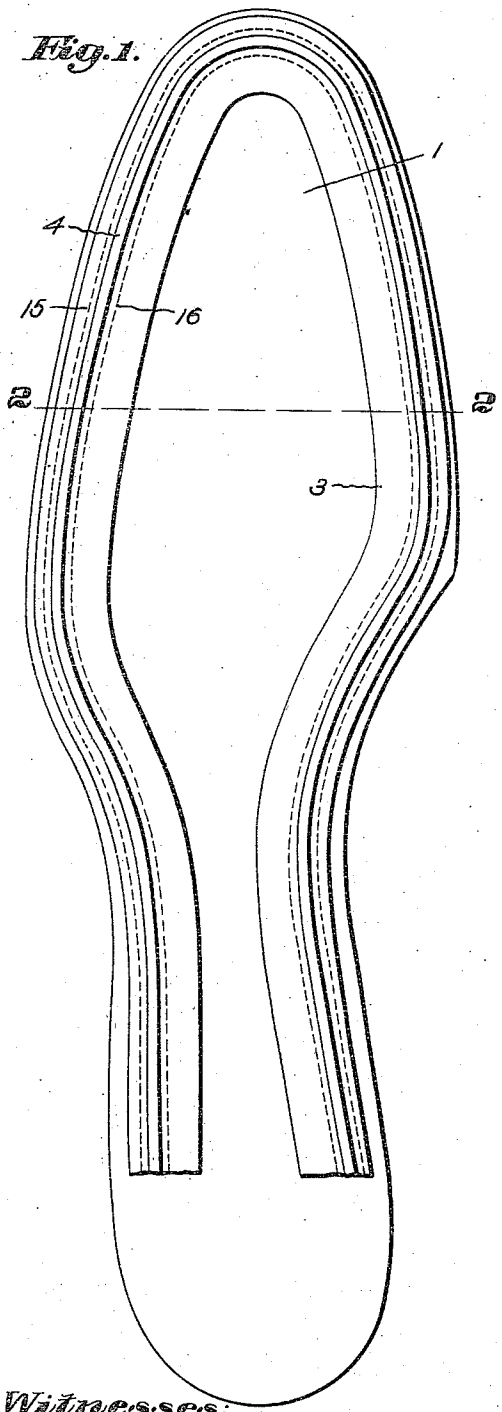


Fig. 2.

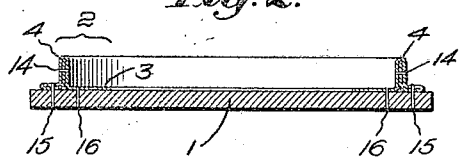


Fig. 3.

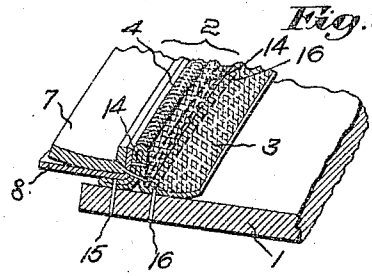


Fig. 4.

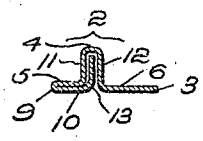
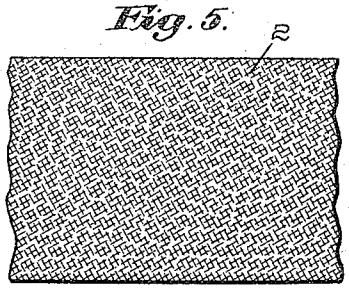


Fig. 5.



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UNITED STATES PATENT OFFICE.

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INNERSOLE AND REINFORCING-STRIP THEREFOR.

1,147,787. Specification of Letters Patent. Patented July 27, 1915.

Application filed June 19, 1914. Serial No. 846,173.

To all whom it may concern:

Be it known that I, FRED L. CORSON, a citizen of the United States, and a resident of Rochester, in the county of Strafford and State of New Hampshire, have invented an Improvement in Innersoles and Reinforcing-Strips Therefor, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to inner-soles for boots and shoes and to reinforcing strips therefor.

In order that the principle of the invention may be readily understood, I shall proceed to describe a single embodiment thereof represented in the accompanying drawings, wherein—

Figure 1 is an inverted plan view of an inner-sole constructed in accordance with my invention and having the reinforcing strip secured thereto; Fig. 2 is a transverse section on the line 2—2 of Fig. 1; Fig. 3 is a perspective view, parts being shown in section, of a portion of the reinforcing strip and inner-sole to which it is secured; Fig. 4 is a cross sectional, somewhat diagrammatic view of the preferred form of the strip reinforcing member; and Fig. 5 represents a portion of the reinforcing strip positioned flatwise and showing the bias arrangement of the threads thereof.

This invention is an improvement upon the construction shown in my Patent No. 1,034,208, dated July 30, 1912. In said patent I have represented a reinforcing strip folded to constitute a stitch receiving rib and provided with inner and outer edges or parts.

In accordance with my present invention, I preferably form the strip of woven material, either stright or on the bias. Preferably the strip is formed of canvas, and preferably the inner edge or part is relatively broad, and is so constructed and applied to the inner-sole that the picker on the welt machine will not pick up such inner edge nor interfere with the row of stitching by which said inner edge is secured to the inner-sole. Preferably the outer edge is relatively narrow compared with the inner edge and is also preferably turned upon itself, thus providing a finished outer edge. By making the outer edge narrow, I prevent interference with the lasting of the upper over the edge of the inner-sole, so that the upper can be positioned close to the edge of the inner-sole, thus providing for a tight welt. Furthermore, the turned in outer edge is prolonged and applied to the folded rib, thus constituting a reinforcement thereof, as will be hereinafter more fully set forth.

Referring more particularly to the drawings, the inner-sole is represented at 1, it being of any suitable material, but preferably of light leather. Instead of channeling said inner-sole, (which, however, I may prefer to do under certain circumstances,) I provide the reinforcing strip member hereinafter set forth, and to which the welt and upper may be sewed or otherwise suitably secured. The said strip member is represented at 2 in the several figures, it being preferably composed of warp and weft threads arranged on the bias, so as to prevent raveling out of the edges thereof and particularly of the inner edge 3 of the strip. If cut straight away, it is well to have the inside edge cemented to prevent raveling. The said strip 2 is folded to provide a stitch-receiving lip 4 of any suitable proportions, an outer edge or part 5 and an inner edge or part 6. I have herein represented the welt 7 and upper 8 as sewed thereto in a manner not necessary more fully to describe.

I provide the strip with a stitch receiving rib of the general type shown in my said patent, but I reinforce the rib and preferably by inserting a reinforcement between the walls or parts of the rib. A reinforced rib provides a better cushioning for the thread and assists in taking up the strain thereof when the thread is being pulled through the work, thus preventing the thread from cutting its way through the rib. I find that by inserting a reinforcement between the walls or parts of the rib, I secure the best results, since in such case the entire rib is self-contained, and is not composed of parts that tend to or may separate in the stitching operation. Preferably such reinforcement is a wall positioned between the portions of the folded rib and having a face to face relation thereto. In the disclosed embodiment of my invention the reinforcement for the rib is composed of an integral portion of the strip, folded into the rib, but in the broad aspect of my invention I am not limited thereto, since obviously the reinforcement may be variously constructed or applied.

As shown clearly in the drawing, the outer edge of the strip is relatively narrow and is folded upon itself as indicated at 9, the inwardly folded portion 10 being preferably of such width that it may be positioned between the parts 11, 12 of the folded rib, where it terminates in an upstanding reinforcing portion 13.

While I have shown the in-turned portion of the strip as constituting a rib reinforcement and prefer to employ such construction, it will be understood that the strip need not be sufficiently inturned to present a rib reinforcement. It will also be understood that the outer edge of the strip may be oppositely folded so as to be applied to the opposite face of the strip from that represented in Fig. 4, and when so folded it may be and preferably is continued to the folded rib where it constitutes a reinforcement thereof.

The provision of a relatively narrow outer edge is important, as thereby I prevent all interference with the lasting of the upper over the edge of the inner-sole and by continuing the inwardly folded portion to the rib I provide reinforcement for the latter.

The reinforcing member is preferably coated upon its inner face with some suitable adhesive material, such as cement. In this manner, the members or parts of the folded rib are adhesively secured together. In addition I preferably provide a line of stitching 14, which, in the preferred embodiment of my invention, passes through the members of the folded rib and also the extreme up-turned edge 13 of the infolded portion of the strip.

The completed strip may be secured in any suitable manner to the inner-sole, and preferably by lines of stitching 15, 16, or by one line of stitching only, though obviously within the scope of my invention, the strip may be secured in position in any suitable manner.

The biasly positioned threads of the upstanding rib of the strip adapt themselves more readily to rounded or curved portions of the insole than do threads positioned at right angles to each other.

It will be understood from the foregoing description that the reinforcing strip is peculiarly adapted to the purposes of my invention. Because of the relatively narrow outer edge, the lasting of the upper can be perfectly accomplished and the welt can be tightly secured in position. Furthermore the construction of the inner edge, which preferably is left unturned, is such that the picker of the welt machine will not interfere therewith, nor with the stitching by which it is secured to the inner-sole. Furthermore, the rib is reinforced so that it will constitute a sufficient support for the welt and upper when sewed or otherwise secured thereto.

While the cement edges are more useful in connection with the straight cut strips than with the bias strip, because the edges of the former are more likely to unravel, nevertheless the cement may be used to confine the ends of the bias cut strips where exposed at the edges of the strip.

It is not essential for all purposes that the several features of the invention be used conjointly as they can advantageously be otherwise used.

Having thus described one illustrative embodiment of my invention, I desire it to be understood that although specific terms are employed, they are used in a generic and descriptive sense and not for purposes of limitation, the scope of the invention being set forth in the following claims.

Claims.

1. As an article of manufacture, a reinforcing strip member for an inner-sole narrow in comparison to the width of the sole and folded to form a stitch-receiving rib, a broad inner edge or part and a relatively narrow outer edge or part, both said edges or parts being adapted to lie flatwise against the inner-sole, and one of said edges or parts having a rib reinforcing extension.

2. As an article of manufacture, a reinforcing strip member for an inner-sole narrow in comparison to the width of the sole and folded to form a stitch-receiving rib, and inner and outer edges or parts adapted to lie flatwise against the inner-sole, the outer edge having a rib reinforcing extension.

3. As an article of manufacture, a reinforcing strip member for an inner-sole, narrow in comparison with the width of said sole, said strip having a two-walled rib integral therewith, and a reinforcement between said rib walls.

4. As an article of manufacture, a reinforcing strip member for an inner-sole, narrow in comparison with the width of said sole, said strip being of woven material having its threads arranged on the bias, and being folded to form a stitch receiving rib, and a reinforcement between the portions of said rib.

5. As an article of manufacture, a reinforcing strip member for an inner-sole folded to form a stitch-receiving rib, a broad inner edge or part and a relatively narrow outer edge or part provided with a rib reinforcing portion.

6. As an article of manufacture, a reinforcing strip member for an inner-sole, narrow in comparison with the width of said sole, said strip being folded to form a stitch-receiving rib, and a reinforcement between the portions of said rib.

7. As an article of manufacture, a reinforcing strip member for an inner-sole, narrow in comparison with the width of said

sole, said strip being folded to form a stitch-receiving rib, and a rib-reinforcing wall positioned between the portions of the rib and having a substantially parallel relation thereto.

8. As an article of manufacture, a reinforcing strip member for an inner-sole folded to form a stitch receiving rib, a longitudinal portion of said member being turned in between the parts of the rib.

9. As an article of manufacture, a reinforcing strip member for an inner sole folded to form a stitch receiving rib, a portion of the outer edge of said strip being turned in and positioned between the parts of the rib.

10. As an article of manufacture, a reinforcing strip member for an inner-sole folded to form a stitch-receiving rib, a portion of the outer edge of said strip being turned in and positioned between the parts of the rib, and stitching securing together the parts of the rib and turned-in edge.

11. As an article of manufacture, an inner-sole body, and a reinforcing member secured thereto and narrow in comparison with the width of said body, said reinforcing member having a two-walled stitch-receiving rib, a portion of said member being folded longitudinally upon itself and positioned between the walls of the rib to constitute a reinforcement thereof.

12. As an article of manufacture, an inner-sole body, and a reinforcing member secured thereto, said reinforcing member consisting of a strip folded to form a stitch-receiving rib, the outer edge of the strip being folded longitudinally upon itself and inserted between the parts of the rib to constitute a reinforcement thereof.

13. As an article of manufacture, an inner-sole body and a reinforcing member secured thereto, said reinforcing member consisting of a woven, bias strip folded to form a stitch-receiving rib, a portion of said strip being folded longitudinally upon itself and secured to the rib to reinforce the latter.

14. As an article of manufacture, a reinforcing strip member for inner-soles, narrow in comparison with the width of said sole, said strip being folded to form a stitch-receiving rib, and a reinforcing insertion between the portions of the rib.

In testimony whereof, I have signed my named to this specification, in the presence of two subscribing witnesses.

FRED L. CORSON.

Witnesses:
ELMER J. SMART,
DELLA B. YEATON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."