J. W. BLAKENEY.

INSOLE AND METHOD OF MAKING SAME.

APPLICATION FILED NOV. 26, 1915.

1,339,160. **Patented May 4, 1920.**

Fig. 2.

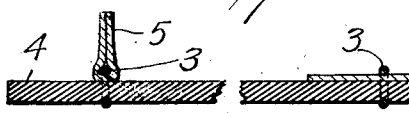


Fig. 1.

Fig. 5.

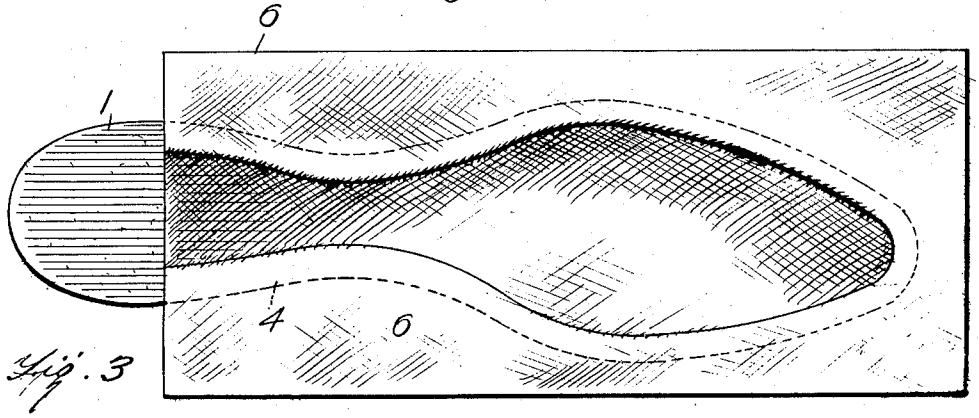


Fig. 3

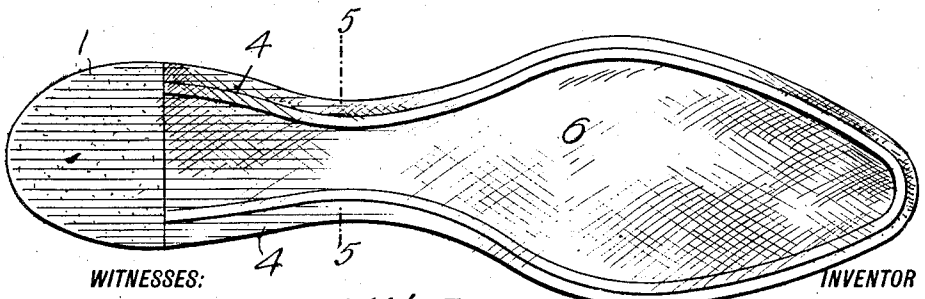


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. BLAKENEY, OF CINCINNATI, OHIO, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO ARMSTRONG CORK COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

INSOLE AND METHOD OF MAKING SAME.

1,339,160. Specification of Letters Patent. Patented May 4, 1920.

Application filed November 26, 1915. Serial No. 63,544.

To all whom it may concern:

Be it known that I, JOHN W. BLAKENEY, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Insoles and Methods of Making Same, of which the following is a specification.

In the manufacture of insoles, it has been customary to channel the inner sole to form lips or ribs, to which the welt and uppers may be sewed; and, as the leather used for the manufacture of insoles is usually of an inferior quality, and as the insoles are channeled at the places where the greatest strength is required, it will be seen that the channeling weakens the insoles at a point where the greatest strength is required, while the other portions of the insole are unnecessarily thick and heavy, and lack flexibility.

My invention relates to that type of insoles designed to overcome the necessity of channeling the material thereof to form the lips or ribs referred to; and has for its object the production of a serviceable flexible insole which may be manufactured at a small cost.

In the accompanying drawing, my insole is represented in various stages of construction, according to my new method. Like reference-characters denote corresponding parts throughout the several views. The different views may be briefly described as follows:

Figure 1 is a perspective view of my improved insole, at one stage in its construction, according to my method;

Fig. 2 is a transverse sectional view, on the line 2—2, Fig. 1;

Fig. 3 is a perspective view of my improved insole, at a subsequent stage in its construction, according to my method;

Fig. 4 is a top plan view of my finished insole; and

Fig. 5 is a transverse sectional view, on the line 5—5, Fig. 4.

Referring, now, in detail to the drawing:

In the manufacture of my insole, the use of leather or similar relatively expensive material may be obviated, and a cheaper material substituted. My insole is the product of a method of construction embodying a sequence of steps, and, in devising my method, as herein disclosed, I had in mind the primary considerations of practicability, resulting in the production, at a low cost, of an insole possessing a high degree of merit.

1 designates the body of my insole, which as shown, is a perfectly flat, suitably outlined blank of thin leather, or of thin canvas, or, in fact, of any suitable material embodying the requisite tenacity and durability, combined with great cheapness. The body 1 may be and preferably is rubber-coated, so as to be waterproof.

One side or face of the insole is provided, along the shank portion, the fore portion and the toe portion, with a textile strip or tape 2, which is adhesively coated, as for example a strip of the adhesive coated canvas known in the shoe trade as "gem duck." In my process or method of assembling the tape 2 with the insole, the tape is laid flat on the insole with its adhesive side outermost (as shown at the right in Figs. 1 and 2), and is sewed thereto, preferably by a single line of stitching 3 following a median, longitudinal path on the tape. The tape follows the edge of the insole, and is spaced somewhat from the marginal edge thereof, so as to leave the customary feather 4. Having stitched the tape flatwise onto one side or face of the insole, the next step in the method is to bend upward the two portions or sections of the tape lying on opposite sides of the line of stitches 3, so as to form a lip 5. This turning up of the tape to form the lip is effected by a suitable machine adapted for the purpose, which turns up the two longitudinal sections of the tape on each side of the line of stitching and brings them together firmly, so that they adhere, the folded tape thereby forming a solid rib or lip 5, which is securely anchored to the insole by the stitching 3.

The next step is the application of a covering member to the face or side of the insole carrying the rib 5. This cover-member 6 is preferably a piece of adhesive coated canvas known in the shoe trade as "gem duck." The adhesive coated face of the cover member 6 is in contact with the insole 1. This flexible cover 6 is disposed over one face or side of the insole and over the rib 6 and over the feather 4 of the insole, and is then creased or indented on both sides

of and adjacent to the rib 5, so that it will adhere to both sides of the rib and also lie flatly on the insole 1. Fig. 3 shows the cover-member 6 as applied to the insole and indented or creased along the inner side of the rib 5.

The next step, after creasing the cover member 6, is to trim it, so as to remove the portion thereof projecting beyond the feather, and this is accomplished by a suitable machine adapted for the purpose. By thus covering the rib, the rib is not left exposed, but is covered and strengthened, and the insole is also strengthened.

The application of the reinforcing fabric 6 is known in the shoe trade as "gemming" an insole.

Fig. 4 shows the cover-member 6 trimmed.

From the above description, taken in connection with the drawing, the many advantages of my invention will be apparent, especially to those skilled in the art to which the invention pertains. While I have described with great particularity a concrete embodiment of my invention, it will be understood that changes may be made, within the scope of the appended claims, without departing from the spirit of the invention, and that all such changes come within the scope and purview thereof.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. An insole comprising a body portion having a strip of fabric sewed to one face adjacent the edge thereof by stitches which extend centrally of said strip, said strip being up-folded to form a two-ply rib, a layer of canvas overlying said face of body material and embracing the up-folded plies, and means separate from the canvas layer for securely holding said plies together throughout while the canvas layer is being applied.

2. An insole comprising a body portion having an adhesively coated strip sewed to one face of the body portion adjacent the edge thereof with an adhesive side outermost by stitches along the middle portion of the strip, said strip being upfolded with its free edges in adhesive contact to form a two-ply rib, and reinforcing fabric embracing the upfolded plies.

3. That method of manufacturing an insole having a lip or rib to which the welt and upper may be sewn, which consists in providing a tape or strip having one surface coated with adhesive, stitching said strip to the insole body with the adhesive coated side outermost with a line of stitches, so as to leave the edges of the strip free, turning up the free edges of the strip and bringing their adhesively coated surfaces together so as to form a two-ply rib, and then applying a reinforcing fabric to the rib.

4. That method of manufacturing an insole having a lip or rib to which the welt and upper may be sewn, which consists in providing a tape or strip having one surface coated with adhesive, stitching said strip to the insole body with the adhesive coated side outermost with a line of stitches, so as to leave the edges of the strip free, turning up the free edges of the strip and bringing their adhesively coated surfaces together so as to form a two-ply rib, and then gemming the insole.

5. The steps in the method of manufacturing an insole having a lip or rib to which the welt and upper may be sewn, which consist in providing a tape or strip of textile material having one surface treated with adhesive, placing said tape or strip on the sole with the adhesive side outermost, attaching said strip or tape to said sole by stitches to leave the edges of said strip or tape free and turning up said free edges of said strip or tape to bring their adhesively treated surfaces into adhesive contact throughout their extension.

6. The steps in the method of manufacturing an insole which consist in providing a strip or tape having one surface coated with adhesive, applying said strip or tape to the surface of the sole with the adhesively coated surface of said strip or tape outermost, attaching said strip or tape to said sole by a line of stitches following the median line of said strip or tape, and folding the said strip or tape along the line of said stitches to bring the free edges and surfaces thereof into intimate contact to secure the same together by means of their adhesive.

7. The steps in the method of manufacturing an insole having a rib or lip to which the welt and upper may be sewn, which consist in providing a strip or tape having at least one surface treated with adhesive, stitching said strip or tape to the insole body with an adhesive treated side outermost with a line of stitches so located as to leave the edges of the strip or tape free, and turning up said free edges of the strip or tape to bring their adhesive treated surfaces into contact so as to form a two-ply rib.

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

JOHN W. BLAKENEY.

Witnesses:

GEORGE W. WELCH,

WM. WOLFE.