

J. A. KELLY.
WET PROOF SHOE.

APPLICATION FILED NOV. 22, 1906. RENEWED NOV. 11, 1909.

986,576.

Patented Mar. 14, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

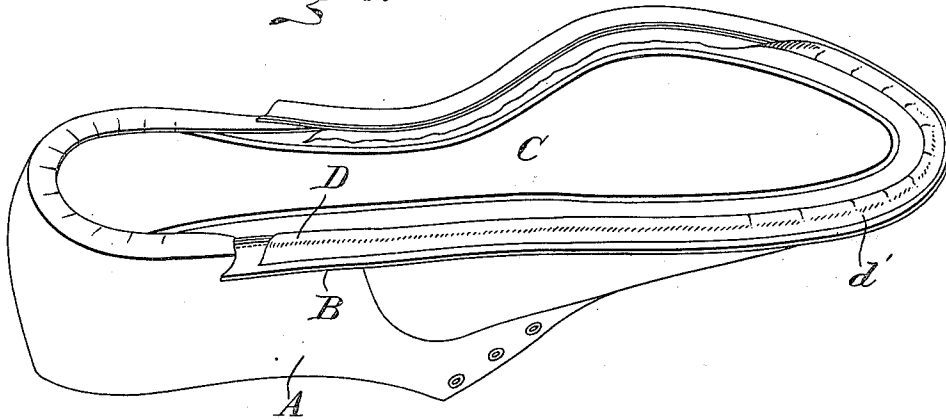


Fig. 2.

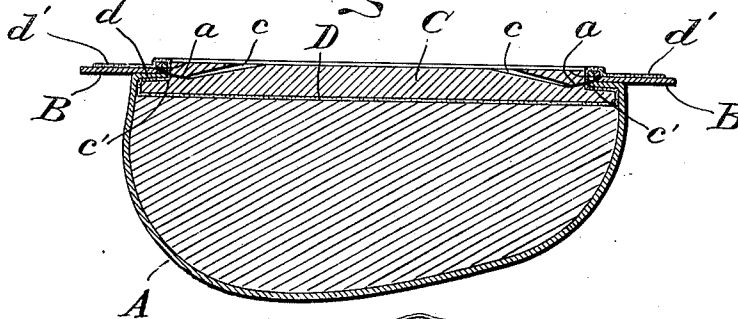


Fig. 3.

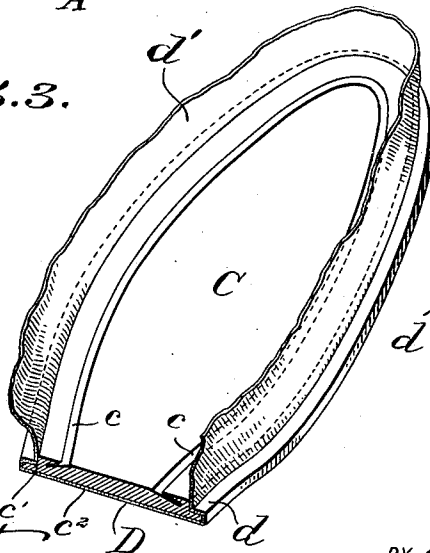
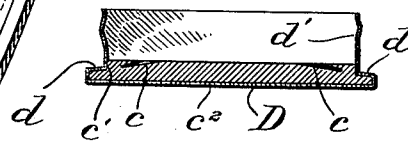


Fig. 4.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 5.

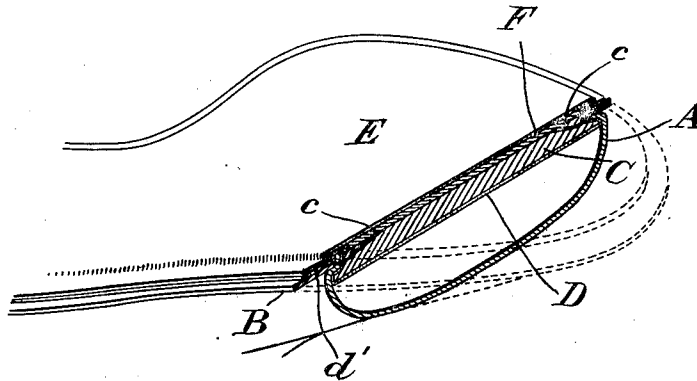
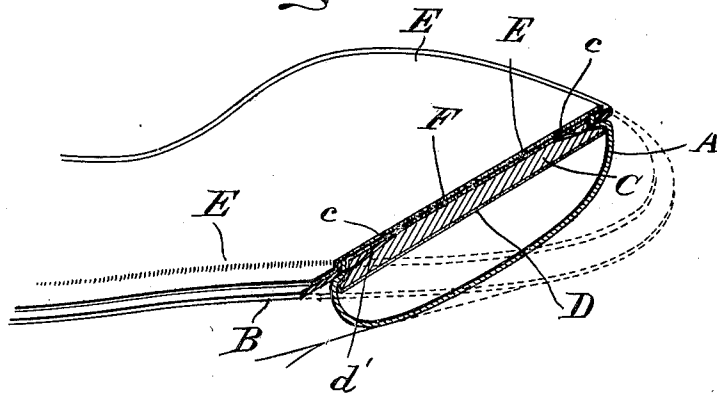


Fig. 6.



WITNESSES

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JOHN A. KELLY, OF NEW YORK, N. Y.

WET-PROOF SHOE.

986,576.

Specification of Letters Patent.

Patented Mar. 14, 1911.

Application filed November 22, 1906, Serial No. 344,572. Renewed November 11, 1909. Serial No. 527,571.

To all whom it may concern:

Be it known that I, JOHN A. KELLY, a citizen of the United States, residing in the city of New York, borough of Brooklyn, county and State of New York, have invented a new and useful Wet-Proof Shoe, of which the following is a specification.

This invention is a wetproof shoe wherein provision is made for precluding moisture from soaking through the joint or stitches between the upper, the outer sole and the insole, as well as through the insole itself.

The shoe or boot belongs to that class wherein an insole is employed, such insole constituting a separate element from the sole proper, or outer sole, and, further, the insole being lasted with, and united to, the upper before the shoe is completed by the attachment of the outer sole, with or without a welt.

According to this invention, a layer of moisture-proof material is attached to the insole, preferably before the insole is united to the upper, a characteristic feature of the invention residing in a free or unattached edge portion of said moisture proof material. Subsequent to the operation of uniting the upper to the insole, by stitching the parts together, the unattached or free edge portion of the moisture-proof material is folded so as to inclose the edge of the upper and to incase the row of stitches which unite the upper and the insole. Should the welt be attached to the upper and the insole at the time these two latter parts are united, the stitches uniting the three parts, *i. e.*, upper, insole and welt, are covered or incased by folding the free or unattached edge of the moisture-proof material.

According to one embodiment of the invention, the moisture-proof material above referred to is attached to a smooth or unchanneled face of the insole, and a portion of said moisture-proof material is folded over or around the edges of the insole so as to cover a channeled portion of said insole; but one edge of said moisture-proof material is not united to the insole, thus leaving said edge of the moisture-proof material free and unattached, whereby the free or unattached edge of moisture-proof material is adapted to be folded, subsequent to the stitching of the upper to the insole, in a manner to inclose the edge of the upper and to cover the stitches.

According to the mode of procedure just

described, in carrying out one embodiment of the invention, the moisture-proof material is attached to one face of the insole, and is folded around an edge thereof, but this is not essential, the salient feature of the invention consisting of a layer of moisture-proof material attached to an insole so as to leave a free or unattached edge to said layer of moisture-proof material, which free or unattached edge is folded to cover the edge of the upper and to incase the stitches that fasten the insole and the upper together.

When the layer of moisture-proof material is attached to the unchanneled face of the insole and folded around the edge thereof, I preferably apply another layer of moisture-proof material over the channeled face of the insole, the edge of the second layer being arranged to cover the folded edge of the first mentioned layer and the row of stitches. Thereafter, the welt is folded in, and the outer sole attached in the usual manner, so that the shoe or boot is completed according to the usual process of manufacture.

In the accompanying drawings I have shown certain embodiments of the invention, but the constructions shown therein are to be understood as illustrative only, and not as defining the limits of the invention.

Figure 1 is a view showing the upper and the insole applied to a last, and represents the procedure invented by me for making the shoe wet proof; Fig. 2 is a cross section through that portion of the shoe corresponding to the ball of the foot. Fig. 3 is a perspective view of the insole, the latter being partly broken away, and one of the layers of moisture proof material being applied thereto; Fig. 4 is a detail cross section through the insole. Fig. 5 shows the shoe with the second layer of moisture proof material applied thereto; and Fig. 6 is a view of a modified form of shoe embodying the principles of this invention.

A designates an upper, B a welt, and C the insole of a shoe or boot. These parts are constructed in the usual or any preferred way, and they are united by stitching them together in the usual manner, the stitches, *a* extending through the upper, the welt and a channeled portion *c* and the shouldered portion *c'* of said insole. Previous to the stitching operation, however, by which the insole is united to the upper and the welt, the insole is subjected to such treatment as to make

it water-proof, although the procedure for more thoroughly, or effectively waterproofing the insole may be completed after the union of the said insole to the upper and the welt.

In accordance with one embodiment of the invention, the insole is provided with a layer D of waterproof or moisture-proof material. This layer is cut to the required shape and size, and it is united in any approved way to the smooth or unchanneled surface, c^2 , of the insole, said layer, D, being united, preferably, by cementing the layer to said insole. I now proceed to double or fold the edge of the layer D around the edge of the insole, the doubled edge portion of the layer D extending over the shouldered edge c' and the channeled portion c of said insole. The aforesaid doubled portion of the layer D is indicated at d , the same being folded and cemented to the insole so as to fit snugly to the shouldered and channeled faces of the insole. A certain edge portion d' of the layer D is left free or unattached to the insole, for a purpose which will presently appear.

After preparing the insole by the attachment of the layer D thereto in the manner described, and as shown by Figs. 3 and 4, the insole is ready for attachment to the upper and the welt. The insole and the upper are lasted in the usual way, as shown by Figs. 1 and 2, the layer D being next to the last and the channeled surface of the insole, with the edges d d' of the layer, being exposed. The welt is now made ready, and the several parts are sewed, the stitches a passing through the folded edge d of the layer D and also through the welt, the upper and the shouldered and channeled edge portions of the insole as shown in Figs. 1 and 2. I next proceed to trim off the free projecting edges of the upper, in the usual way, and thereafter the free edge portion d' of the layer D may be secured in either of two ways. As shown by Figs. 1 and 2, the free edge d' of said layer D may be folded over, and cemented or otherwise secured upon, the trimmed edge of the upper and the seam formed by the stitches a . A filling of suitable material, such as cork or the like, may now be applied to the channeled surface of the insole, and thereafter the layer E may be applied to said insole, as shown by Fig. 5. This layer E is also composed of waterproof or moisture proof material, and it is cut to the required size or shape. The layer E fits over the filling material and the channeled surface of the insole, the edge portion of said layer E extending over the folded back edge portion d' of the layer D. Said layer E is secured in place by cementing it over the insole or the filling, and upon the folded edge d' of the layer D, or by otherwise uniting the layer E to the shoe while it

is incomplete. It should be observed that the insole has layers D E of moisture proof material applied to the respective faces thereof; that the layer D is folded to cover the seam a ; that the layer E incloses the folded edge of the layer D and also incloses the seam. The insole and the seam are thus made thoroughly waterproof so that water cannot leak or soak through the insole or the seam of the boot or shoe, thereby protecting the foot of the wearer from dampness. The layer D also serves the purpose of an inside lining within the shoe, for the reason that it is secured directly to the smoother unchanneled surface of the insole.

In Fig. 6 I have shown another construction wherein the edge portion d' of the waterproof layer D is folded over the channeled portion c of the insole instead of folding said edge d' upon the upper and the seam. As shown by this figure (6) the edge d' is folded back over, and cemented to, the channeled face c of the insole after the latter is sewed to the upper and the welt. I may now apply the layer E (of waterproof material) directly to the channeled face of the insole, the edge of the layer E being extended over the trimmed edge of the upper and the seam a . The filling material (such as cork) may now be applied to the layer E, and the outer sole attached to the shoe. It will be understood that the welt and the outer sole should be attached in the usual or any preferred way, and that the shoe may be manipulated or treated to finish and complete the same in accordance with the usual practice of the art.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent is:—

1. In an article of foot wear, a channeled insole, an upper, a layer of moisture proof material, and a row of stitches uniting the upper and the insole, said layer of moisture proof material being stitched between the edge portions of the insole and the upper and said layer being, also, folded to substantially incase the stitches.

2. In an article of foot wear, a channeled insole, an upper stitched thereto, and a layer of moisture-proof material united to said insole, a portion of said moisture-proof material being positioned between the upper and the insole along the line of union of said parts, and another portion of said moisture-proof material being folded upon the stitches by which the upper and the insole are united.

3. In an article of foot wear, a channeled insole, an upper, a welt, and a layer of moisture-proof material secured to said insole, a portion of said moisture-proof material embracing the edge of the insole and interposed between said insole and the upper along the seam which unites the upper, welt and insole, said moisture-proof material having an

edge portion thereof folded around the edge of the upper and upon said seam.

4. In an article of foot wear, a channeled insole, an upper, and two layers of moisture proof material applied to the respective faces of the insole, one of said layers being doubled or folded around the edge of said insole and the other layer overlapping the folded edge portion of the first mentioned layer.

5. In an article of foot wear, a channeled insole, an upper, and two layers of moisture proof material, one of said layers being opposite to, and in coöperative relation with, a channeled face of the insole, and the other layer being attached to the insole substantially at the unchanneled face thereof, one of said layers being stitched between the edge portions of the upper and the insole and said layers being, also, folded subsequent to the stitching operation to substantially incase the stitches.

6. In an article of foot wear, an insole provided on one face with a channel, an upper, a layer of moisture proof material in coöperative relation to the channeled face of the insole, another layer of moisture proof material in substantially coöperative relation to an unchanneled face of said insole, and stitches uniting the upper, insole and one of said layers directly together, one of said layers having an edge portion thereof folded substantially around the stitches for incasing the resulting seam by which the upper and insole are united.

7. In an article of foot wear, an insole having a channel on one face thereof, an upper, a welt, stitches uniting the edge portions of the insole, upper and welt, and a moisture proof layer stitched between the upper and the insole, said moisture proof layer being folded, subsequent to the stitching operation, around the edges of the upper and welt and substantially incasing the stitches by which the several parts are united.

8. In an article of foot wear, a channeled insole, an upper, a welt stitched to said upper, and a layer of moistureproof material secured to the smooth face of the insole and folded around the edge thereof, said folded edge being, also, folded upon the row of stitches which unite the welt and said upper, the seam between the several parts being inclosed by said moisture-proof layer.

9. In an article of foot wear, a channeled insole, a layer of moisture proof material united to the unchanneled surface of said insole, said layer being folded around the edge of the insole, a filling on the channeled sur-

face of the insole, and another layer of moisture proof material, said second named layer of moisture proof material being applied to said filling, and an upper, one of said layers of moisture proof material being united with a feather of the insole to said upper.

10. In an article of foot wear, an insole having one of its surfaces channeled, an upper stitched to said insole, a layer of moisture proof material covering the unchanneled surface and folded around the edge of said insole, said water proof material extending beyond the stitching which unites the insole and the upper, and said extended edge doubled upon itself so as to form a fold, and a welt positioned within said fold and united to the insole, upper, and water proof material.

11. In an article of foot wear, an upper, an insole, and a layer of moisture proof material positioned between the upper and the insole, a portion of said layer being folded over the edge of the upper and inclosing the seam which unites the upper and the insole.

12. In an article of foot wear, an upper, an insole, and a layer of moisture proof material positioned between the upper and the insole, said layer being attached to the insole and having a part thereof folded over the edge of the upper, whereby the layer substantially incases the seam which unites the upper and the insole.

13. In an article of foot wear, an upper, an insole, and a layer of moisture proof material positioned between the upper and the insole, a portion of said layer covering the edge of the insole and another portion of the layer being folded over the edge of the upper to substantially inclose a seam by which the upper is united to the insole.

14. In an article of foot wear, an upper, an insole, a welt, and a layer of moisture proof material having a part thereof positioned between the upper and the insole, another portion of said layer being folded to inclose the edges of the upper and the welt.

15. In an article of foot wear, an upper, an insole, and moisture proof material folded over the edge of the upper and substantially incasing a seam by which the upper and insole are united.

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

JOHN A. KELLY.

Witnesses:

H. F. BERNHORD,
V. E. NICHOLS.