Oct. 20, 1931. C. H. DANIELS 1,828,320

BOOT OR SHOE AND METHOD OF MAKING SAME

Filed June 17, 1931

Fig. 1.

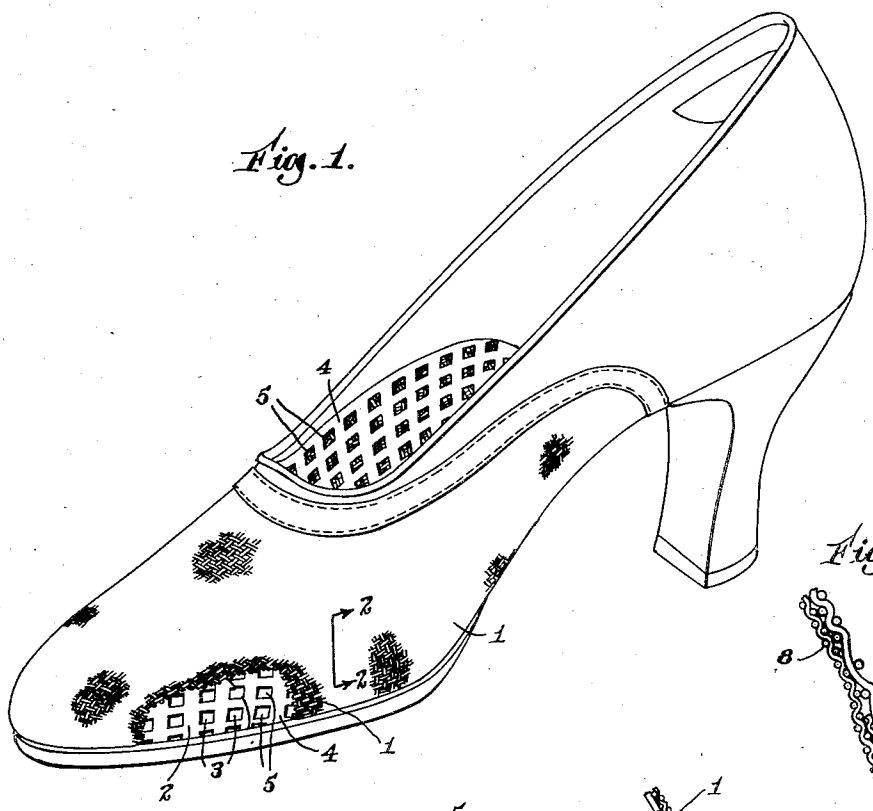


Fig. 5.

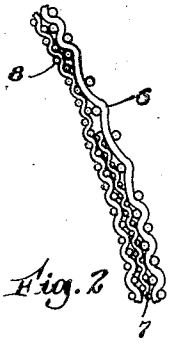
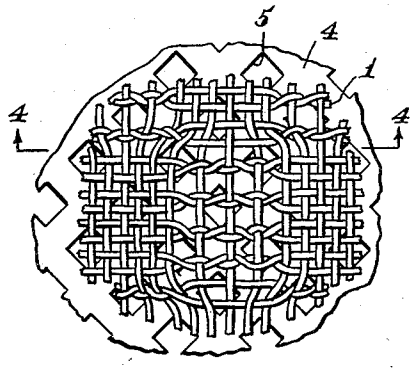


Fig. 3.



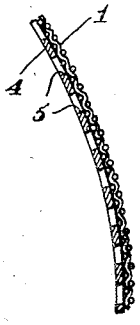
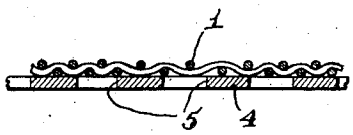


Fig. 2

Fig. 4.



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UNITED STATES PATENT OFFICE

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BOOT OR SHOE AND METHOD OF MAKING SAME

Application filed June 17, 1931. Serial No. 544,945.

My present invention relates to boots or shoes, and includes a novel method of manufacturing same.

There are being manufactured, at the present time, shoes in which portions of the upper materials comprise a layer of open-work material, usually textile fabric. This textile fabric, however, in and of itself, is flimsy and non-self-supporting, requiring the use either of a box toe, or of a toe tip, to prevent collapsing of the upper materials at this point. The presence of either of these elements destroys one of the principal purposes of the shoe, which is ventilation and coolness.

An important object of the present invention, therefore, resides in the provision of a shoe, portions of the upper materials of which consist of a layer of open-work material, and which shoe may be made without a box toe, and without a toe tip, thus permitting the manufacture of a plain toe shoe of this type, and furthermore provides ventilation to the extreme toe of the shoe.

Another important object of the present invention resides in the provision of an open-work lining, on which the open-work upper portion is superimposed, whereby strength, durability, and ruggedness are incorporated in the shoe without detracting from the ventilating and cooling features thereof, and furthermore still resulting in a shoe of desirable lightness.

Another object of the present invention resides in the fact that the openings in the open-work upper portion and in the lining are haphazardly or indiscriminately arranged with respect to each other, without detracting from the appearance or ventilation of the shoe.

Another object of the present invention resides in the utilization of a toe stiffener layer, of open-work material, with the openings thereof indiscriminately positioned or located with respect to the openings in the open-work upper material. This toe stiffener layer may be utilized in conjunction with the perforated lining above described, or may be utilized alone, without the lining, if desired.

In either form of the shoe, with the lining, or with the toe stiffener, or with both, all of the advantageous features of this shoe are retained, at the same time enabling a plain toe shoe of this type to be produced without a toe tip and without a box toe therein.

The advantages and benefits of my novel shoe will be instantly apparent to those skilled in this art.

I believe that the shoe illustrated and described herein is novel, and have therefore claimed the same broadly in the present application.

I also believe that the method of making said shoe, described in this application, is novel, and have also claimed said method herein.

Referring to the drawings, illustrating a preferred embodiment of the present invention,

Fig. 1 is a perspective view, partly broken away, illustrating a completed shoe manufactured according to my invention;

Fig. 2 is a fragmentary sectional view on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary plan view on an enlarged scale;

Fig. 4 is a cross sectional view on the line 4—4 of Fig. 3; and

Fig. 5 is a fragmentary sectional view, on an enlarged scale, illustrating a different type of lining and toe stiffener.

Referring now to the drawings, for a particular description of the invention, 1 designates a layer of upper materials, composed of open-work material such as open-work or lacy fabric. Positioned beneath the toe portion of the layer 1 is a toe stiffener 2 provided with a plurality of perforations or apertures 3, said apertures or perforations 3 being haphazardly arranged with respect to the openings in the layer 1. If desired this toe stiffener 2 may be adhesively secured to the layer 1, for better retention.

I may also provide a lining 4 provided with a plurality of perforations or apertures 5, said apertures 5 being also arranged at random or indiscriminately with respect to the openings in the layer 1, and the lining 4, if desired, may be adhesively united to the layer 1.

When utilizing the layer 4, I may, if desired, dispense with the toe stiffener 2, as the lining 4 provides considerable strength and support to the upper material 1.

The layer 1 of open-work material may have any suitable design or configuration or ornamentation woven therein, Fig. 3 illustrating a variation in the weaving to produce a design effect of alternate widely spaced strands and relatively closely woven strands.

When utilizing both the toe stiffener 2 and lining 4, the same are preferably assembled and perforated simultaneously, although it will be understood and appreciated that the perforating of the toe stiffener and lining may be effected as separate operations, and that the openings 3 and 5 may likewise be arranged at random with respect to each other.

If desired, and as will be readily understood, I may construct my novel shoe with all of the layers thereof of the same material. For example, as illustrated in Fig. 5, I may utilize an outer open-work layer 6 and a toe stiffener 7, each of open-work lacy material, adhesively united, or not, as desired. Also, in addition to the two layers 6 and 7, I may provide a lining 8, also of open-work material similar to the layers 6 and 7. When utilizing the two layers 6 and 7 it will be appreciated that the opening in each layer will be indiscriminately arranged with each other, and that when utilizing the three layers 6, 7 and 8, the openings in each layer will be arranged at random or indiscriminately with respect to the openings in an adjacent layer or layers.

My invention may be embodied in any type of shoe, whether welt, McKay, turn shoe, cemented shoe, or otherwise.

It will thus be appreciated that I have devised a novel boot or shoe, embodying all of the advantageous features of prior shoes utilizing the open-work or lacy fabric upper materials, such as lightness, coolness and ventilation, and have added thereto advantages and features not heretofore considered possible in a shoe of this type, such as strength, ruggedness, durability and self-supporting at the important points.

While I have necessarily described my present invention somewhat in detail, it will be appreciated that I may vary the size, shape, arrangement of parts, design and material, within reasonably wide limits, without departing from the spirit of the invention.

My invention is further described and defined in the form of claims as follows:

1. A boot or shoe of the character described comprising an open-work outer section of textile fabric, an inner open-work section to reinforce and stiffen said outer section, at least some of the openings in the inner and the outer sections being alined with each other, and means fastening the sections together in superimposed relation.

2. A boot or shoe of the character described comprising an open-work outer section of textile fabric, an inner open-work section to reinforce and stiffen said outer section, at least some of the openings in the inner and the outer sections being alined with each other, and means fastening the sections together against shifting or being separated relative to one another.

3. A boot or shoe of the character described comprising an open-work outer section of textile fabric, a plurality of superimposed open-work inner sections to reinforce and stiffen said outer textile fabric section, the respective sections having alined openings and being fastened together against shifting or being separated relative to one another.

In testimony whereof, I have signed my name to this specification.

CLAUDE H. DANIELS.